

House of Commons Education and Skills Committee

The future sustainability of the higher education sector: international aspects

Eighth Report of Session 2006–07

Volume II

Oral and written evidence

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The Education and Skills Committee

The Education and Skills Committee is appointed by the House of Commons to examine the expenditure, administration and policy of the Department for Education and Skills and its associated public bodies.

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G R Evans Dr J R Lukes

Taken before the Education and Skills Committee

on Monday 29 January 2007

Members present:

Mr Barry Sheerman, in the Chair

Mr Douglas Carswell Mr David Chaytor Helen Jones Mr Gordon Marsden Mr Andrew Pelling Stephen Williams

Memorandum submitted by Higher Education Funding Council for England (HEFCE)

1. The HEFCE was established by the Further and Higher Education Act 1992 as a non-departmental public body operating with a high degree of autonomy within a policy and funding context set by the Government. The Council's main function is to administer grants provided by the Secretary of State for Education and Skills. We have distinct statutory duties and are thus free from day-to-day political control. Although we are often referred to as a "buffer body" between higher education institutions and the Government and provide independent advice to the Secretary of State on the funding needs and development of higher education, we take account of the strategic direction set by Ministers in the annual grant letter to the Council and the key performance targets in our Strategic Plan are subject to Ministerial approval. Further information about the role, policies and funding allocations of the HEFCE can be found on our web-site at www.hefce.ac.uk (HEFCE publications 2006/13, 2006/43 and 2006/44).

2. HEFCE employs around 240 staff, mostly based at our head office in Bristol with a small secretariat in London. Our running costs for the 2005–06 financial year totalled £17 million, just 0.25% of our total expenditure of £6,713 million. This compares with figures of between 0.5 and 5% for other public bodies.

HEFCE STRATEGIC VISION

HEFCE Mission statement

"Working in partnership, we promote and fund high-quality, cost-effective teaching and research, meeting the diverse needs of students, the economy and society".

3. It is now nine years since Lord Dearing set out his vision for higher education in the learning society, but the four main purposes he identified for higher education still hold true:

- To inspire and enable individuals to develop their capabilities to the highest potential levels throughout life, so that they grow intellectually, are well-equipped for work, can contribute effectively to society and achieve personal fulfilment.
- To increase knowledge and understanding for their own sake and to foster their application to the benefit of the economy and society.
- To serve the needs of an adaptable, sustainable, knowledge-based economy at local, regional and national levels.
- To play a major role in shaping a democratic, civilised, inclusive society.

4. Since the Dearing Report in 1997, global competition has intensified and high-level skills and knowledge have become even more central to the UK's economic success. Demand for higher learning is escalating across the world, and there has been a dramatic expansion of higher education in some other countries, leading to increased competition for students. There is also a global market in the recruitment of leading academics and in the award of research contracts. European policies are gaining a higher profile and we must engage with them on, for example, quality assurance, lifelong learning and research. At the same time the internet and other new technologies, many arising out of higher education, give us new opportunities to compete and connect across the world.

5. We live in a diverse world which brings us stimulation and excitement, but also creates tensions. The contribution that higher education brings to society—to understand, to solve problems, and to connect intellectually—is ever more important. Of course we need to balance our global perspective with the need to relate to our own communities and regions, and for higher education to play a part in reaching out locally to the diversity of people within our nation.

6. Higher education also has an important contribution to make in responding to the challenges and opportunities posed by increasing life expectancy. England's population is predicted to grow substantially in the next 50 years through increased longevity and migration from within and beyond the UK. These

demographic changes are likely to have implications for economic growth and for regional development and infrastructure. An ageing population will also increase demands on public funding, especially in relation to pensions, health and long-term care.

7. So while the fundamental purposes of higher education remain constant, the challenges it faces are increasing in complexity. The pace of change in our society is increasing and higher education needs to keep up with that pace, and even innovate ahead of it. There are a growing number of stakeholders in higher education—students, businesses, the public sector, society, and Government are just a few. They are demanding more and varied outcomes and they seek a swift response as their needs change. Therefore, on the one hand higher education needs to be closely attuned to the needs of its customers and stakeholders; on the other, it needs to help transform and not just reflect society. The people who work in higher education are key to achieving this.

8. Our Strategic Plan 2006–11 sets out how we think the higher education sector needs to respond to these complex challenges both now and in the future. It sets out our vision for higher education in England and our role in working in partnership to take it forward.

9. The HEFCE Strategic Plan covers the period 2006–11. A copy of the Plan has been sent to the Select Committee with this submission and can be accessed on the HEFCE web-site at www.hefce.ac.uk (HEFCE publication 2006/13). The plan was published in April 2006 following extensive consultation with stakeholders and Ministerial approval of our key performance targets. Our approach over the five years covered by the plan will be to build on the many strengths of a sector that is already diverse and responding to the social, economic and environmental challenges that we need to face together. The student experience, social inclusion, sustaining world-class research and supporting the wider roles of universities and colleges within the economy and society are all key features of our strategic plan. Uppermost in our mind is the need to maintain institutional autonomy and identify policies and funding methods which are not burdensome, but which will help to secure the long term sustainability, vitality and excellence of higher education. We believe that our strategic plan, enriched by the input of many contributors and partners, provides a map to get us there.

10. Working with DfES and our other stakeholders, we will fundamentally review this strategic plan after three years and consider what changes may then be needed. In addition we will undertake a small-scale annual review of the plan to take account of changes that have occurred since the publication in April 2006, such as the outcome of the Comprehensive Spending Review.

11. We have four core strategic aims concerned with widening participation and fair access, learning and teaching, research, and the contribution of higher education to our economy and society. Underpinning these are two further strategic aims: to sustain a high quality higher education sector and to operate at the highest level ourselves as an organisation. Our Strategic Plan contains 22 key performance targets by which the successful delivery of the plan will be measured.

12. In 2006–07 the HEFCE will allocate £6.7 billion in public funds to universities and colleges to support high quality education, research and related activities. We are accountable for the proper use of that funding, and for ensuring that the higher education sector is financially healthy and well managed. To promote high standards in the sector, we identify and disseminate good practice. We are also responsible for making sure that the quality of learning and teaching is assessed. This work is carried out on our behalf by the Quality Assurance Agency for Higher Education.

13. HEFCE will fund 275 institutions in 2006–07: 132 higher education institutions (88 universities, two general colleges, and 42 specialist institutions) and 143 directly funded further education colleges providing HE courses.

14. Some argue that we need a period of stability of public funding as we adjust to the new fee arrangements for full-time undergraduates. Students as fee payers are likely to become more demanding, and their interests and the quality of their learning experience are at the heart of our plans. Meeting their increasingly diverse needs will require a much closer engagement with employers and other partners. We will ensure that our funding method for learning and teaching is appropriate for the sector, supports innovative, flexible provision, and has the capacity to cope with more significant change if required by Parliament following the independent review of the HE funding reforms in 2009.

15. We remain committed to funded growth in student numbers. We see this as essential if we are to meet the challenge of widening access, and increasing participation and student progression, which all remain crucial to our mission. We continue to see the drive towards widening participation as fundamental in promoting social inclusion and improving the country's economic competitiveness.

16. A key feature of the next five years will be maintaining a dynamic, world-class research sector which will underpin economic prosperity and national well-being. We will work with the Government, the Research Councils and other funders to ensure that the UK's record in creating new knowledge and opening up new fields of research is matched by achievements in their application. It is our objective to maintain a research sector with a strong position among the world leaders.

17. The Government's framework for science and innovation highlights the important role that the higher education knowledge base plays as a source of the country's global competitiveness. Long-term funding to promote engagement between higher education institutions and businesses will be crucial in creating ideas and nurturing enterprise, as well as enhancing skills, management capability and productivity.

18. We also want to focus on the role of higher education in society more broadly, and will develop a strategy on the social dimension to activities to enhance the contribution that higher education institutions make to their localities and regions.

19. We aim to achieve all this while continuing to reduce bureaucracy. We will take an increasingly riskbased approach to ensuring that the public funds we distribute are well spent, relying more on well led, governed and managed institutions' own accountability processes.

20. At the global level our strategy will be to support the higher education sector's reputation for excellence. At the national level we will aim to ensure that the sector retains the capacity to meet national needs, while building on the strengths and diversity of autonomous universities and colleges. There will be significant challenges at the regional level where we will work more closely with partners to address underprovision, skills development needs and economic regeneration.

ROLE OF THE HEFCE: ENABLING EXCELLENCE

21. The future of higher education may be subject to Parliamentary decision in a number of areas and could be shaped by a mix of decisions by autonomous universities and colleges; market forces from students and business; increased engagement with employers; strategic influence and investment from Government and public bodies; and proportionate regulation from a range of organisations. These forces will interact differently through time as the contribution of each to public policy objectives is more clearly understood, with markets maturing and regulatory processes adapting. Accordingly, the role we expect to take between now and 2011 will continue to evolve.

22. In the light of the new tuition fee arrangements for full-time undergraduate students from 2006, our funds will therefore make up a lower, although still significant, proportion of the overall funding available to the sector. The \pounds 3,000 cap on fees cannot be raised in real terms before 2010 at the earliest. While this may limit the effect of market forces, the introduction of a significant new funding steam is already influencing the behaviour of universities and colleges.

23. There will be an increasing need for us to provide evidence-based advice and information to help Parliament and Ministers consider issues of public interest, as higher education institutions develop their brands and build on their strengths. The aspirations and goals of a diverse higher education system do not necessarily add up to meeting national or even regional interests. So our role is to consider the whole higher education sector—what it delivers in terms of support for the intellectual, economic, social and environmental needs of society, and whether this is done in the most effective and efficient way to secure the long-term sustainability of higher education.

24. We will help to develop further a higher education system where excellence in teaching and in knowledge exchange are as highly regarded as excellence in research. We will support innovative ways of delivering lifelong learning, both traditionally and through new technologies. We will support all parts of the sector in widening participation to under-represented groups, so that all those who can benefit from higher education are able to do so successfully. We will contribute to the 2009 independent review of the higher education funding reforms, in terms of monitoring the impact of variable fees on the sector and on the recruitment and progression of students, including those from lower socio-economic groups and part-time students.

25. We will also support diversity and collaboration to sustain and improve quality. We will support subjects that are of strategic importance to the nation, but where there is a mismatch between supply and demand. We will identify opportunities arising from our funding relationship with the sector to disseminate advice and guidance, often by sharing good practice from within and beyond higher education.

26. In doing all of this we will make full use of evidence from research and evaluation, as well as international experience. We will also take advantage of opportunities to promote the role and achievements of the higher education sector.

PUBLIC CONFIDENCE AND BETTER REGULATION

27. Overall we expect to have relatively stable funding for publicly funded teaching and research, but there may be some volatility and uncertainty as higher education institutions come to terms with the new economic landscape. Therefore, one of our most important roles is to facilitate the transition for institutions and in doing so to foster public confidence.

28. We will maintain the highest standards of public accountability in all of our work, and pursue the same in the bodies that we fund by following a risk-based approach to better regulation. It is our belief that good regulation adds value by supporting stakeholder confidence that public money is being used properly.

It is also our belief that regulation must be minimised and constantly challenged. We will increasingly rely on universities and colleges' own accountability processes so that we can continue to reduce the burden of accountability. It is our objective to be a modern and sensitive regulator with vision.

KEY DEVELOPMENTS

29. To supplement the information provided in our Strategic Plan 2006–11 we have provided notes for the Select Committee on the following areas of HEFCE activity:

- Strength of the higher education sector.
- Managing the transition.
- Research assessment and funding.
- Enhancing Learning and Teaching.
- Review of the teaching funding method.
- Funding for growth in student numbers.
- The Leitch Review and engaging employers with higher education.
- Widening participation and fair access.
- Enhancing the contribution of higher education to the economy and society.
- Public engagement with higher education.
- Strategically important and vulnerable subjects.
- Leadership, Governance and Management in higher education.

STRENGTH OF THE HIGHER EDUCATION SECTOR

30. Higher education in England is world class. It is an indispensable part of our competitive knowledgebased economy and a major force for securing a democratic, civilized and inclusive society.

31. As the pace of change in our society increases, universities and colleges have demonstrated great flexibility in shaping and responding to their environment, not only through significant expansion but through the variety of flexible ways of learning that they offer, and the range of partnerships they have entered into with employers, their communities, business and other stakeholders.

32. The HE sector has also delivered efficiencies over many years, as demonstrated by a real terms reduction in the unit of funding of a third since $1989-90^1$. Efficiencies have been delivered through improvements in asset utilisation², savings from procurement³, improvements in people management⁴, and continuing development of our world-class network infrastructure⁵.

33. HE in England is itself an international business (worth £45 billion to the UK economy on a public investment of £15 billion, and generating £3.6 billion in gross export earnings—a larger contributor to the UK economy than the UK pharmaceutical industry and aircraft industry⁶) contributing significantly to UK competitiveness and fostering long-term international relationships.

34. Higher education in England is respected throughout the world for the quality of its learning and teaching. Comprehensive teaching quality information is available to all prospective students and published on the Teaching Quality Information (TQI) website⁷. Recent surveys have shown that 80% of students are satisfied with the quality of learning and teaching they receive⁸, and 81% of employers state that the graduates they employ are typically well prepared for work⁹. Furthermore, the rapid growth in overseas student numbers and fee income over the past decade¹⁰ exceeded targets in the Government's first initiative for international education.

35. Higher level skills and knowledge are central to our ability to trade on high quality and added-value goods and services. HE develops the critical and creative thinkers who ensure that the UK has the intellectual innovation, skills and knowledge both to compete and to contribute internationally.

7 www.tqi.ac.uk

¹ (If capital funding is excluded—or by 25% if capital funding is included). Data from DfES' annual grant letters to HEFCE.

² Estate Management Statistics reported an increase in floor area of nearly 4% between 2000 and 2004. In this same period the FTE student population increased by 12%, and total income in real terms rose by 13%.

³ For example, the latest set of purchasing consortia annual reports detailed efficiencies of £40 million.

 ⁴ For example, investment in modernising management processes has put HEIs in a stronger position to retain high quality staff.
 ⁵ The Joint Information Systems Committee has recently had a value for money study undertaken which highlighted that, on

average, for every £1 of the JISC budget the HE community received at least £5 of demonstrable value.

⁶ "The economic impact of UK higher education institutions", Universities UK 2006.

⁸ National Student Survey 2006, www.hefce.ac.uk/learning/nss/data/2006/

⁹ National Employer Skills Survey 2005: Main Report, LSC 2006.

¹⁰ Overseas student fee income exceeded £1,215 million in 2004–05. HESA Finance Statistics Return (English HEIs only).

36. The Leitch Review of Skills notes the progress made in raising the proportion of adults with high skills from 21% in 1994 to 29% in 2005,¹¹ placing the UK in a position comparable with the OECD average at present. Furthermore, completion rates remain among the best in the world.¹² A high proportion of students completing their course is an important indicator of good quality learning, teaching and student support. This provides an excellent base for the further expansion recommended by Leitch to move the UK towards a world-class position by 2020.

37. Increasingly HE is not a one-off experience. More learning takes place over an extended period, offering individuals lifelong learning opportunities for personal and professional development and responding to employers' changing requirements. Nearly 55% of students starting undergraduate studies are 21 or over and 45% study part-time. In addition postgraduates now account for one in six of all entrants⁻

38. Of course, HE has much more than an economic role to play in our future. The experience of higher learning helps individuals to develop tolerant attitudes, to adapt to and manage change, and encourages active citizenship. For example, we know that graduates are more likely to vote, to be active in community organisations and to have non-racist attitudes than non-graduates with A-levels.¹⁴ Participation in HE also significantly improves an individual's life experiences in employment, physical and mental health, and parenting.¹⁵ The increasing profile of widening participation over the past 10 years means that ensuring social justice in HE has become a central plank of the policy agenda, which can only lead to benefits for those from disadvantaged groups.

39. The UK has been exceptionally good at generating new knowledge, and the HE sector's research is world-class. Although the UK has only 1% of the world's population, it carries out 5% of world research and produces over 12% of all cited papers and almost 13% of papers with the highest impact. On average, UK scientists receive about 10% of internationally recognised science prizes.¹⁶ This places the UK second in the world in terms of percentage share of citations and high impact research. While we recognise that the Government has made significant steps in increasing investment in UK research and development over the past 10 years,¹⁷ UK success has occurred in spite of historically lower public and private investment in UK research and development than our leading competitors. The majority of UK research and development is carried out in HEIs, whereas in other countries (such as Germany) public research institutes do a larger proportion of the research.

40. This world-class research base is critical to our economic future: a view reflected in the Lambert Review of Business-University Collaboration,¹⁸ and the Government's Science and Innovation Investment Framework 2004-14.¹⁹ We know that publicly-funded research contributes significantly to industrial and economic growth, as the business sector seizes opportunities from the generation of knowledge.²⁰

41. Higher education institutions (HEIs) have become increasingly outward-looking, with a growing ability and motivation to work more effectively with business, each other, and numerous other stakeholders.²¹ The HE-business and community interaction (HE-BCI) surveys of the past five years²² demonstrate the considerable progress made by HEIs in building relationships with business, not only in R&D, but also through consultancy and training. For example, the surveys highlight that UK HEIs are more successful than US institutions in forming spin-out companies (even if at present UK HEIs generate proportionally less licence income).

42. HEIs are also playing a growing role in supporting and helping to regenerate communities, with some explicitly placing regeneration at the heart of teaching and research missions. A recent survey²³ shows that regeneration income to the sector increased by 47% from 2002–03 to reach nearly £216 million in 2003–04.

²³ See note 23.

¹¹ Leitch Review of Skills, "Prosperity for all in the global economy—world class skills: Final Report", HMSO 2006.

¹² According to OECD statistics the UK is fifth in terms of the survival rates of students in tertiary education. "Education at a Glance 2006", table A3.4. www.oecd.org

¹³ HEFCE 2006/13 Strategic plan 2006-11 www.hefce.ac.uk/pubs/hefce/2006/06-13/

¹⁴ Institute of Education, University of London, 2001, "The wider benefits of higher education". Study sponsored by HEFCE and the Smith Institute (HEFCE 01/46).

¹⁵ Bedford Group for Lifecourse and Statistical Studies (Institute of Education), "Revisiting the benefits of higher education", HEFCE research and evaluation report April 2003.

¹⁶ PSA target metrics for the UK research base, OST 2004, cited in "Science and innovation investment framework 2004–14: next steps", HMSO 2006.

¹⁷ HM Treasury, DTI, DfES, Department of Health, "Science and innovation investment framework 2004–14: next steps", HMSO 2006, page 6.

¹⁸ "Lambert Review of Business-University Collaboration", HMSO 2003. Available on Treasury website,

ww.hm-treasury.gov.uk under Consultations and legislation/Full index of consultations.

¹⁹ HM Treasury, DTI and DfES, "Science & innovation investment framework 2004–14", HMSO 2004. Available on the Treasury web-site, www.hm-treasury.gov.uk under Spending review/2004 Spending review.

²⁰ An analysis across 16 OECD countries concludes that a 1% increase in public R&D expenditure leads to a 0.17% growth in productivity. From Guellec, D and van Pottelsberghe de la Potterie, B, 2001, "R&D and productivity growth: panel data analysis of 16 OECD countries", OECD Economic Studies No 33.

²¹ As demonstrated by the annual surveys of interactions between higher education and business and the community, published jointly by the Department of Trade & Industry (DTI) and HEFCE.

²² HEFCE 2006/25 Higher education-business and community interaction survey www.hefce.ac.uk/pubs/hefce/2006/06_25/

Activities include providing consultancy or continuing professional development to businesses and individuals—sometimes free at the point of use. Academic staff also work with voluntary groups and others, to plan urban renewal or economic regeneration projects.

43. The total activity of the UK sector in delivering "knowledge exchange" is valued at around £2 billion (in 2003–04), nearly £1 billion of which was delivered through contract and collaborative research for business to develop new knowledge and innovative applications.²⁴

44. Our universities and colleges are central to the country's economic future, and play a major part in meeting the country's social and environmental goals. We know that globalisation, fierce economic competition, rapid technological change, demographic change, and growing pressures on natural resources and the global climate will pose considerable challenges for our country and place major strains on the global community, particularly developing countries. HE has a major role to play globally, and in transforming our own economy and society, to meet these challenges.

MANAGING THE TRANSITION

45. England has a high performing higher education sector. It has successfully addressed multiple, complex and dynamic agendas. In the past it has managed change well—for instance, the doubling of HE participation²⁵ or the introduction of fees. It must do the same in the future if the UK is to remain globally competitive and deal with deep-seated social issues.

46. The key to HE success has been a diverse sector, autonomous institutions and a regulatory system that commands respect and is continually improved. Other governments are reshaping their HE systems to adopt these features as they are keen to replicate the English success.²⁶

47. The challenge for England is therefore to stay ahead. The introduction of variable fees will provide a much-needed stream of additional investment, but it may also intensify the trend of students who demand more from their investment of time and money. This should help improve the competitiveness of institutions but may result in market shocks which need to be managed to protect public investment and the experience of existing students. In these circumstances HEFCE is able to offer institutions support as they reshape their provision. This enables market factors such as student and employer demands to be properly reflected in a re-alignment of supply. We also invest to ensure provision that is crucial to our economic prosperity (for example, science, technology, engineering and mathematics subjects) or to widening participation (for example, accessible and local provision) remains available even when short-term market forces would otherwise cause closure.

48. It is doubtless true that as global competition intensifies and new players, at home and abroad, enter the HE market then the sector will need to adapt and respond at a faster rate than in the past. Our approach will be to rely on a combination of market forces and selective interventions to ensure the English HE sector maintains its leading global position.

RESEARCH ASSESSMENT AND FUNDING

49. In 2006–07 HEFCE will distribute \pounds 1,342 million in recurrent funding for research within our block grant to HEIs. This funding is allocated to institutions selectively to support and reward excellence in research of all kinds and in all subjects, across the HE sector, with the aim of developing and sustaining a world class research base that can respond flexibly to the changing needs of stakeholders and lead in developing new approaches and fields of enquiry.

50. Within the dual support system our funding for research has two key purposes:

- To support and develop the core research infrastructure, underpinning work of public benefit funded by Research Councils, other government departments, industry, charities and the European Union.
- To enable HEIs to pursue curiosity-driven and "blue skies" research that is fundamental to future innovation.

51. Most of our research grant is distributed as quality related (QR) funding allocated primarily on the basis of quality, as measured through the Research Assessment Exercise (RAE); there is also some specific funding for initiatives to develop research capacity and capability in selected disciplines. There are elements within QR grant allocated by reference to research income from charities and to support the costs of supervising postgraduate research students.

²⁴ See note 23.

²⁵ The number of students in HE more than doubled between 1977 and 1997, with particularly rapid growth between 1988 and 1993. "Higher Education in the Learning Society" (The Dearing Report), HMSO 1997.

²⁶ For example, the Australian Government has been developing a Research Quality Framework. "Research Quality Framework—Assessing the quality and impact of research in Australia", Australian Government Department of Education, Science and Training 2006.

52. Since 1986 the HEFCE has assessed research quality through peer review, in periodic RAEs in which expert panels rate the quality of research conducted in departments across the UK. In addition to informing our grant allocations RAE has been influential in driving up the quality of research and of research management and in benchmarking quality in an international context. The last RAE in the present form is due to take place in 2008, and this will substantially inform funding for a period of five years from 2009.

53. HEFCE has recently announced that it will allocate a portion of QR funds (£60 million in 2007–08) to support and encourage research that directly meets the needs of business and industry.

Reform of research assessment and funding

54. In the December 2006 pre budget report the Government announced the development of a new framework for the assessment and funding of research, to follow after the 2008 Research Assessment Exercise (RAE). The new system will be designed to reduce significantly the operating cost and administrative burden associated with the RAE while still producing robust indicators that can be used to benchmark quality and to drive the Council's funding for research.

55. HEFCE has welcomed the Government's continuing commitment expressed in this announcement to the dual support system for public funding for research and the distinctive role within this for QR funding allocated primarily by reference to research excellence. The Council will now undertake the detailed work necessary to develop and implement the new framework, including detailed consultation with the sector. We will seek to ensure a smooth transition to the new arrangements, to be fully in place by 2014.

56. The new arrangements will be developed as a single overarching framework within which a differentiated approach is possible for groups of disciplines. The approach for science, engineering, technology and medicine will be based on quantitative indicators of research quality and outputs (including bibliometric data, external research income and postgraduate student information), with a role for expert advisors in determining the use of these indicators. This will run for the first time in 2009 with a gradually phased change to funding allocations between 2010 and 2014. For other disciplines there will be a light touch peer review based assessment process, informed by statistical indicators, to be undertaken in 2013 to inform funding allocations from 2014.

Sustainability

57. While the reform of the assessment and funding mechanisms will provide a stable framework for our continuing support of a world leading research base which is dynamic and responsive, further progress is needed to ensure its financial sustainability. During the 1990s, the amount of research funding provided to HEIs by external partners more than doubled; but the funding to support the QR part of the system increased only modestly in real terms. The result has been a situation where the HE sector is struggling to provide the infrastructure to underpin externally funded research. The HEFCE estimates that the full economic cost (taking into account the need to invest continually in renewing the infrastructure) of research of public benefit undertaken in English higher education institutions currently exceeds the income from all sources to support that work.

58. The Government's Science and Innovation Investment Framework (SIIF) set out a 10 year plan for the delivery of stronger research outcomes, including increased investment on both sides of the dual support system, and expectations that Research Councils and other government departments would pay a greater proportion of the full economic costs of the research they commission. Provision for increased spending on research through QR will contribute to closing the gap, but achieving full sustainability without risking a damaging loss of research volume remains a challenge for the HEFCE and the sector. We continue to monitor HEIs' progress towards sustainability through annual "TRAC" returns of their costs and income for all activities, and through the broader monitoring of sustainability in the UK research base initiated by the HE Research Base Funders' Forum.

59. HEFCE is currently considering the contribution that strategic collaboration between higher education institutions can make to improving the strength and sustainability of the research base, informed by discussion with colleagues from the HE sector at a seminar held in September 2006.

ENHANCING LEARNING AND TEACHING

60. The University sector in England is widely acknowledged to be of high quality and its systems for quality are recognised across the world. The quality assurance system has been enhanced through the development of publicly available information including a comprehensive National Student Survey (NSS). The information is available on a web site www.tqi.ac.uk and includes the second year of data from the NSS. This shows a broad based high level of student satisfaction across the sector which, along with the high level of positive assurance given by the Quality Assurance Agency for Higher Education (QAA), demonstrates that our HE sector is maintaining its quality as we move to much greater student numbers.

61. There is a strong indication that institutions are using the outcomes of the NSS for quality enhancement efforts within their institutions. The Higher Education Academy (HEA) and the Equality Challenge Unit are using evidence from the NSS to support institutions in improving the experience of students from particular ethnic groups, and of those with disabilities. The HEA, along with the QAA, will also be looking at ways in which institutions can improve assessment and feedback mechanisms to students, another area identified by the NSS. Institutions will also begin to share, as a matter of course, external examiners' reports with student representatives, strengthening the student involvement in improving assurance and enhancement.

62. As a result of significant investment, institutions now place quality enhancement in learning and teaching at the heart of their strategic objectives. This investment has been extended to include provision by further education colleges. Targeted investment of this kind supports institutions in driving forward change and raising the profile of teaching and learning across the campus.

63. Over the past year the 74 Centres for Excellence in Higher Education (CETL) have established their presence and most of the work to enhance the learning environments through injections of capital spending has been completed. This investment will enhance the learning experience of an increasing number of students as the CETLs complete their programmes to infuse their excellence into further programmes of study. This focus on developing excellence helps English HE to maintain its position in the increasingly competitive market for international students.

64. Through the network of 24 subject centres, the HEA is working with the QAA to further develop enhancement in HE, and on benchmarking academic standards. The HEA also continues to support institutions in their response to judgements from the QAA, ensuring they use the outcomes of reports to drive forward enhancement programmes.

REVIEW OF THE TEACHING FUNDING METHOD

65. HEFCE began its review of teaching funding in 2005. The guiding principle was to ensure that our approach to teaching funding was fit for purpose in the funding environment envisaged in the Higher Education Act 2004. In developing our revised approach we consulted widely with the higher education sector and other stakeholders.

66. We are now committed to a two-cycle approach which will ensure that the sector will be able to meet the challenges arising from variable fees. A second cycle will take into account any changes recommended in the review of the new funding reforms in 2009.

67. The key principles underpinning our funding in the planning period 2006–10 are ensuring that the sector has a stable funding platform rewarding dynamism and enhancing quality, and securing strategic provision and strategic objectives (notably strategic and vulnerable subjects, widening participation, and employer engagement).

68. These objectives will be secured through maintaining a commitment to the teaching funding allocation being determined by volume of teaching and the relative cost of provision. In addition we will make a number of allocations to support strategic subjects, widening participation, historic buildings, and exceptional costs carried by some institutions. Our teaching funding will continue to be delivered to institutions as a block grant, leaving institutions the discretion to invest HEFCE funding in accordance with their own strategic priorities.

69. We will continue to extend the Transparent Approach to Costing (TRAC) to teaching. This major project will enable higher education institutions better to understand the distribution of costs between teaching, research and other activities. It will also, by 2008, give HEFCE and the HE sector robust data on the relative costs of different types of provision and, when used sensitively and with appropriate contextual information, will give clearer data on teaching costs. These data will help inform our review of teaching after 2009.

FUNDING FOR GROWTH IN STUDENT NUMBERS

70. The Leitch Review of Skills sets a challenging vision for expansion in HE. The Report emphasises the need for significant growth in a parallel economy of lifelong learning to up skill the adult workforce to higher skill levels through HE qualifications. It states that the costs this expansion should be met predominantly by the individual and employers. It is a challenging agenda starting from a low base. The Report is also clear that this new growth must be built on the successful bedrock of a continued increase in the proportion of young people progressing to HE as part of their initial education. HEFCE believes that it is important to maximise the growth in higher level learning in the most cost-effective way through both routes. We expect there will be continued demand for HE arising from the following factors: demographic change; increased numbers of students from other EU countries; anticipated improvements in attainment at level 3; and the success of existing and future activities to increase demand. It will be important to enable the HE sector to meet that demand as well as to increase the number of employees learning in the workplace in order to ensure a continued flow of people with higher level knowledge and skills through HE to benefit our economy and society.

MAINTAINING OPPORTUNITY

71. The population of 18–20-year-olds will continue to increase until 2010–11²⁷. Growth in student numbers is therefore required just to maintain the current rate of HE participation. Zero or limited growth would mean that some young people might not be able to progress to HE. Those denied a place in such circumstances could include a number of young people from less advantaged backgrounds. Providing the students of tomorrow with opportunities to participate in HE is important if all those succeeding at level 3 are to fulfil their potential.

72. Ten countries joined the European Union in 2004, and Bulgaria and Romania became members on 1 January 2007. We anticipate that this will lead to more demand from EU students. The HE system may need to become even more responsive to meet national and European demand.

73. The Public Service Agreement targets include increasing the proportion of young people who achieve Level 3 qualifications. This will lead to an increased demand for HE places as more young people with level 3 qualifications progress to higher level courses. Progress has already been made: the numbers of 19-year-olds qualified to Level 3 increased by 3.5% between 2004 and 2005²⁸. Modelling currently assumes that this improvement will continue at a rate of 1% per year. Work to improve boys' attainment at levels 2 and 3 (where boys consistently under-perform girls)²⁹ will also feed into achievement of this target, and thus into higher rates of progression to HE.³⁰

74. We are currently supporting measures, such as Aim Higher and Lifelong Learning Networks that will further develop demand from young people. Soundings within the HE sector, and statistics on applicants from UCAS, suggest that there is continuing growth in demand from young people which it is in the public interest to meet. Furthermore, to reach the proportions of people in the workforce with HE qualifications that the Leitch Review says the UK needs to be competitive, a far greater investment in demand development activity will be required.

75. In considering the cost effectiveness of different routes to producing higher levels of HE qualified people in the workforce it is important to examine evidence about completion rates. Sixty seven per cent of full-time undergraduates on three-year programmes qualify with an HE award within three years, whereas it can take rather longer to complete some part-time vocational programmes. While there are often good business and career reasons why learners and their employers are making use of HE in this way, in order to address the issues being raised by the Leitch Review of Skills, we need to strive for an appropriate balance between traditional full-time provision and employer co-funded provision as another type of higher education.

GROWTH IN LEARNING IN THE WORKPLACE CO-FUNDED WITH EMPLOYERS

76. Building employer demand and supporting the HE sector to innovate in their supply of new flexible learning solutions should help the HE sector to develop programmes that more closely match the needs of employers and their employees. Consequently, employers should be more inclined in the future to meet a greater proportion of the costs of HE-level learning undertaken by their employees.

77. There are significant variations in employers' contributions to costs, influenced by factors outside the control of HE such as the size of the employer, the sector, their exposure to competition and the prevailing economic conditions. Co-funded provision is relatively new. We will use the experience of the coming years to help us predict with greater certainty how quickly co-funded HE-level learning in the workplace can grow after 2011.

THE LEITCH REVIEW AND ENGAGING EMPLOYERS WITH HIGHER EDUCATION

78. HEFCE welcomes the report from the Leitch Review. Lord Leitch rightly sets out targets which will challenge higher education in meeting the country's future needs for higher level skills. The role of higher education is crucial to driving up economic productivity by adding value both to the individual and to the economy. We also welcome the recommendation that some expansion in Higher Education should be delivered through a demand-led mechanism like Train to Gain. We have already established Higher Level Train to Gain pathfinders in three regions. We will explore with partners how we extend our support for universities and colleges in taking a greater role in workforce development, and extend their capacity to deliver the tailored flexible courses that businesses and individuals need. We look forward to working with the DfES and the HE Sector to help realise the Leitch vision.

²⁷ Bekhradnia, B, "Demand for Higher Education to 2020", Higher Education Policy Institute 2006.

²⁸ National Statistics First Release, "Level 2 and Level 3 attainment by young people in England measured using matched administrative data: attainment by age 19 in 2005 (provisional)", DfES 2006.

²⁹ 38.3% of male 19 year-olds in 2004 had attained a level 3 qualification, compared to 47.1% of females. Source: "Level 2 and 3 attainment by young people in England measured using matched administrative data: attainment by age 19 in 2004", table 2, additional information, DfES 2005.

³⁰ The Higher Education Initial Participation Rate (HEIPR) for male English domiciled first-time entrants to HE courses at UK HEIs was a provisional 37% in 2004–05; the equivalent rate for women was a provisional 47% in 2004–05. Source: DfES, 2006, "Statistical first release: participation rates in higher education: academic years 1999–2000 to 2004–05 (Provisional)." See also HEPI, 2005, "Demand for HE to 2020" on the benefits for progression of raising boys' attainment.

79. The approach advocated by Lord Leitch is consistent with that set out in HEFCE's own strategy for engaging employers with higher education, agreed in June 2006. This strategy, delivers current HEFCE Strategic Plan objectives in relation to flexible and lifelong learning and employer engagement and draws on significant independent research commissioned by HEFCE in 2005. It also addresses issues raised by the Secretary of State for Education and Skills in HEFCE's 2006 grant letter.

80. Higher education has a vital role in making the country more competitive by promoting the knowledge-based aspects of our economy and driving up productivity and growth, through improving skill levels. Although many universities and colleges are already engaged with the world of work, the HE sector needs to collaborate more effectively with employers to maximise the benefits for learners, employees, employees, the economy and society. HEFCE's strategy will identify how we should support the HE providers to do this. In doing so, a key aim will be to promote partnerships between HE, employers and individuals. This will deliver a holistic approach to the key challenges and ensure a fair partnership in which all three share in the costs as well as the benefits of higher education. The strategy will seek to improve the employability of graduates, as well as helping HE to make a stronger contribution to workforce development.

81. We are adopting a two-phase approach. In the first phase we are funding a range of pilot projects which will develop our understanding of current activity and test approaches to making provision more relevant and tailored to employers' needs. The second phase will draw on these findings to develop a shared strategy between HE and its partners.

82. We will be supporting a range of projects at national, sectoral, regional and local levels. These will explore and address the barriers faced by universities and colleges in being responsive to employers' needs. These include ensuring that:

- quality assurance systems which apply to HE provision are fit for purpose;
- employer-responsive provision is funded appropriately;
- HE links effectively to policy for 14–19 year-old learners and further education;
- vocational and work-based learning is valued and supported by providers;
- academic staff have opportunities to update and refresh their knowledge of industry and the world of work;
- there are clearer routes for learners to enter HE with non-traditional backgrounds; and
- credits and qualifications systems enable learners to learn and accumulate qualifications in a flexible way that fits with their work and broader life commitments.
- 83. Employers can also expect to see better services tailored to their needs, such as:
 - Access to HE level provision through the Train to Gain brokerage service for employers in three regions: North East, North West, and South West.
 - Clearer presentation of the costs of HE programmes to suit employers' needs for general business skills and specialist knowledge.
 - More undergraduate and postgraduate courses that are relevant to employers' current needs; and more student placements and consultancy which will contribute to higher productivity and business transformation.
 - More universities and colleges offering opportunities for workforce development, such as through:
 - work-based learning;
 - e-learning;
 - short courses;
 - flexible delivery at the workplace;
 - accreditation of prior learning;
 - accreditation of experiential learning; and
 - accreditation of companies' in-house training programmes.

84. To improve services for national employers, we will work with the Learning and Skills Council to explore the potential for HE provision to be accessed through the LSC's National Employer Service.

85. We also aim to expand opportunities for employers to access HE provision to complement and enhance knowledge transfer, research and consultancy from universities and colleges.

- 86. In the longer term we seek to:
 - make clearer to employers which universities can meet their needs;
 - spread good practice on engaging with employers to enable employers to focus on practical outcomes, with fewer committees;
 - develop a shared language between employers and the HE sector;

- ensure employees know what support is available to them for increasing their skills and personal development; and
- ensure graduates are well-rounded, with the skills and attributes not only for employability but to help them transform the businesses they work in.

87. A key challenge in this agenda will be in building employer demand for higher level skills and HE qualifications. As the Lambert Review showed in relation to knowledge transfer, too few businesses are demanding the services from HE that they need to support innovation and productivity and remain gloabally competitive. To realise the vision of the Leitch Review, with a massive growth in higher level learners, paid for in part by employers, there will need to be a concerted and combined effort, using a wide range of publicly supported mechanisms, to demonstrate to employers the value of investing in higher level upskilling of their workforce. The HE sector has an important role to play but other organisations will also need to play their part.

WIDENING PARTICIPATION AND FAIR ACCESS

88. We fully support the Government's aim to increase and widen participation in higher education so that all those who can benefit from it have the opportunity to do so. Higher education institutions (HEIs) have already made considerable progress in meeting the long-term challenges that this poses, supported by targeted public funding and good practice guidance.

89. The evidence that widening participation (WP) interventions have an immediate positive impact on aspirations of learners is overwhelming. In our recent review of WP (2006), we showed that activity designed to raise aspirations among young people were considered very successful by practitioners and teachers. There is also some research evidence to suggest that this conclusion is well-founded. The Sutton Trust was surprised (and gratified) to find that two-thirds of 11-16 year-olds in schools in England and Wales questioned by MORI for research commissioned by the Trust said they expected to go into higher education when they were old enough (Sutton Trust 2002). Eighty-four per cent of professionals think it likely their children will go to university, but so too according to Wragg and Johnson, do 65% of manual workers. "Despite the differences... the very fact that nearly two-thirds of routine manual workers expect their children to go to university, it could be argued, is evidence of the success of policies encouraging all groups in society to aspire to higher education" (Wragg and Johnson 2005, 96). There is also strong evidence of endorsement by teachers, and although less common (because more difficult to reach) positive endorsement from parents and carers too. In addition, as part of the evaluation of Aimhigher, evidence from the NFER surveys in the former Excellence Challenge areas found: higher than expected levels of attainment associated with being designated as a member of the WP cohort; a 4.6 percentage point improvement in the proportion of Year 9 pupils attaining Level 4, 5 or 6 in mathematics at Key Stage 3; an average improvement of 2.5 points in GCSE total point scores; a 3.9 percentage point increase in Year 11 pupils intending to progress to HE.

90. We believe that some of the expansion in student numbers caused by demand-raising activities such as Aimhigher will be captured within growth due to demographic changes and increases in level 3 attainment. However, we expect demand to increase still further. Estimates of demand in the regions have indicated that institutions may wish to accommodate around 60,000 additional places over the next CSR period. This is around 6,000 more that we project from demographic changes, increased attainment and EU expansion. We believe that the difference reasonably represents the additional growth that demand-raising activities may stimulate, beyond what they contribute to increased attainment.

91. A significant part of our work in further raising demand for HE is the steps we have taken to improve the prospects for progression into and through higher education for vocational learners. Roughly half of those qualified at level 3 in vocational subjects progress to HE compared with about 90% of those with academic qualifications.³¹ In addition, for those vocational learners already in HE, there continue to be gaps and inconsistencies in opportunities available. To address this, HEFCE and the LSC asked partnerships of HEIs and further education colleges (FECs) (along with key partners such as Aimhigher, Regional Development Agencies, Sector Skills Councils, and local employers) to develop proposals for Lifelong Learning Networks (LLNs). While the core characteristics of an LLN were identified in advance, each LLN has developed solutions appropriate to their regional context and sector focus, through an iterative development process found to be robust by HEFCE's internal audit.

92. We have been encouraged by the different and innovative approaches taken by LLNs, and have now achieved almost national coverage. To date, approximately £92 million has been allocated to fund twenty seven networks, spanning 113 higher education institutions and more than 260 further education colleges. If all of the further proposals are developed into full business cases, this would increase national coverage to at least 119 HEIs and over 285 FECs. LLNs have also been allocated approximately 7000 additional student numbers (ASNs) to make places available on programmes (existing programmes or new ones) that enable progression for vocational learners.

³¹ Emerging research does suggest that the differential participation rates between those with academic qualifications and those with vocational qualifications may reflect weaker underlying performance at both level 2 and 3.

93. LLNs will take a number of steps to create the required coherence, clarity and certainty for vocational learners. These include:

- Progression agreements that define clearly the expectations about progression that learners can reasonably hold and makes a commitment that these expectations will be met (moving beyond "pathways" and "frameworks").
- Curriculum alignment that removes barriers to progression and bridging provision that forms part of the HE offer.
- HE Curriculum development involving employers to ensure that appropriate learning opportunities are actually available that match the skills and abilities non-traditional learners bring to HE to the needs of employers.
- The involvement of HE in the development of the 14–19 specialised diplomas.
- Learner support systems that allow LLNs to engage, and track, learners in the context of lifelong learning opportunities.

94. As well as raising aspirations and demand for HE, supporting student success is also a shared concern across the sector, facilitated through a combination of targeted support and increased flexibility and quality of provision. Many institutions have objectives "to attract and retain" students, and look to support a diverse student body. Both the Universities UK report, From the Margins to the Mainstream (2005) and Action on Access (2003) argue that embedding WP across institutional practice and policy is the key to supporting student success. The evidence is that WP funding is leading to the incorporation of WP objectives in the mission statements and management arrangements of HEIs. Some institutions now expect faculties and departments to justify their portion of the retention allocation as part of their reporting processes and business planning cycles. Indeed, evidence to date suggests that widening participation funding is leading to the incorporation of widening participation objectives in the mission statements and management arrangements of HEIs. For example, the University of Manchester aims to be the UK's most accessible research-intensive university and has widening participation as one of its nine strategic goals. This suggests a shift in HE culture and shows real commitment to wider access.

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ENHANCING THE CONTRIBUTION OF HIGHER EDUCATION TO THE ECONOMY AND SOCIETY

95. Higher education institutions (HEIs) contribute to the economy and society in many ways. HEFCE is committed to maximising the contributions made by HE teaching and research to businesses, public services, social enterprises, arts and cultural institutions. We aim to enhance HE's capacity to create jobs and wealth, as well as to improve people's quality of life, support social and economic regeneration and inculcate civic values.

96. The HE knowledge base has a considerable role to play as a source of the country's global competitiveness, creating new ideas, entrepreneurs and increasing skills and productivity. This has been acknowledged in the Government's Science and Innovation Framework.³² Since 1999 HEFCE, in partnership with Government partners has been providing a "third stream" of funding alongside funds for teaching and research, to enable institutions to develop their responsiveness to the needs of business and the community. This investment has put in place an infrastructure for knowledge exchange between HEIs and a range of users, including public and private partners, social, civic and cultural organisations, and individuals.

97. The HE Innovation Fund (HEIF), which is a partnership between HEFCE, DfES and OSI, enables all HEIs to invest in culture change and infrastructure to engage with users across the broad range of their activities and to shape their future offer in response to the needs of business and the community. It aims to integrate third stream activities into every HEI in a sustainable way that is appropriate to their mission. Under HEIF 3 (2006–08) we will allocate £233 million through a formula allocation to all HEIs, and project funding to 11 large-scale collaborative projects.

³² Science and Innovation Investment Framework 2004–14, HM Treasury, July 2004.

98. We expect our funding to leverage funds from other sources and some aspects of knowledge exchange (eg commercialisation) are most appropriately funded by the beneficiary rather than public funds. However, we believe there is a strong need for the continued public funding of this innovation infrastructure in HEIs, in order to secure the wide range of public goods which are delivered from engagement between HEIs and external partners, such as research which informs business and social activity, the promotion of enterprise education and knowledge exchange with community organisations and small and medium-sized enterprises (SMEs) who are not likely to be able to pay the full costs of interactions with HE.

99. We continue to work with Government partners to collect and develop appropriate data relating to the third stream activities of HEIs, as a basis for effective mechanisms for funding in this area. We run the annual HE Business and Community Interaction Survey (HEBCI) for this purpose. The HEBCI survey shows a significant shift in the quality and extent of HEIs' interactions with business and the community during the period 2000–04 (see table below).

Selected HE-BCI indicators 2000-01 to 2003-04

	2000-01	2001–02	2002–03	2003–04
Number of invention disclosures [†]	2,159	2,478	2,710	3,029
Consultancy income £000s (real terms*)	112	129	172	211
Collaborative research income £000s (real terms*)	447	495	491	541
A required contracting system for all staff-business	60%	65%	66%	68%
consulting activities (% of UK HEIs)				
An enquiry point for SMEs (% of UK HEIs)	83%	85%	89%	90%
Regeneration income £000s (real terms*)	£129	£134	£150	£216
Equipment and facilities £000s (real terms*)	£28	£53	£68	£80
HEIs providing short bespoke courses on companies'	62%	67%	78%	80%
premises				
HEIs providing distance learning for business	52%	52%	66%	66%

* All figures have been adjusted to 2003–04 prices.

[†] Disclosures are often the first step to the commercialisation of inventions and certain types of intellectual property.

100. Much of our third stream funding to date has been awarded to collaborative projects which encourage HEIs to pool their resources and work together to deliver increased benefits to external users. We are also supporting the sector to identify and share good practice in engagement with business and the community, and are working with the new Institute of Knowledge Transfer and other sector based bodies to professionalise knowledge transfer careers within HE. The Cooksey Review³³ recommended that HEFCE and OSI should also review the technology transfer function in HEIs, to identify and disseminate good practice in this area, and we will be developing our proposals in relation to this in the coming months.

101. Through HEIF 3 formula funding we are supporting all HEIs to develop a strategy and infrastructure to share the benefits of their teaching and research with the wider world. However, in future we also want to do more to support those HEIs who are going further and focussing their institutional mission on the third stream. Such HEIs are increasingly describing themselves in terms of their relevance to users, and are significantly increasing the intensity of their third stream activities. We believe that enabling this kind of mission could expand the reach of HE to users and sectors which don't currently engage with HE knowledge. It will also encourage a more diverse HE sector that provides a range of services relevant to all aspects of competitiveness. We are currently working jointly with five HEIs³⁴ on experimental projects that will demonstrate latent capacity in institutions with this mission profile that could stimulate demand in new users, particularly local and regional SMEs.

102. Through our Strategic Development Fund (SDF), we support large-scale and structural changes in the HE sector. Many projects funded through SDF seek to align HE more closely with the needs of business and the community, either at local, regional or national levels. Through SDF we are currently working with a number of HEIs to develop new ways for the HE sector to encourage business innovation and creativity, through collaborations in design and creativity, bringing together students, researchers and businesses in a shared environment.

103. Investment in our HE sector to improve knowledge transfer and innovation is of vital importance to the future competitiveness of our economy. However, we also see a need to promote more international and global partnerships devoted to innovation through creating opportunities for leading-edge researchers and practitioners to come together with users of research to push back the barriers of discovery and application together. A number of the projects funded through HEIF 3 include international collaborations with HEIs, businesses and others in India, China and North America, to develop new ideas and technologies

³³ Sir David Cooksey, A Review of Health Research Funding, HM Treasury, December 2006, pp 96, paragraph 7.41.

³⁴ The five HEIs are: De Montfort University, University of Central England, University of Hertfordshire, Sheffield Hallam University, Brighton University.

which will increase the global competitiveness of the UK. We will support the work of other partners such as the UK Research Councils, Technology Strategy Board and UKTI in promoting international partnerships in innovation.

PUBLIC ENGAGEMENT WITH HIGHER EDUCATION

104. HEFCE has united with the major UK funding bodies to establish a co-ordinated approach to recognising, rewarding and building capacity for public engagement in higher education institutions (HEIs). Support for public engagement was one of the issues that received significant backing in the consultation on the HEFCE strategic plan for 2006–11. With Research Councils UK, and the Scottish and Welsh Funding Councils in association with the Wellcome Trust, we have launched a new initiative to promote excellence and effect a culture change in the way universities and colleges engage with the public. The initiative will seek to create partnerships and networks between higher education institutions (HEIs) and other providers such as museums and galleries and will span all subjects and activities in higher education.

105. HEFCE on behalf of all the funding bodies is inviting proposals from HEIs to set up collaborative beacons for public engagement, including one national co-ordinating centre. Jointly we are providing a total of up to £8 million over four years to support this pilot initiative. We believe that this co-ordinated approach will send out a strong signal that maintaining an effective dialogue with the wider public is important in terms of maintaining confidence in higher education and extending its civic and civilizing influence. It is also essential that teaching and research remain in tune with the needs of society, and that means listening to the public.

STRATEGICALLY IMPORTANT AND VULNERABLE SUBJECTS (SIVS)

106. HEFCE believes that it is essential that disciplines and subjects that are of strategic importance to the nation are sustained and developed so that the public interest in England's higher education is secured.

107. The principles and policy that guide our programme were set by an advisory group chaired by Professor Sir Gareth Roberts in June 2005 (see HEFCE 2005/24). In summary, Sir Gareth's group advised that:

- The dynamism of the HE sector is a great strength. Action should therefore be proportionate to the problems we find.
- Each strategic and vulnerable subject will have its own characteristics that will require a tailormade solution.

108. Since then we have worked in partnership with a wide variety of stakeholders, using a sound and reliable evidence base, to support and develop strategically important and vulnerable subjects. Stakeholders include, but are not limited to, funding bodies, Royal Societies and professional bodies, subject associations and groups concerned with widening participation into HE.

109. In tandem with this we keep a watching brief on the potential national consequences of withdrawal of provision and department closures in HEIs to monitor whether current provision is out of step with national or regional need. Acting with regional partners, such as Regional Development Agencies, we are able to sustain disciplines of strategic importance in a region where an individual HEI's decision may have led to some decline. We also keep abreast of the data so that we can understand trends over time in strategic subjects. This helps us to recognise the vulnerability of individual strategic subjects. Over the longer term, these data will help us understand the impact of our work to encourage more people to study strategic subjects in higher education.

110. We have developed a programme of work tailored to the specific vulnerabilities of each subject, which is informed by the policy framework set by Professor Sir Gareth Roberts' advisory group. This programme is proceeding hand in hand with the initiatives and funding streams that support our strategic aims, many of which provide national and regional support for strategic subjects.

111. We have sought to increase and widen participation in these subjects by working through existing structures, including Aimhigher and the Science, Engineering, Technology and Mathematics Network (SETNET). Although individual professional bodies have led the way, they have taken a very inclusive approach, working (for example) with CETLs, Higher Education Academy subject centres, RDAs, and Sector Skills Councils. We will also take account of the way in which the recommendations from the Langlands Review, "Gateways to the Professions³⁵" are taken forward.

112. We are acting to raise aspiration in collaboration with the Institute of Physics, the Royal Society of Chemistry, The Royal Academy of Engineering and other professional bodies in science, technology, engineering and mathematics (STEM) and with the HE Academy's subject centre in languages, linguistics and area studies to raise demand for the study of modern foreign languages. We are providing additional funded student places in STEM disciplines. We are also working with the Research Councils and the UK's other higher education funding bodies to sustain research capacity and capability in areas that are of critical

³⁵ Details are available at http://www.dfes.gov.uk/hegateway/hereform/gatewaystotheprofessions/index.cfm

importance to the nation. An example is our £12 million support for the UK wide Area Studies and Related Languages initiative. This aims to create a world class cadre of researchers to enhance the UK's understanding of the Arab World, China, Japan, Eastern Europe and the former Soviet Union.

113. In addition, we fund several Centres for Excellence in Teaching and Learning that support SIVS and the funding we have committed to support Lifelong Learning Networks will also help to meet regional skills needs and economic priorities of England's regions in conjunction with key stakeholders and raise demand for HE.

114. Such demand raising activity will, by its very nature, take some time to result in increased take up of these subjects in HE. Therefore, we have recognised the need to help HEIs maintain provision in those subjects that are particularly expensive to provide, ie chemistry, physics, chemical engineering and mineral, metallurgy and materials engineering. Consequently, we announced in November 2006 that we would deliver an additional £75 million to the sector to sustain capacity in these very high cost subjects over the next three years.

115. Overall, we have committed nearly £250 million to support our work in SIVS. Looking forward, we will evaluate the effectiveness of this programme of work during 2007. The results will help inform the work of a review overseen by a new advisory group in 2008, which will consider whether the policy framework we have in place is still fit for purpose in a more marketised higher education environment. The results of future government spending reviews and subsequent decisions about priorities will also help determine the level of investment in strategic subjects in the future.

LEADERSHIP, GOVERNANCE AND MANAGEMENT IN HIGHER EDUCATION

116. English HE is a leading UK export³⁶ and a source of local and regional wealth creation³⁷. Its current strength reflects well on its past leadership, governance and management. Judged by its outputs the HE sector must be good.

117. While on the whole this analysis is true, it is deficient in two important respects. First, past success does not guarantee future success. There is, for instance, now a much greater need for HEIs to understand better, and to communicate effectively with, their "markets." Students and employers are obvious examples but the marketing skills need to be deployed more widely; universities are increasingly looking to expand donations and need to ensure government investments are seen to deliver valuable outcomes. Running a modern HEI is every bit as complex as managing a large multinational, multi-product business. To succeed in the future HEIs will need to widen their range of skills as well developing new ones.

118. Second, multiple stakeholders demand a greater degree of accountability in return for both public and private investment, with a need for assurance that extends much wider than existing regulatory systems such as the Quality Assurance Agency for Higher Education and the Research Assessment Exercise. Banks and donors want to ensure their investments are safe. It is also important that HEIs fulfil their obligations under public policy agendas such as equal opportunity and sustainable development. In this context it would be easy for the accountability burden to rise with little real world improvements. At HEFCE we have worked hard to reduce the burden of accountability by using a risk-based approach and targeting our resources appropriately. With a low risk, high performing sector, this means we have achieved a 25% reduction in burden between 2000 and 2004.³⁸ We have also sought to increase broad confidence, leading to the sector enjoying some of the lowest rates and best terms available in the financial markets.

DEVELOPMENT OF THE NEW ACCOUNTABILITY FRAMEWORK

119. We aim to further reduce the accountability burden over the coming years (by 20% between 2004 and 2007, and by a further 10% by 2011³⁹). To achieve this we consulted the sector in 2005 on proposals to change the accountability process. The key idea is the "single conversation", concentrating, as far as possible, the exchange of documents and dialogue with institutions into a short period each year. The sector broadly supported our plans and we have been running a pilot study in 2006. The results will be available in early 2007, and we hope to move towards new sector-wide processes after that.

120. At the same time we have been discussing with other public sector funders of higher education how to create a common accountability framework. By relying more on each others' work we could cut out duplicated and unnecessary effort. In this way institutions would face fewer demands for information. The National Audit Office is playing a key role in promoting this initiative.

³⁶ English HE is reported as being worth £45 billion to the UK economy and generating £3.6 billion in gross export earnings. "The economic impact of UK higher education institutions", Universities UK 2006.

³⁷ For example, the University of Bradford is working closely with the city's planners in a major transformation of the city, creating an educational village that is integral to the city centre. There are many more universities and colleges taking a leading role in the regeneration of cities and towns: current developments include Ipswich, Southend, Hastings and Folkestone, Birmingham, Stoke on Trent, Lincoln and Newcastle.

³⁸ PA Consulting (2004) "Better accountability revisited: review of accountability costs 2004", HEFCE research report.

³⁹ Key performance target 17, "Strategic plan 2006–11", HEFCE 2006/13.

PROGRESS ON SECTOR LEADERSHIP, GOVERNANCE AND MANAGEMENT ISSUES

121. Considerable progress has been made in leadership, governance and management issues in recent years. Taken together, these make a significant contribution towards achieving the Council's key strategic aim to "sustain a high-quality HE sector which adapts to the developing needs of stakeholders, and which continues to be recognised as world class".

Sustainable Development

122. Sustainable development is a central part of our strategy for the future development of the sector. During our recent consultation with the sector, a leading journal in this field (the International Journal for Sustainability in Higher Education) declared UK higher education to be the leading sector in Europe after Sweden. Our vision is that, within the next 10 years, the HE sector in England will be recognised as a major contributor to society's efforts to achieve sustainability—through the skills and knowledge that its graduates learn and put into practice, and through its own strategies and operations. Our recently published sustainable development strategy⁴⁰ has raised the issue's profile in the sector, and HEIs agree that they have a significant contribution to make towards ensuring the sustainable development of society. This will be in four ways—as an educator; developing research in new technologies; acting as a catalyst for change with businesses, government bodies and others; and through the position HEIs hold in their communities. All of these support the UK Government's sustainability strategy to secure our future.

People and Skills

HR Management

123. Since the substantial injection of £888 million of new funding into the sector via the Rewarding and Developing Staff in HE special initiative, HEIs have modernised their human resource processes and practices. Evidence from KPMG's evaluation of the initiative⁴¹ in 2005 found that the investment had changed the profile of human resources in HE: becoming more proactive, strategic, professional and systematic. There is an increasing awareness of the importance of strategic human resourcing to institutional success. At the same time, the sector has implemented the Framework Agreement for the Modernisation of Pay Structures, resulting in a range of improvements including contribution pay and market supplements, as well as a single pay spine for all HE staff which will go some way towards ensuring equal pay for work of equal value.

Workforce Development

124. Our workforce "framework" will be the vehicle whereby we can identify workforce challenges of the future, publish research that is of sector importance as well as highlighting those HE "success stories" from which other HEIs can derive valuable examples of good practice. Delivering an appropriate and useful framework will require successful maintenance of those important partnerships with our key stakeholders. Our future work in this area will be based around internationalisation and cross-sector comparisons.

Estates

125. Capital investment of some £4.36 billion from HEFCE between 2000 and 2007,⁴² as well as the increasing marketisation of HE, means that the quality of the HE infrastructure has improved significantly over recent years. About two-thirds of the estate is classified as either category A (as new) or category B (good). Estates Management Statistics and the UK HE Space Management Group further enable us to gather appropriate data and facilitate change in this area, and we are developing a new Capital Investment Framework, which will allow for longer-term, strategic investment.

Building capacity and capability

Leadership, Governance and Management Fund

126. The Leadership, Governance and Management Fund continues to provide a small, but valuable source of public funding for the development and dissemination of good practice in these areas. Often this is identified by HEIs themselves, but we can maintain a strategic overview through commissioning projects which are of strategic importance to the sector and for government—most recently, for example, in the areas of: governance; shared services; environmental sustainability; performance management; and pensions:

⁴⁰ "Sustainable development in higher education", HEFCE 2005/28.

⁴¹ Evaluation of Rewarding and Developing Staff in HE initiative 2001–02 to 2003–04. May 2005. A report for the HEFCE by KPMG LLP.

⁴² "Future needs for capital funding in HE—a review of the future of SRIF and learning and teaching capital", a report to HEFCE by JM Consulting Ltd 2006.

- Committee of University Chairman—key performance indicators to aid effective governance in HE.
- University of Leeds—academic performance management for excellence at the university—NHS interface.
- St George's Hospital Medical School—UK Panel for Research Integrity in Health and Biomedical Sciences.
- University of Westminster—development of a 10 year pensions strategy for HE.
- University of Liverpool—business processes and organisational development (shared services).

Leadership Foundation for Higher Education

127. The Leadership Foundation for Higher Education (LFHE) was launched in March 2004 to help the HE sector meet the future demands of global HE provision. An evaluation by independent consultants, reporting in June 2006 after two years of operation, endorsed its approach and found it to be a well-led organisation. The evaluation report said: "The LFHE is a well-led and governed organisation that has fully grasped and understands the role it must perform . . . that it is now generally accepted as a legitimate and necessary capability that serves to work for and on behalf of the sector is in our view a very real achievement".

Governance

128. A close working relationship with the Committee of University Chairmen supports ongoing improvements in governance development (for example, we worked with the Committee to produce the new governance code⁴³), and we commissioned the Leadership Foundation for HE to deliver governor development programmes, research and related activity. This aligns with recent thinking in the EU: among the recommendations given in their *Modernisation Agenda for Universities*,⁴⁴ the EU commissioners said that member states should ". . . build up and reward management and leadership capacity within universities. This could be done by setting up national bodies dedicated to university management and leadership training, which could learn from those already existing", recognising the future leadership demands of global HE provision.

Equality and Diversity

129. We are committed to promoting equality and diversity within the staff and student bodies in higher education, within a legal framework where we have a positive duty to promote race, disability and soon gender. But our commitment to promoting diversity across *all* areas runs throughout our strategic aims. With the other UK funding bodies, we fund the Equality Challenge Unit to work with HEIs to ensure they are properly advised and supported in achieving both the letter and the spirit of the law in this area. The Equality Challenge Unit works with individual HEIs offering sector-wide advice; representing the sector publicly; advising organisations within the sector; liaising with outside bodies on the sector's behalf; and initiating sector-wide conversations on the key issues. In recent years, HEIs have developed equality schemes in the areas of race and disability, and will shortly be producing equality schemes for gender.

THE BOLOGNA PROCESS

130. HEFCE supports the Bologna Process. Active engagement by the English higher education (HE) sector with the development of the European Higher Education Area is important for a number of reasons. It will help to secure the position of English HE within Europe, and to ensure that best practice can be shared and applied in learning, teaching and quality assurance. It will also support the mobility of learners, enabling them to develop an international perspective that will enhance their employability in an increasingly globalised economy. We support this engagement in the following ways:

- By providing funding, together with the other UK funding bodies and other stakeholders, in support of the UK Higher Education Europe Unit, to co-ordinate and champion the UK contribution to developments in Europe.
- Through supporting the contribution of the Quality Assurance Agency for Higher Education to the development of Europe wide quality assurance arrangements.

⁴³ Guide for Members of Higher Education Governing Bodies in the UK—Governance Code of Practice and General Principles", Committee of University Chairmen 2004/40a.

⁴⁴ "Communication from the Commission to the Council and the European Parliament—delivering on the modernisation agenda for universities: education, research and innovation", Commission of the European Communities, Brussels 10.5.2006 COM(2006) 208 final.

- Through support for the "Measuring and Recording Student Achievement Steering Group" that has recommended the adoption of a common HE credit framework that would articulate with the European Credit Transfer System (ECTS) and has led discussions about enhancements to the transcript based around the Diploma Supplement.
- Through supporting a faster adoption of the ECTS-compatible credit framework by moving towards funding on the basis of credit and proposing amendments to the HESA record so that provision is recorded at module level.

131. The UK Higher Education Europe Unit has provided a separate written submission to the Select Committee Inquiry into the Bologna Process. HEFCE supports this submission and the issues covered in the document. We would emphasise the issue of progress towards full implementation of the Diploma Supplement by English HE providers and the importance of developing flexible provision in HE.

132. We noted the progress institutions were making towards awarding the Diploma Supplement, reported in the Europe Unit survey conducted in 2005. The "Measuring and Recording Student Achievement Steering Group" will report in 2007 on the future of the degree classification and make proposals in relation to enhancements to the accompanying transcript that will enable higher education institutions to work towards adoption of a combined diploma supplement/transcript. We are aware that some institutions have been awaiting the recommendation of this Group before embarking on further revisions or development of their transcripts. HEFCE will seek confirmation from institutions in 2007 that the HE sector has made further progress towards the full implementation of the Diploma Supplement.

133. HEFCE is supporting a wide range of activities to improve the flexibility of the learning and teaching on offer to students. This includes a number of pilot projects that are testing the feasibility of, and demand for, HE courses that vary the pace of learning. One form of flexibility that institutions are experimenting with involves a more intensive programme of study, essentially teaching within the summer period in addition to the normal terms or semesters. In some circumstances this enables learners to complete six semesters of work within two calendar years rather than three, using the summer period as a "third semester". We regard provision of flexible learning as being extremely important in meeting the needs of employers and learners, as students or employees, and supporting the competitiveness of our economy in a global market. If we are to realise the levels of HE learning that the Leitch Review advocates, HE providers in the UK (and indeed across Europe) will need to be able to respond to demand from learners for HE learning packaged in a form to meet their needs. This may include more intensive provision as well as provision in other forms such as e-learning and learning in the workplace.

134. We are continuing to explore issues of compatibility of intensive study programmes with the Bologna first cycle and the HE institutions involved in the pilots will test the levels of demand from learners. If there is significant demand for this form of learning it will be important to reach agreement as to its treatment within the European Higher Education Area.

January 2007

Witness: Professor David Eastwood, Chief Executive, Higher Education Funding Council for England, gave evidence.

O1 Chairman: Professor Eastwood, it is nice to see you again. You were helping us with our inquiry when we were looking at the Research Assessment Exercise and the proposals to change that, but this is really the beginning of a major inquiry into higher education. I think you have seen the terms of reference, and you know as well as we do that this is coming up to the tenth anniversary of Lord Dearing's report on higher and further education. If you recall, he wanted at that time to see an independent inquiry into progress after 10 years. I do not know if the Department is going to grant that; I have not heard any rumblings from the Department. Perhaps we can ask the Minister for Higher Education when he is in front of this Committee on Wednesday. Meanwhile, the Select Committee will be looking, root and branch, at the higher education sector, which is a changing one, as you and I have agreed on a previous occasion. Professor Eastwood, is there anything you would like to say to kick us off or would you like to go straight into questions?

Professor Eastwood: I am perfectly happy, Chairman, to go straight into questions.

Q2 Chairman: Can I start by trying to embarrass you a little: what on earth is going on where the Russell Group has appointed a Director General to head up their organisation with quite a staff, I understand. Are we seeing a realignment in UK higher education?

Professor Eastwood: The inner workings of the Russell Group are something I am not privy to, and you will no doubt want to speak with them in due course. What we are seeing right across the sector is a number of so-called mission groups which are taking their own roles increasingly seriously, and it probably represents two things. One is that within the sector there is ever greater seriousness about the challenges that we face, not just nationally but internationally, and seeking to equip groups of universities to meet those. Secondly, it would be true to say that within the sector there is increasing differentiation of institutional mission and the way in which some of the so-called mission groups are developing I think reflects that.

Q3 Chairman: If you were going to go back, as we have been doing in preparation for this meeting, to

Dearing and look at his aims and purposes in higher education, would you change those today? It is 10 years on, a lot has happened; would you change the kind of vision that Dearing had of the sector?

Professor Eastwood: I was looking at Dearing again over the last two or three days and my impression is that Dearing has worn rather well over a period of 10 years and some of the central statements and aims are ones that not just the Funding Council but many in higher education would continue to endorse, and to endorse wholeheartedly. A number of the directions of travel that Dearing charted I think are directions that the sector has moved down, some more rapidly than others but, nevertheless, looking back on Dearing, much of what Dearing recommended was timely and appropriate and has helped to shape the sector over the last decade.

Q4 Chairman: We have a tradition in this country of probably having the most devolved, autonomous universities, certainly in Europe, and now work on Bologna has reaffirmed our belief that that is the case, that they are autonomous institutions in many ways, apart from their funding, which, again, is through you and your organisation, much of it. In terms of that ten-year span, do you think central government is trying to change its attitude? Is it getting impatient? Is it trying to push higher education, these autonomous universities, irritating as they sometimes may be because of their autonomy? Is the Government shaping up to be a bit tougher, getting its own way with the higher education sector, would you say?

Professor Eastwood: Looking back to Dearing, Dearing was very clear that higher education would be pivotal to the kind of knowledge societies which were being built, it would be pivotal to the way in which the British economy would develop in the 21st century. If anything, over the last 10 years the importance of higher education has been further accentuated and the Government is well aware of that and of the absolutely central role that higher education plays, not just economically but socially. I think that has made the Government ever more keen to ensure that British higher education remains strong, remains globally competitive and remains in many ways second only to the US in terms of its success.

Q5 Chairman: Just recently, out of the blue, we have had the Chancellor's decision to look again at the way we fund research, with what a lot of people thought was not a great deal of consultation. Putting that to one side, we had a recent debate on the Further Education Bill in the House of Lords, and a number of chancellors and vice-chancellors were jumping up and down, very angry about the clause in the Bill, clause 19, which will give the FE sector colleges the ability to award degrees. There is a lack of consultation, a surprising lack of consultation, is there not?

Professor Eastwood: If we separate the two things out and take first the Chancellor's announcement in the Budget last year about research, that was in the context of the Government's ten-year framework for

investment in research and it was also, as I said on a previous occasion in this Committee, in the context of a commitment on the part of not just the English Funding Council but all the funding councils to review the RAE before 2008. It was certainly consonant with the direction in which the sector was travelling. If we look at the FE Bill, clearly, it is trying to do a number of things as far as FE pure and simple is concerned but also there is a joint commitment on the part of Government, of us as a funder and of institutions both in further and higher education to make the foundation degree work, and I think that is a shared objective. The clause to which you refer is cast in the context of trying to ensure that foundation degrees continue to grow but remain robust.

Q6 Chairman: It would be unthinkable in terms of competition policy to introduce a major piece of legislation, or even a significant piece of legislation, without consulting the CBI. You can see that Universities UK and other people in the sector are a bit cross that they were not consulted as much as they think they should have been, or consulted at all. Would you have sympathy with that view?

Professor Eastwood: Certainly, to my knowledge, a range of bodies have now been consulted, including ourselves.

Q7 Chairman: If you remember, it was a bolt from the blue; everyone said that until the Bill was printed they did not know that that right to confer degrees was in the Bill.

Professor Eastwood: Some were certainly in that position, yes.

Q8 Chairman: In that 10 years what are the biggest landmarks? What have been the biggest changes?

Professor Eastwood: As far as funding is concerned, two major changes have been the commitment post 2000 to increase investment in the research base, now codified in the ten-year framework, and also, through particularly the 2003 White Paper and the 2004 Act, a transformation in the way in which teaching is being and will be funded in English universities and that, coupled with the decisions in the late Nineties, has reversed what had then been a 15–20 year diminution in the investment in teaching. So the story in terms of the investment both in teaching and research post-Dearing has been a strong one and one that Dearing, I am sure, would endorse, but no doubt you may be speaking to him in due course. In a number of ways we have continued to grow the sector, perhaps grow the sector more quickly than the Dearing Report had anticipated, and that growth has been consonant with the maintenance of quality and an increasing commitment to widening participation. So I would cite investment in higher education, I would cite further growth and I would cite significant progress in a widening social base of higher education.

Q9 Chairman: What about the balance of who should pay for higher education? That was really at the heart of the report as well, was it not?

29 January 2007 Professor David Eastwood

Professor Eastwood: It was, and I think we are in the middle of an interesting experiment in terms of higher education funding as we move into the post-2006 environment. I think there is a consensus that those who benefit from higher education should pay for it. The benefits are to the individual, the benefits are social and the benefits are economic, so a triangulation between contributions from the individual, from the public through taxation and from employers seems to me to be right and I think that is now commonly accepted. 2006 represents a particular balance between those three sources of funding and so far the evidence is that the move towards a new funding regime has been largely stable and largely successful.

Q10 Chairman: Successful in terms of protecting those more vulnerable individuals who come from poorer homes? Do you think they have been protected during that process?

Professor Eastwood: As we moved towards 2006 there were two areas of considerable anxiety: one is the one to which you have just referred and the other is whether or not particular institutions would find themselves vulnerable in the new market. It is too early to give authoritative data on what is happening around social inclusion and those will be published in June/July of this year but the early data do suggest that the story might actually be quite encouraging, that is to say, a move towards the reintroduction of grants supplemented by bursaries may well have been rather positive in terms of social inclusion. Certainly, it does not look as if the impact has been negative. Secondly, we at HEFCE have monitored carefully the impact at institutional level and there is no institution which is in crisis as a result of the move towards the new fee regime. Indeed, the sector has managed this transition with considerable maturity.

Q11 Chairman: What do you think is going to happen with variable fees?

Professor Eastwood: The formal answer, of course, is that there is going to be a review in 2009 and that will inform any decisions made by Parliament subsequently.

Q12 Chairman: Is that timely or is it too early for a proper assessment?

Professor Eastwood: I think it is timely. It will be at the point where we will have had three years of experience of the new funding regime and the sector will have the full benefit of the additional funding flowing from fees, and by then we will have gathered significant data on the impact of the new funding regime on students, on the institutions and on key indicators such as widening participation and social inclusion. So I think there will be a sensible evidence base from which that review can evaluate the new regime and make whatever recommendations it chooses for the next decade.

Q13 Chairman: So if the evaluation is right, if people from socially deprived backgrounds have not been deterred, inclusion has increased, you would see the cap being lifted?

Professor Eastwood: I do not think one should immediately jump to that conclusion, because it may be that all of those things hold, but the present fee regime would not hold if the cap was raised or removed. I think there remains a question going forward, looking to the next decade, around the extent to which new attempts to draw employers into funding higher education will have started to succeed and that will be a new element. That is an area of considerable uncertainty at the moment.

Q14 Chairman: Because employers have not contributed much in the last 10 years?

Professor Eastwood: It depends how you evaluate employer contributions. My view is that employers do contribute substantially by paying a salary premium to graduates, and that is a market response, and the extent to which students are carrying debt may well influence graduate starting salaries and the way in which employers contribute through paying that graduate premium but we are working with the Department, as I am sure the Committee knows, around exploring the possibility of employer co-funding of particular students and particular programmes. I think that raises some exciting and very interesting opportunities and that will be a new element in the funding mix which clearly was not there in 2004, when the Bill was being debated.

Q15 Chairman: I do not quite follow you in terms of the employer contribution. I would have expected when I read Dearing 10 years ago that that would have flowed through to a more positive contribution from employers actually into the institutions themselves.

Professor Eastwood: I was referring narrowly to payments for individual students. Clearly, if we are looking more widely at the question of employer engagement, then since Dearing employer engagement by the sector has expanded enormously. One can see that in terms of spin-out, one can see that in terms of the business investment in universities, and one can see that in terms of the whole stream of activity that we brand third stream. I was referring particularly to the way in which the costs of undergraduate education are met, and there I think we are seeing employers contributing through the way in which they reward graduates on the one hand, but we should expect to see an increased direct contribution through the kind of cofunding initiatives I was referring to a moment ago.

Q16 Chairman: If you look at the pie chart you supplied, it gives sources of finance for universities and colleges 2004–2005. We can clearly see public finance, 38% and so on, but where does the business contribution come in that pie chart?

Professor Eastwood: Chairman, I do not have it in front of me but if you could refresh my memory, I will happily speak about it.

Q17 Chairman: We will get a copy of it to you. When the big debate on variable fees took place, Professor Eastwood, do you remember Ministers made claims that it was such a good thing to invest in higher education because the lifetime earnings of a graduate were so much greater? The sums that were bandied around were in the region of £400,000. Have they stood up over time?

Professor Eastwood: That is a difficult question to answer authoritatively. There is certainly a considerable premium over a lifetime. The figure which is widely cited now is of the order of $\pounds 150,000$.

Q18 Chairman: Ministers used £400,000 at one stage, did they not?

Professor Eastwood: A number of figures were used, yes.

Q19 Chairman: Where can we get the most authoritative source for that?

Professor Eastwood: We will draw drop you a line to that effect.¹

Chairman: Excellent. It would be very nice if someone could find out who gave us the $\pounds 400,000$ figure originally. We will move on and dig a little more deeply into the aims and purposes of higher education.

Q20 Mr Chaytor: Looking forward to the next 10 years, what do you think are the three or four highest priorities for HEFCE?

Professor Eastwood: Probably the highest priority must be for us to play our part in maintaining the quality of English higher education and to do so in an environment where HE will be increasingly globally competitive. I think we must do that, and it seems to me the key to that, whether we are talking about UK students or international students, is quality. HE will be a business where quality is the key. Secondly, I think the challenge around participation and social inclusion remains and, if we look at the demography going forward through the next decade, that challenge may become a more acute one. The third area which I think is critical is that we retain the research edge that English HE gives to our economy both in terms of the quality of blue-sky research and in our ability to exploit that research, which I think we are continuing to enhance and that is probably an area of further improvement or enhancement. The fourth area will be to address those new agendas, the agendas outlined in Sandy Leitch's recent report around high-level skills in the economy, enriching skills, and I think one of the ways that that is going to be interpreted is in a new form of lifelong learning and a new form of continuous skilling and re-skilling. There is an area of very considerable challenge that we are only just beginning to work through.

Q21 Mr Chaytor: In your earlier remarks you mentioned the trend towards greater differentiation. My question now is: where does that figure in your plans? Do the priorities you have outlined imply significantly greater differentiation and does your current funding system encourage or inhibit that differentiation?

Professor Eastwood: I think what I have been saying does imply probably greater differentiation though I think we are seeing that trend already. I think that is a differentiation which should be driven, following the Chairman's earlier comments, by largely autonomous institutions considering the way in which the sector is developing, their own areas of comparative advantage and the areas where they have a quality product to offer. I think it is important that our funding gives them the confidence to do that and the confidence to plan, and there it does seem to me that the principle of funding that we adopt, which is a transparent system of funding but a system of funding around block grant, will give institutions the ability to plan, the confidence to plan and the confidence as appropriate to specialise.

Q22 Mr Chaytor: You identified quality and competitiveness as your first priority for the next 10 years and the demand for graduates is continuing to grow but I understand a third of employers have recently said that graduates are still lacking key skills. Is that in line with your assessment and, if there is that criticism still, how can HEFCE channel funding to ensure that graduates are more employable?

Professor Eastwood: As the market continues to develop, the market will do some of that itself, that is to say, institutions which have a strong record in terms of graduate employability will obviously be institutions which are attractive to applicants, so there may be an element of self-correction.

Q23 Mr Chaytor: If I can interrupt there, should that be a criterion in your funding allocation?

Professor Eastwood: Given that our funding allocation will follow recruitment, that is to say, an institution that struggles to recruit ultimately will lose not only fee income but HEFCE income, that linkage is already there. You raise a more profound question than my answer a moment ago would suggest and I do think—and I think this is consonant with what Sandy Leitch was saying in his reportthat we need to continue to develop the kind of dialogues that we have with employers around the way in which employers specify their requirements and the way in which employers specify their disappointment when disappointment exists. I think institutions are now very responsive to those kinds of messages but I think quite often the difficulty is they are at articulating in very general terms: they would like more literate graduates, they would like more numerate graduates, and I think that needs some closer specification for institutions to be able to adjust or to flex their programmes to deliver better to those agendas.

Q24 Mr Chaytor: Looking at it from the students' point of view, we now have the national student satisfaction survey, which I understand indicated that 80% of students were satisfied with their tuition, but presumably 20% are dissatisfied with their tuition. If this were a school or a college, this presumably would be front-page news, that 20% of university students are dissatisfied with the quality

of teaching that they are receiving, but you have managed to escape that kind of headline. My question is: given that schools and colleges are subject to quite an intensive inspection regime, why are universities not subject to the same level of quality and inspection procedures?

Professor Eastwood: The first thing I would say is that the levels of student satisfaction that come through the National Student Survey by international standards are very high indeed and therefore in those terms it is a good news story. That is not unimportant given the global environment in which we operate. In England we often have a genius for berating ourselves where we should actually be celebrating. I think it is as well that that story is appropriately represented.

Q25 Chairman: You are not referring to cricket there, are you, Professor Eastwood?

Professor Eastwood: Fortunately, Chairman, that does not fall within our remit, though the 2012 Olympics are starting to, so in due course I might be hauled back as a result of our failure to garner sufficient gold medals. The first point I would make is that, in terms of international comparisons, it is a strong showing. The second thing-the survey has been run twice now-is that institutions have responded remarkably swiftly to areas where the national student survey suggests that they could improve their performance. So we are getting that kind of feedback loop and, if you look across the sector, the area where virtually all institutions dip is in assessment and feedback, which is the area of greatest student dissatisfaction. Students are still predominantly satisfied but is it is the area where the highest proportion of students is less satisfied, and both the Higher Education Academy and individual institutions are working with their students to improve their performance in that area. So what we are seeing is a culture of self-improvement on the back of the national student survey. The third point I would make is that I do think through the Quality Assurance Agency we have a fit-for-purpose body in terms of ensuring quality, and a body with a very strong international as well as national reputation. So I do think that the sector is appropriately held to account in terms of quality and also, given that that is one of our statutory responsibilities, it is something that we take enormously seriously.

Q26 Chairman: But some of the universities dodge out of that assessment, do they not?

Professor Eastwood: A small number of universities have not had a sufficient number of returns to get above the threshold level, which is 50% at the moment, which is a very high level and was deliberately set high so that the robustness of the survey could not be questioned.

Chairman: Andrew, your old university is one of the ones that is not literate or competent enough to fill in a form. Is that right?

Mr Pelling: I am sure there are always far too many important things to do to fill in forms at a university like that.

Q27 Chairman: How many universities fail to complete these? People out there seem to be saying it is a bit of a conspiracy, that certain universities are saying, "This is far too mundane for us to take part in. Don't not fill those forms in and then we will not appear in the tables." Is there a conspiracy of non-co-operation from some universities?

Professor Eastwood: Given that all universities have to facilitate the exercise, it is difficult to run a conspiracy. I do not think such a conspiracy exists.

Q28 Chairman: But Oxford and Cambridge do not fill in enough.

Professor Eastwood: They do not meet the threshold. What we are doing at the moment is we are consulting on whether or not the 50% threshold is necessary or whether a downward revision of that threshold would be appropriate and still retain the robustness of the survey.

Q29 Chairman: It is irritating that two of our leading universities do not get enough students to fill in these things so that we can assess them in the tables. Does it irritate you from HEFCE's point of view?

Professor Eastwood: We are exploring with the sector whether or not there are ways in which we can revise the methodology, retain its robustness, but ensure still greater coverage in the national student survey.

Q30 Chairman: You would agree then with the assessment that they have far more important things to do in the dreaming spires of Oxford and Cambridge to fill in these forms? What is your interpretation?

Professor Eastwood: My interpretation is that there are particular difficulties in federal universities in facilitating these exercises.

Q31 Chairman: Including in London? That is the federal university.

Professor Eastwood: Effectively, it is reported by individual institutions so it is a unitary exercise.

Q32 Helen Jones: Durham?

Professor Eastwood: Again, there are two universities which are distinctive in terms of their organisation, and they are Oxford and Cambridge, but let me anticipate your next question: the University of Warwick has also not participated or not come above the threshold. I know that is a matter of concern for the current Vice-Chancellor.

Q33 Chairman: What you are saying is that if there is going to be a survey of student satisfaction—how many universities or HEIs do you reckon there are? *Professor Eastwood:* It depends how you cut it and whether you include Scotland and Wales. Let us say 100.

Q34 Chairman: Of that 100, a couple of the major institutions everyone knows for some reason do not have enough replies to the survey.

Professor Eastwood: What I am saying, Chairman, is I do not think the situation will persist and I think it is desirable that it does not persist.

Chairman: Good. Let us move on to university funding.

Q35 Mr Marsden: I want to move on, if I may, to talk about university funding. I have obviously looked at what you have said about that and how you use formulae and how you try to simplify that. I thought it might be a bit like the Schleswig-Holstein question. You remember there were two people who knew about it, one was mad and the other one was dead. I am not going to ask you if you come into either category but what I am going to ask you is about the teaching because you say, "We are currently reviewing our funding method for teaching to ensure it remains fit for purpose." Does that imply you do not think it is fit for purpose?

Professor Eastwood: No, it does not, and you were charitable enough not to put the third person into the Schleswig-Holstein question, who of course was the person who had forgotten it, and that was Palmerston; fortunately, I have not yet forgotten why we are consulting on our teaching funding methodology. The issue here was that from 2006, with the introduction of variable fees, teaching funding was changing in rather important ways and what we wanted to do was to ensure that our teaching funding was appropriate for what I call the known universe, that is to say, for the funding regime from 2006 to whenever it is revised, if it is revised. We wanted to achieve two things: we wanted to ensure that there was reasonable stability in an environment which might otherwise be volatile for institutions, but we also wanted to ensure, if there were some unintended consequences of the new funding regime-I am thinking in terms of some subjects in particular finding their position financially imperilled—that we had a mechanism for achieving that, and we were also concerned that the measures that we were taking to ensure that participation in HE was broadened would continue to have impact. Those were the principles which underpinned the review, and we have arrived at a point where the funding as it goes forward now will be fit for purpose in what we might describe as a £3,000 regime.

Q36 Mr Marsden: If I can take you on from that, my understanding is that you are moving to a system which is much more output-based. It is going to be based on funding for credits and everything that goes with that, is it not?

Professor Eastwood: We have not moved straightforwardly to a credit funding system yet.

Q37 Mr Marsden: No, but you are on the way.

Professor Eastwood: You are quite right. We are consulting again on how we fund outcomes which are short of the originally intended course outcome and under Bob Burgess, Vice-Chancellor of Leicester, there is a working party on credit moving

forward but at the moment we are trying to have a funding regime which recognizes that different institutions are differently positioned in this market.

Q38 Mr Marsden: Are you worried then—and I'm saying this in the light of your previous remarks— that by moving to that credit-based system, which might be seen as a more mechanistic system, one or two individual institutions that might have particular emphases or perhaps have larger numbers of part-time students than others might otherwise suffer? Are you trying to create some sort of safety net for them?

Professor Eastwood: On the proposals that we are currently consulting on, which we have modelled, we do not think there would be any need to safety net an institution and we do not think there would be any need to cap an institution either. Of course, once you change the funding methodology you can always change behaviour and that is what it makes it difficult to model. No, we do not have particular anxieties at the moment.

Q39 Mr Marsden: I was struck by what you said earlier in response to my colleague David Chaytor. You talked about the importance of the challenge of social inclusion, I think you said it was going to become sharper; you talked about re-skilling. These are things which historically universities have not really paid a great deal of attention to, have they? By historically I mean pre-1997.

Professor Eastwood: I think there are some notable exceptions to that. The MBA would be a good example. The MBA was a qualification constructed precisely because the market wanted it and it has been a highly valued qualification as far as the market is concerned. I think I am saying that institutions have become more responsive, so I am agreeing with you, and I am saying that institutions will need to become more responsive in a number of ways and that responsiveness will be manifested differently in different institutions. The SME challenge is a very considerable one. We could point to a number of universities which have notably strong engagement with local SMEs and are beginning to crack what historically has been a very difficult challenge.

Q40 Mr Marsden: Forgive me for saying this. I would agree with you on that and I would say actually that the engagement by regions of universities is stronger in some parts of the country than others. In my own area of the North West-I would say that, would I not, as a north-west MP?— I think there is a particularly good engagement. Is not one of the problems that your current mechanisms for teaching funding slightly work against the grain in this respect? Let me put an example to you. You are talking about social exclusion and re-skilling: what is the incentive for younger academics, people in their thirties, particularly perhaps in the humanities and the arts, who want to do things in their universities, want to do outreach stuff with schools, want to do interesting social exclusion projects? Apart from people patting them on the head and saying that is a great thing to do, there is no financial incentive. They are all being directed lemming-like down the RAE scores, are they not?

Professor Eastwood: I think that may well have been a charge that could have been levelled at some institutions at some point. I think the combination of the changes that are forthcoming in RAE methodology on the one hand and also institutions' increasing sensitivity to the variety of their funding streams means that institutions are starting to change the incentive structures that they have. So clearly, in the new environment teaching is in every sense a more valued activity, quite properly, because teaching is at the core of what universities are about, but one can see that premium on teaching starting to feed through in the way that even very researchintensive universities are prepared to promote now all the way to professor on the basis of excellence in teaching rather than excellence in research. I think too there is both within universities and within government an increasingly strong emphasis on the civic role of universities, which is being valued in a number of ways. I do not want to sound complacent because I think there is something in the challenge that you lay before the sector, but I do detect over the last couple of years a significant move. You instance young academics; in young academics I think there is a strong willingness to embrace the diversity of the challenge or, using older language, the diversity of the calling of being an academic, where that passion for taking out your subject, your understanding and indeed, your research to engage with a variety of communities is something which I think is driving a number of academics.

Q41 Mr Marsden: You say the Government increasingly recognizes the civic role of universities but one of the concerns that is being expressed is the differential that was indicated in the Secretary of State's grant letter for 2007 between the increase for research and the increase for teaching. The increase for research was 6.9% and for teaching 4.4%, and the CMU have quite specifically said that they are concerned about this and have said that it is going to have a negative effect on widening participation. What was your reaction to that differential in terms of the increase between research and teaching? Did it concern you?

Professor Eastwood: We were not surprised, because it came at the end of a Spending Review period and we knew that the increase in the research allocation was driven by the 10-year framework and the teaching allocation was driven by other aspects of the Spending Review 2004. It was absolutely in line with what we had anticipated. If you couple the increase which has enabled us to sustain the unit of resource for teaching on the one hand with the new fee income on the other, what we are seeing is a pulse of resource into teaching on a scale that we have not seen for a generation.

Q42 Mr Marsden: So you are not worried this differential is going to continue and widen?

Professor Eastwood: What I think we should do in the new funding environment is look at the totality of resource available for particular activities, whether it be teaching or whether it be research. For us, the ability to maintain the unit of resource for teaching was very important and I believe we will be able to announce next month that we are doing that. Alongside that, institutions are seeing the benefit of the new fee regime and sitting behind that is the other side of this funding equation, which is the student support regime and if you look at the resource going into student support not my responsibility directly—that represents a very considerable investment in undergraduate programmes.

Q43 Mr Marsden: That is all well and good, but the reality is that we know already from what Ministers have said before this Committee and what has been said elsewhere that the Comprehensive Spending Review settlement in terms of DfES this year is likely to be very tight, certainly tighter than in previous years. The Treasury would not be human—some people may think not think it is human anyway—if it were not looking at this income stream of extra fees coming in and thinking "Maybe we can cut back a bit further in terms of teaching funding." Ministers say they want this holistic social participation process but it has to be paid for. What are you going to do as an institution to try and head those Treasury impulses off at the pass?

Professor Eastwood: If we go back to Dearing and if we go back to the 2003 White Paper, if we go back to the rather anguished debate which some of you will remember in 2004, what was at the heart of all that was trying to find a way of ensuring that teaching in universities was appropriately funded. I do not think that the Government went through the difficulties of 2004 and coming within five votes of something else happening in order not to sustain a contribution to the appropriate funding of teaching.

Q44 Mr Marsden: So you are relying on us lot to do it for you, are you?

Professor Eastwood: We have given our advice confidentially, as you would expect, to Ministers in the context of the Spending Review. If you read our documents and our strategic plan we have been working with government to continue to grow the sector, to continue to make progress towards the 50% target and to continue to ensure that teaching is properly funded.

Q45 Chairman: But, Professor Eastwood, going back to Dearing, when you get to his bullet points he says, "That future will require higher education in the UK to: encourage and enable all students [...]" and so on, and then we come down to, "be part of the conscience of a democratic society, founded on respect for the rights of the individual and the responsibilities of the individual to society as a whole". That resonates for us when we are looking at citizenship education. We have not done enough, I have to confess, on citizenship in higher education. As my colleague has just been asking you, if

something is not funded it is likely not to be done as well as it might be. On that theory where are universities and should there be more funding for aspect of the activity of a university?

Professor Eastwood: We have taken the view, and successive governments have taken the view, that universities as mature and substantially autonomous institutions are best funded by block grant and we expect, and I am sure government expects, that from that block grant universities will be able to sustain not simply the core activities of teaching and research but also those other activities, qualities and values that make universities what they are. We would not be particularly enthusiastic for the salami slicing of funding in order to drive certain forms of behaviour in universities, not least because I would argue that universities are substantially successful in terms of that cultural role, that they are substantially successful as places where culture is going to go.

Q46 Chairman: But, Professor, we would like to see the evidence for that. Some of us get rather dispirited when we visit some of our premier universities and you are walking past the hallowed turf with a master of the college and you say, "How many graduates here will go into teaching or public service?", and the master says, "Oh, no, they all go into the City now". If we are spending a lot of taxpayers' money, a lot of my constituents' hard-earned money, to fund higher education, is that what it is all about, that we are just feeding some of the brightest people in the most competitive universities to go into the City at high salaries? Are we not feeding them into public service, into the Civil Service, into running our hospitals and our universities and our local government? What on earth are you funding things for if that is all it is about? If masters of colleges can say to me and to my colleagues that they all go into the City, what is the point of higher education?

Professor Eastwood: Having taught in one of those universities that had quadrangles and played croquet, it certainly was not the case that all of my students went into the City. They went into a variety of activities, including a substantial number into public service.

Q47 Chairman: Very few now go into teaching, Professor. You know the stats as well as I do.

Professor Eastwood: There are clearly particular issues around teaching which we need to address and address in an integrated way, and we may or may not come onto the teaching of particular subjects, and so I freely accept that there are challenges there. I think the responsibility of a higher education system and therefore the responsibility of a higher education funder is to facilitate a range of social and economic activities, from universities being beacons of liberal democracy on the one hand through to being places of blue-skies research on another to being places where individual lives are transformed through dynamic and stretching teaching.

Q48 Chairman: Professor, that vision fills me with enthusiasm, but so does "to be part of the conscience of a democratic society, founded [. . .]" and so on, and yet so many of the young people that now go to our universities do not seem to learn anything else but that they must get out as fast as possible to earn the largest salaries they possibly can. That means that that job is not being done well enough, does it not? What is the ethos of living in a civilised society? Is it only that they should go into the City to earn as much money as possible?

Professor Eastwood: It clearly is not, but I do not think that is what I was saying, or indeed, Chairman, probably what you were saying. It seems to me that the ethos of a liberal democracy is that a range of graduates will do a range of things. One of the things that our funding does not do, except in certain particular cases, is constrain the choices that graduates make. Clearly there is a whole range of graduates that come out of universities who are on vocational programmes, from the medics and the vets through to the social workers, and who all go into public service.

Chairman: I am just worried, Professor Eastwood, that my constituents, and I think a lot of people out there who pay their taxes, sometimes wonder about the priorities that we have in higher education if we are not providing the teachers, the public servants and those other people that our country so desperately needs, but we will move on.

Q49 Stephen Williams: You were asked initially about the 2009 review, and perhaps I can pick up on some of the points you made. Has HEFCE actually been commissioned by the Government to be the leaders of this review in 2009?

Professor Eastwood: To the best of my knowledge the shape of that review has not yet been determined.

Q50 Stephen Williams: It is at early stages then? *Professor Eastwood:* Unless somebody better informed than I tells you otherwise that is my understanding.

Q51 Stephen Williams: Do you anticipate that your organisation will be the main source of data and evidence for the Government when they have that review?

Professor Eastwood: As with Dearing and other major inquiries, we will have a substantial role in providing evidence and data and we will make sure between now and that inquiry that we are collecting and processing appropriate data which will inform that inquiry's considerations.

Q52 Stephen Williams: As I understand it, if this review is going to be done before the end of 2009, which is what the Government promised back in 2004, which seems to be a political timetable more than anything, we will have the current cohort of students, 2006–07, who have just started off, and we know that that is a mixed-up group of people because of distorted behaviour when we were trying to avoid the introduction of top-up fees, so if we set that cohort aside we will have next year, 2007–08,

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and that is all we will have because 2008–09 will not be ready by the time the Government comes to do the review if your normal reporting timetable via HESA is followed, so we will only have one complete cohort of students who will be second-year undergraduates by the time this review takes place. No-one will have graduated under the current scheme, there will be no trend in data. Is that enough evidence on which to base quite a fundamental review of higher education?

Professor Eastwood: What we will have is considerable evidence about the trend in applications. We will have data on admissions, we will have data on the relative success of different subjects and we will know whether or not some of the discincentives which critics of the new regime thought would occur have come to pass. You are quite right that we will not have, as it were, cohort data on the career choices that the students going through the new funding regime make, but to get really hard and serviceable data of that kind we will need to look quite a long way forward, not just at the first destination, in other words, but further downstream. Those data in due course will be important but as a date for the review 2009 was late enough to allow the new system to start to take shape but early enough for interventions to be made if the new system was having unanticipated consequences.

Q53 Stephen Williams: So would it be fair to say, given the lack of long term evidence, any decisions resulting from this review that have long term implications, such as a large rise in fees or taking the cap off altogether, which some of the more enthusiastic people in the sector for variable fees might be advocating by the time we come to that date, that that would be too much of a risk to take in the absence of sufficient data to base that decision on?

Professor Eastwood: I do not think that, as I sit here or as others sit here, we can anticipate what that review is going to conclude. What I do think though is that we will have a range of information which will be robust and helpful and we will certainly know more about the new fee regime in 2009 than we did when the legislation went through in 2004. In other words, in summary, I think we will be in a position where some medium range recommendations can be made.

Q54 Stephen Williams: Can I change topic to HEFCE's role in the financial management of universities? Obviously, universities are autonomous institutions, they have their own auditors to appoint and so on to look at how they spend their money, but once HEFCE decides via this Schleswig-Holstein Question method of funding teaching that Gordon Marsden has mentioned what funds go to universities, at that point, if I understand it, you let go and it is up to universities how they spend the money. If HEFCE gets a suspicion that certain institutions are perhaps struggling or not spending funds in the right way, let us say the

University of Whitby, to take an example that does not exist, what would you do with the University of Whitby or Lindisfarne if they were in that situation? Professor Eastwood: It would depend on what was happening. Probably the most helpful way in which I can respond is that we have a series of informal engagements with universities, notably through our regional teams, so we are well informed about what is going on on the ground, and if through those informal contacts we had some anxieties we would make appropriate inquiries. We have a number of formal instruments at our disposal and they include our own audit process, they include compliance with our financial memorandum, and they would enable us in extremis to make certain requirements of the university as a condition of grant. There are a number of stages where we would be able to intervene. In practice what we try to do, through a number of elements in our financial memorandum, is ensure that university governing bodies reflect on decisions that they are going to take, that they appropriately manage the risk, that if they are going to borrow heavily they require HEFCE approval to do so, and I think it would be reasonable to characterise the relationships between HEFCE and institutions as strong and open and mutually supportive.

Q55 Stephen Williams: One of the outcomes of a market and the variable fee system, if it does develop after the regime into a fully blown market, is failure, by the way, so it is not a market. Do you think the sector and HEFCE as the funding body are prepared for that, that institutions may well fail if they do not attract the students or set their fees in the right way? Professor Eastwood: One of the things we have been trying to do is ensure that institutions have appropriate management information to operate in that kind of environment and that is why we have developed things such as the transparent methodology for looking at costs of teaching and research, so we think it is very important that universities first have the kind of financial management information that they need to operate in a more marketised environment. Secondly, insofar as a market is developing, it is different from other markets. We are not talking about businesses that produce, as it were, a single product which could go bust overnight as a result of something that happened somewhere else in the world. Where institutions need to adapt, need to change, need to refocus, they will have a period of time to do it just because of the sorts of business cycles that universities operate on, and we have means of working with them to enable them to do that, including our Strategic Development Fund which does enable and is enabling institutions to shift their priorities in response to new challenges.

Q56 Stephen Williams: We know there is going to be democratic change in the next decade, the number of teenagers who will be available to enter university for the first time is going to fall, so there is going to be a shrinking number of consumers/customers for

higher education, and therefore the risk of market failure of some institutions that are less financially well managed must be greater.

Professor Eastwood: As we sit here now the majority of students are over 21 at the point at which they enter universities, so there is a danger of over-emphasising the characteristic, traditional 18-year old student. You are absolutely right, that the demographic curve for 18-year-olds turns down after 2010–11 but, as I was saying earlier in response to Mr Chaytor's questions, there is the Leitch agenda, there is the new skills agenda and there are other challenges for universities for which they will need to change and flex on what they do to respond, but that will mean that in the next decade there is still plenty of business for universities to do.

Q57 Chairman: Professor Eastwood, how many institutions cause you sleepless nights? How many higher education institutions at the moment cause you to think very seriously about their future?

Professor Eastwood: At the moment I do not lie awake at night wondering about particular institutions. I think there are always institutions which are going through periods of transition, of refocusing and remodelling. There are always going to be institutions, particularly some of the smaller and more specialist institutions, which are looking at forms of strategic alliance, so we will always see that kind of dynamism, that sort of plasticity, if you like, within the sector, but the financial health of the sector overall, though it is tight and this year is particularly tight, is such that it remains a well-managed sector and I do not think we have particular causes for concern.

Q58 Chairman: Are there any causes for concern in terms of the over-reliance on a single but volatile part of the market, such as international students? **Professor Eastwood:** If you had asked that question in 2004 I or my predecessor would have said yes. I think the shake-out in the international market since 2004 has meant that institutions which were very reliant on international student recruitment, where they have not been able to recruit to those numbers. have had to make adjustments. My response to the greater volatility we see in the international market is to suggest to institutions that they will need to derive higher margins from that activity in order to buffer themselves against that sort of volatility downstream, and I think there is evidence that universities are beginning to do that though it is not something you can do easily overnight.

Q59 Mr Pelling: Professor, I mentioned earlier the kind of diversity that one could aspire to within the sector, and indeed that was very much what was behind the Dearing Report, comments like, "It will include institutions of world renown and it must be a conscious objective of national policy that the UK should continue to have such institutions. Other institutions will see their role as supporting regional or local needs. Some will see themselves as essentially research oriented; others will be predominantly engaged in teaching." Based on those

recommendations, Sir Howard Newby sought to re-engineer the HEFCE's funding model "to encourage, rather than discourage, a greater diversity of mission within the sector". Was Sir Howard successful in achieving that aim?

Professor Eastwood: We have certainly seen some refocusing in the last three or four years. That has been facilitated by our Strategic Development Fund and the way in which we have made certain interventions through that. It has also been facilitated by an initiative that Howard took in establishing Lifelong Learning Networks which enabled, within regions and sub-regions, HEIs and others to come together. I think the Dearing vision remains the right vision. As I was saying earlier, I think it is important that our funding in our steering of the sector gives institutions the confidence to continue down that road of identifying and pursuing their own areas of comparative advantage.

Q60 Mr Pelling: So Sir Howard then was not able to achieve that?

Professor Eastwood: When you are looking at universities and institutions which have a planning horizon of tomorrow, the next year, the next five years or the next 40 years, what we are talking about here is something that is medium range. I cannot speak for Howard but I would be surprised if he thought it was something that would be accomplished in two, three or four years.

Q61 Mr Pelling: Does the funding model discourage diversity?

Professor Eastwood: I do not think it does particularly discourage diversity, no. I think what it does is put the onus on institutions' management and governors to chart the course for that university with vigour and confidence, and if they succeed our funding model will reward them irrespective of the mission of the university.

Q62 Mr Pelling: Do you share that vision that Sir Howard had?

Professor Eastwood: I do not speak in the tongues of rims and hubs and spokes, so my metaphors might be different, but yes, I think that that vision (and you rightly quoted Dearing), which is not a vision that was in any sense particular to Howard, is one that universities increasingly understand. The complication has been, and it goes back to something Mr Marsden was mentioning earlier, a sense that perhaps research was disproportionately important in determining universities' reputations. My own view is that post-2006 we are increasingly moving into an environment where teaching quality and the student experience will be as important in establishing university reputation. If there was a distortion there I think it is in the process of righting itself.

Q63 Mr Pelling: So HEFCE is now meant to be shaping the sector? Is that the role?

Professor Eastwood: We work with institutions and with the sector to find an appropriate shape and size for the sector. We do not plan the sector and we have

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always said, and I think if you were talking to colleagues from Universities UK they would share this view, that the sector works better with this kind of dynamism between autonomous institutions and enlightened public funders.

Q64 Mr Pelling: So who is it that should have the vision then?

Professor Eastwood: I think that has to be a shared endeavour. I think that where institutions have unrealistic aspirations we would in one way or another work quietly with them to see if we could not remodel those aspirations. More usually what we find is that some strategic funding from us can facilitate institutions focusing their endeavours in areas of quality and excellence.

Q65 Mr Pelling: So what is the emerging shared vision?

Professor Eastwood: Of the sector as a whole?

Q66 Mr Pelling: Yes.

Professor Eastwood: I think it is a vision of a sector which has to be and remain internationally competitive, a sector which needs to be responsive to developing priorities, be they local, national or international, and increasingly institutions which are comfortable with their mission, so in the case of some institutions that is clearly a local and regional mission, and in the case of others it is clearly as a global institution. There will always be institutions which are moving within this kind of firmament. We would expect to see that; the dynamism of the sector would be dependent on that. The one thing we would not want to see is a sector which was set in aspic where no institution could have ambition, no institution could have aspiration and no institution could transform its role.

Q67 Mr Pelling: So, using the corporate "you", if I can call it that, your job is just to referee the different aspirations of the different institutions?

Professor Eastwood: No. I think our job is also to work with institutions and to provide not just core funding but also strategic funding as appropriate, to be a facilitator, and also I think we have a role—I think I have a role—in interpreting what you might regard as the broad parameters within which English higher education is operating. Some of those are fairly hard-nosed realities and there is no point in being anything other than direct about that.

Q68 Chairman: What do you think about pre-1992 when Ken Clarke was Education Secretary and polytechnics disappeared? If your role and HEFCE's role is about giving shape, when we took the Committee fairly recently to Dublin and looked at their polytechnic sector, which is still there, what they could show us and what they were very proud of was the fact that they are still training technicians to a very high level. Somebody might put to you, and I am going to put it to you, that employers here say they cannot get technicians for love nor money because with the change to all polytechnics becoming universities no-one sees that as their role.

Is this perhaps behind the Government's sudden decision to allow foundation degrees to flourish and FE colleges to award degrees? Would you agree, Professor Eastwood, that there is a gap there and why was it that employers could say over a period of time that that kind of technician level, high quality people who would have a range of qualifications, is not provided for in this country in the way it is still in the Republic of Ireland?

Professor Eastwood: I think we might have found them saying that before 1992 as well. I think our response to that though would be that if you look at what has happened since 1992 there are a number of professions which were non-degree professions which have become degree professions and most of those professions, a lot of them in the public sector, would say that they were better for doing that. We have seen the development, and very successful development it should be said, of new qualifications such as the foundation degree, which have some of those characteristics within them-62,000 foundation programmes now and that number is rising. Within Lifelong Learning Networks again we are trying to create pathways which are appropriate for young people in particular to follow which will enable them to develop their skills in the most appropriate ways, and certainly, both as a funding council and within institutions in the sector, we are working around the development of the new diplomas to ensure that that is a high quality pathway which may lead directly into work or into appropriate HE programmes for the kinds of young people who come through. I think there are challenges here but there is a range of initiatives which either are in place or are coming on stream which will enable us to address that challenge.

Q69 Mr Carswell: I understand that HEFCE undertook a review of its policy on funding and supporting higher education in further education colleges. Is HEFCE's policy on funding and supporting higher education in further education colleges restricting growth?

Professor Eastwood: Could I just say that we are in the middle of a consultation on higher education and further education. It is about 8%, as you know, of higher education which is delivered through further education colleges. I think for us we are asking some open and quite searching questions and what we want to do is ensure that higher education and further education are strategic to the institution which is delivering them.

Q70 Mr Carswell: Sorry; I do not understand what that means.

Professor Eastwood: We want to ensure that the further education institutions which are delivering higher education are committed to it on a stable basis and they are working in appropriate partnership with a higher education institution or institutions. That is why in the consultation we are inviting both further education colleges that provide higher education and the validating higher education institutions to consider whether or not

they should come forward with plans which would give us that sort of stability and a framework into which we could then invest.

Q71 Mr Carswell: You say it is out to consultation but do you want to see growth in the provision of higher education in further education colleges?

Professor Eastwood: If we are to continue to make progress in terms of the expansion of higher education opportunities it will be important. I think there are kinds of higher education which are very appropriately delivered in further education colleges, and there are also parts of the country where the kind of distributed provision that we need to have in place does mean that we need precisely these kinds of partnerships between higher and further education, so yes, I think we would see higher education colleges continuing to expand, just as we hope that higher education in higher education institutions will continue to expand.

Q72 Mr Carswell: I gather that in April 2006 there were some conclusions put to your policy board, is that right?

Professor Eastwood: To the HEFCE board, yes.

Q73 Mr Carswell: What were the conclusions of the review that were reported?

Professor Eastwood: That is really what is informing the current consultation. There are issues around the capital funding of higher education and further education colleges. There are issues about ensuring that progression is appropriate. We think that that is largely being achieved through Lifelong Learning Networks but we need to establish that. We are also looking particularly at areas of very small-scale provision of higher education and further education colleges. Some of that is very appropriate either because of issues of geography or because of issues of specialisation, but again we want to ensure that that is stable in the medium term.

Q74 Mr Pelling: In terms of this blurring of the edges is there a gold standard in the HE sector which is under threat by these changes?

Professor Eastwood: All the evidence that we have had hitherto is that through a period of very considerable change and development quality has been maintained, evaluated in terms of what the Quality Assurance Agency has been saying about quality, and evaluated in terms of the National Student Survey, which we were talking about earlier, looking at it in terms of retention rates and graduation rates, so I think English higher education has a very strong story to tell around quality and fitness for purpose.

Chairman: I want to apologise to you. Professor Eastwood, because people are moving in and out of the Committee. It is not meant as a discourtesy to you. The Whips here from both parties put people on Standing Committees where they have to go. I think they are always trying to undermine the power of Parliament rather than the Executive, but never mind; both Members are now back. Can we move on to something that is of great interest to the Committee, as all these items are, but we have been lobbied pretty hard on this, and that is part-time students.

Q75 Helen Jones: Professor, you will remember that during the passage of the Higher Education Bill the Government gave assurances that institutions, basically two, Birkbeck and the OU, that taught all part-time students would not be disadvantaged in any way. Why have we still not managed to arrive at a settlement which is acceptable to those institutions and which protects their position, because you spoke earlier about the need to encourage lifelong learning and these are precisely the kinds of institution that are very good at delivering lifelong learning, are they not?

Professor Eastwood: I think we have made some progress. That is not to say that we have done everything that needs to be done but we have made some progress in terms of the premium of part-time. We have made progress in terms of the £40 million that we have committed to widening participation through part-time and the £55 million we have committed to enhancing retention of part-time students. We have taken some measures, and I believe those measures have been welcomed by the institutions you refer to, though, of course, there are many other institutions that have very substantial numbers of part-time students. We are in detailed discussions with those two institutions about their own missions and funding and I am due to visit both of them in the very near future, so I would not like to anticipate those outcomes beyond saying that both institutions also have other important roles which we are working with them to refine. If you take the Open University, it has a very important role in the provision of strategic and vulnerable subjects and will be a significant beneficiary from a number of the measures that we are taking in that area.

Q76 Helen Jones: Can we have a look at that, because I think there is a 10% premium, am I right, for those students?

Professor Eastwood: That is correct.

Q77 Helen Jones: If we look at what happens to the fees, most institutions now are charging full-time students the full £3,000, but Universities UK says the optimum fee for part-time is £600 and I think Birkbeck charges just over £1,125, because that seems to be all that the market will bear in part-time. Is there a case then either for a higher premium for these institutions or for changing the support available to part-time students so that they can raise their fees? Have you had discussions on that?

Professor Eastwood: We are monitoring the trend data very carefully on what is happening to parttime students under the new fee regime. You mentioned the issue of what the market will bear. We are in the process of discovering what that might be, so if you put those two things together we will arrive at a point where we do know what the market will bear and we know the point at which demand for part-time programmes will turn down.

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Q78 Helen Jones: But it is a question of market for whom, is it not? The Government's answer is that employers fund part-time fees but that is only for 40% of the students, is it not? *Professor Eastwood:* Yes.

Q79 Helen Jones: Are we not risking, in simply saying it is what the market will bear, excluding many of those that we would most like to get into higher education simply because the grants are not available to them, the support generally is not available to them, in the way it is available to full-time students?

Professor Eastwood: First, as I say, we are keeping that situation closely under review. Secondly, there was an announcement in 2005 of a move towards some enhancement of the support available to part-time students from poorer backgrounds. The third thing to say is that for the Department and for us the support available to part-time students is something which remains a matter which is under review and under consideration.

Q80 Helen Jones: Can I ask you, Professor, with respect, how long this is going to stay under review because the House was given assurances at the time of the passage of this Bill that these institutions would not be disadvantaged and we are still here, as we have been in previous committees, still asking the same questions, both of Ministers when they come before us and of HEFCE? It is very clear, is it not, that those assurances given to us have not yet been met?

Professor Eastwood: I cannot comment on student support provisions because that is not my area and I am not responsible for that budget.

Q81 Helen Jones: It is all part of the package about whether these institutions would be disadvantaged by the introduction of variable fees.

Professor Eastwood: To go back to what I said earlier, as far as the area we are responsible for is concerned, we have made changes since the Bill went through and those changes recognise some of the particular pressures that not just those institutions but also those recruiting part-time students in the new market might face, and we remain, as I say, in close discussion with the two institutions which have a particular role in part-time provision and I believe that we are continuing to make progress.

Q82 Helen Jones: Do you believe you are not able to make more progress simply because of the loud voices of the Russell Group in these matters?

Professor Eastwood: No, I do not see that that is a particular constraint. I think there are issues, and indeed some colleagues from, for example, CMU institutions would point to the very large numbers of part-time students they have and so for us—and I suspect too for Government when it is looking at student support questions—there are the issues relating to the two specialist part-time institutions but there are the more generic issues related to part-time students as a whole and that is why I have been labouring this particular point, that we do recognise

that there are circumstances which are particular to the Open University and Birkbeck and we wish to continue to address those as the new market develops.

Q83 Helen Jones: I understand that you are going through the process of looking at teaching costs. What information has HEFCE so far gathered about the additional costs of teaching part-time students as opposed to full-time students?

Professor Eastwood: I think the difficulty with that is that, of course, it can vary from institution to institution because of the way in which part-time provision is delivered and the extent to which you have to make special provision or not. We believe that within a year we will have robust information as the so-called "Trac for T" programme runs its course and it will be on that basis, I think, that we are in a position to give some quite robust answers to these questions.

Q84 Helen Jones: Is there any sense in maintaining the distinction between the support we offer to full-time students and part-time students as the distinction between them begins to blur? Some students you might class as full-time, they take a certain number of credits to enable them to work one year and they take more the next year. Is that distinction valid any more for deciding both on student support and how we fund institutions, do you think, or do these institutions, and particularly these two institutions, have different needs from those higher education institutions which have a mix of full- and part-time students?

Professor Eastwood: If I can take the first point, which I think is a very important one, I do think you are right to say that some of those old-style distinctions are starting to blur and it is quite clear that an increasing proportion of full-time students are working throughout their programmes of study and those trends, what you have described as the blurring, will no doubt be issues that the 2009 Commission will want to look at in the context of any recommendations it might want to make around student support.

Q85 Helen Jones: Finally, bearing in mind what you said about many other institutions that have a lot of part-time students—we recognise that as a committee—but these two particular institutions fulfil, as you said, a particular function and have particular needs. Are they not likely to lose out both ways if we are not very careful in that they cannot match the variable fee income of full-time students but that there are differences in the costs they have between their costs and universities which have both full and part-time students? Does there not need to be a special look at these institutions which fulfil a particular role?

Professor Eastwood: As I said earlier, we are in discussions with those two institutions to explore with them the extent to which some part of their activities may or may not be distinct from those of

other institutions which have large numbers of parttime but also have large numbers of full-time students.

Q86 Helen Jones: How long do you expect it will be before we get a resolution to this problem?

Professor Eastwood: It depends what you mean by "a resolution" and it depends what you mean by "this problem".

Q87 Helen Jones: That is an academic's answer. When are we going to have this sorted out as we were promised when the Bill was going past?

Professor Eastwood: If it is on student support I cannot comment on that because, as I say, it is not within my remit. If we are looking at the funding of teaching, which is within our remit, I think the current consultation on the funding of teaching has in it provisions which will be quite helpful to those two institutions and we expect responses to that consultation before Easter, so we will be able to make decisions quite swiftly.

Q88 Chairman: Professor Eastwood, there is a whole variety of institutions. It is not just the two institutions that Helen has, quite rightly, focused on. We have got Northern College in terrible trouble, we have got Ruskin with financial problems. It is a whole sector of education that is very threatened. If this is happening who should act?

Professor Eastwood: If there is a problem on the student support side then it is not a HEFCE issue. If there is a problem on the funding of teaching or the sustainability of the institution then that is a HEFCE responsibility.

Q89 Chairman: Why do you think the people at Northern College and Ruskin are also struggling? *Professor Eastwood:* I probably should not comment on Ruskin; it is an institution in a different sector, so I think I will, if you do not mind, pass up the opportunity to comment on that.

Q90 Chairman: But it is a worry, is it not, and a concern that whatever kind of part-time student you are this end of the market seems to be under threat? A lot of people go to Ruskin and a lot of people go to Northern College, so that must be quite a worry. *Professor Eastwood:* That would be true but there are other access programmes as well that take students from a very wide variety of backgrounds into higher education and do so very successfully. The point I would make though is that the data we have on part-time take-up suggests that though there are some reductions in the number of traditional continuing education-type students the part-time provision for students registering for degree programmes looks as if it is holding up.

Q91 Mr Marsden: We can trade statistics, I know, till the cows come home, but does it not worry you, Professor Eastwood, that we seem to have a certain mindset in the Department which, perhaps because it is financially inconvenient, slightly dismisses these issues of funding? We have had statements in the

past from the Department: "Part-time students are not a uniform group. Many of them are comfortably off, many have their fees paid by employers. Why should we step in and start subsidising employers who are already paying for people to go to higher education?". That may be true in some institutions. It is certainly not true in the two institutions that my colleague Helen Jones has been talking about, and if I could declare an interest I was an Open University part-time tutor for nearly 20 years. Certainly the majority of my students were not comfortably off and did not have their fees paid by their employers. I know you have said student support is not a HEFCE responsibility but the fate of the universities who are affected by parsimony in student support is a HEFCE responsibility, as is the reliability of the statistics on some of these rather glib generalisations that occasionally come out of the department. What are you doing in HEFCE to amass further data on this? Are you confident that the data which DfES officials and occasionally Ministers quote in support of their position is robust?

Professor Eastwood: What sits behind that as far as student support is concerned is a question of targeting and the targeting challenges are different and distinct for part-time students from full-time students.

Q92 Mr Marsden: I am sorry to interrupt you, but I asked a very specific question about the data that is used, this 40/60 split. Are you confident that that is robust?

Professor Eastwood: The 40/60 split?

Q93 Mr Marsden: We are told that 41% of part-time students may receive some level of fee support from employers. Many of the other 59% are in a very different situation. We have a situation where Ministers and civil servants are saying on the back of a four in 10 figure that this is not something we should be too exercised about because there is a whole load of employers out there paying for the students. What I am saying is that that still leaves the 60% who are being paid for but are you confident that those statistics are robust? What are you doing and what are you able to do in HEFCE to get more robust statistics on part-time students?

Professor Eastwood: I have no reason to have particular problems with those data. As I say, the issue for part-time students is the variety of support which is available for part-time students, which does mean that there are particular issues around targeting any kind of student support. In terms of my own core responsibilities I am confident that we have ways of working with the two institutions that you have signalled which will enable them to continue to play the distinctive role in the sector that they have.

Q94 Mr Marsden: As the Chairman said, it is not just a potential issue. It is a very important issue for those two universities, I grant you that, but it is an issue if it is going to become a problem right across the sector. Northumbria, Sunderland, Portsmouth, MMU, all of these are universities with substantial and significant numbers of part-time students. It seems that HEFCE needs to put a sharper focus on how the fall-out from this lack of support for part-time students may hit your individual institutions.

Professor Eastwood: That is what I have been trying to say we are monitoring very carefully and we have committed ourselves from the introduction of the new fee regime to doing that. Were we to start to see the kinds of adverse impacts that you refer to then you can rest assured that we will—

Q95 Mr Marsden: So you will be in there with Bill Rammell telling them about these problems, will you?

Professor Eastwood: Were there to be a significant change in the trends around part-time provision in higher education, yes, of course, I have a responsibility to inform ministers.

Q96 Mr Marsden: Can I ask a final question, and that again is about the law of unintended consequences and that concerns some of the statistics we have seen in terms of the reduction of adults on courses in FE colleges? You yourself have already talked about the widening participation and the link between FE and HE. Given the importance of enhancing opportunities for progression to HE which often comes from FE, was that decline a matter of concern for you?

Professor Eastwood: Again, that is a funding question for the Learning and Skills Council, not for us.

Q97 Mr Marsden: But I am asking you a philosophical question, if you like. You are coming to us this afternoon and saying, quite rightly, all the things that you have said about HEFCE's broader view. You concurred with what the Chairman said in that respect. You cannot entirely wash your hands of a situation if that situation is going to produce fewer people, particularly older people, getting a first taster in FE and then wanting to go into HE, particularly not when you have been lauding Leitch and talking about the importance of skills. You must have a view on it surely?

Professor Eastwood: We certainly do have a view on Leitch and taking—

Q98 Mr Marsden: I know you have got a view on Leitch; you have told us what your view on Leitch is. I want to know what your view is on the decline in adult learners in FE.

Professor Eastwood: As far as higher education is concerned we would want to be assured, and I think we are assured, that there are appropriate pathways into higher education. In that context the very real progress around access programmes is for us probably more important than that, that that sort of pathway, that kind of second and third chance route, remains. I think the funding and quality of access programmes to higher education is pivotal to those sorts of potential learners.

Q99 Stephen Williams: Chairman, we have had Professor Eastwood before us before on research funding so we will not go over the history, but since then the consultation period, which was rather short, has now completed and we look forward to the future. Is HEFCE going to be running the shadow metrics exercise alongside the 2008 RAE?

Following Professor Eastwood: the PBR announcement we are beginning work on the development of the new model and we will make a public announcement in March because my board will agree a timetable at its meeting next month, so that is formally where we are. In practice what we are anticipating now is that we will run the RAE in 2008 as previously advertised. We will test the new model, which by then will have been constructed, in the light of the kinds of data that we get from the RAE in 2008. That will give us a check on its fitness for purpose. We will do any subsequent re-engineering of the new model in the light of that experience so that it is ready to run for the STEM subjects in 2010-11.

Q100 Stephen Williams: So the STEM subjects will start in 2010, not 2009, is that right?

Professor Eastwood: It will be phased in for the funding of STEM subjects from 2010–11 onwards, yes.

Q101 Stephen Williams: But with the separate metrics exercise for STEM subjects, was that not meant to start in 2009 or are you saying the shadow exercise will give you enough information coupled with the RAE to lead to funding for some of these institutions?

Professor Eastwood: Once we have built the new model, if we can just stay with STEM for a moment, that model could work with annual data, so one of the questions that we need to have discussions with the sector and other stakeholders on is the frequency with which we run the model. If you assume that the model is going to be run annually on the basis of annually collected data then we would run it in time to inform the funding outcomes in 2010–11.

Q102 Stephen Williams: We have been led to believe that STEM subjects might have their first review under the new system in 2009 but from what you are saying it might be 2010.

Professor Eastwood: It would be 2009 data to inform 2010–11 outcomes.

Q103 Stephen Williams: Are you at all worried about the distorting effect that the RAE itself, the change to the new system, uncertainty about what the new system might be, has on institutions' behaviour? Just like in the Health Service targets distort priorities, some of us might say, do you think this distorts academic priorities?

Professor Eastwood: Do you mean the existence of an RAE or the perturbations that we have experienced recently?

Q104 Stephen Williams: Well, both really. Does the RAE itself distort academic priorities and is there a concern that the new system might do the same?

Professor Eastwood: My own view, going back to 1986, and you have heard me on this before, is that the impact of the RAE has been broadly beneficial, but we acknowledge that we have arrived at a point where the RAE may be over-engineered and there is significant evidence that it does have some unanticipated and unfortunate consequences. I think that is exacerbated because institutions call the RAE in aid, that is to say, "We are doing this because of the RAE", whereas in fact they are doing it for good local institutional reasons but the RAE is a convenient shroud to wave. I think the different methodology that we are adopting for the RAE of 2008 is a response to some of the criticisms made of earlier RAEs, not least the 2001 RAE, and the system of research assessment that we are in the process of developing will, I believe, further diminish the distorting outcomes of RAE whilst preserving the beneficial effects of both research assessment and research funding

Q105 Stephen Williams: My colleague Gordon Marsden, who is exploding next to me at the moment, was asking about the priority of teaching over research or *vice versa* earlier. Just to come back to my hypothetical University of Lindisfarne, let us just suppose that the University of Lindisfarne had a poor RAE assessment for theology, which, of course, is a core subject for this university, in the past. In order to get a better one in 2008, if it focused all its staff efforts on the RAE and remodelled its timetable so that the students who are now paying £3,000 fees for their courses felt they were not getting a rum deal, would that not be distorting behaviour, an exercise to inform one set of funding actually distorting another part of a university's activities?

Professor Eastwood: The example is a delicious one and I am sure Bede would have scored very well in the RAE but, leaving that aside, if this answers your question, in the environment into which we are now moving institutions' understanding of where their funding is coming from is critical; it goes back to my earlier comments on Trac for T, and though institutions will have some flexibility in the way in which they invest their income, an institution which was substantially raiding its teaching income in order to underwrite research which was not otherwise being funded would be an institution, I think, which would struggle to provide the kind of student experience that Lindisfarnians would expect.

Q106 Stephen Williams: Even if the course was massively over-subscribed normally?

Professor Eastwood: That is an interesting question about brand and the extent to which brand will be uninfluenced by those issues of quality and investment in teaching, and I suspect they will be important.

Q107 Stephen Williams: Looking forward to the future, while we were in Australia on our expensively funded trip we met the Chief Scientific Adviser of Australia who was talking about what they move into in Australia and they can have an impact assessment as part of their equivalent of the RAE. We are going to have something called a quality indicator, I think. Is that the same?

Professor Eastwood: I think it is broadly similar. In terms of the new methodology, we will be looking at, amongst other things, output and their impact, and we will also be seeking to develop impact measures which are appropriate for applied research as well for blue-skies research.

Q108 Stephen Williams: In terms of the whole basis of funding research on quality, whether it has got an impact assessment or not, is not the danger of that (and some parts of the sector might say it already happens) that it leads to a concentration of government funding in certain institutions and it is very hard for newer universities, whether it is Lindisfarne or elsewhere, to get these vast amounts of money in order to have well-funded departments with the capital equipment they need in order to grow a reputation?

Professor Eastwood: What is interesting in terms of the distribution of QR, the funding that arises from the RAE, is that if you look at institutional level, 75% is in 25 institutions, but if you look at the distribution of quality it is very wide. There is a large range of institutions that have high quality research within them. The number of institutions that have, as it were, very heavy concentration at five and five-star is, of course, much smaller, but that pattern of distributed excellence which we have supported, and indeed our colleagues in the Research Council have supported, does seem to me to reflect the way in which institutions are able to sustain research even if you would not describe those institution across the piste as research intensive.

Q109 Mr Chaytor: In the earlier sessions of the Committee that looked at the Bologna Process I think our feeling from the sector was that their view was that it is just a question of time before the foreigners fall into line with the British way of doing things. Is that your view of the Bologna Process? Professor Eastwood: I am wondering whether that is a comment that is more widely applicable. The Bologna Process has been an interesting one because it has been a process of, now, 45 signatories, so it is not an EU process and it is not a process which is driven by a strong directorate. It is certainly true to say that there has been more re-engineering of HE systems in part of Europe as a result of Bologna than there has been within the UK, so to that extent in a number of rather important areas things that have mattered to UK and English higher education-the three-year degree, the one-year masters—have been things which the Bologna Process has recognised. Our emphasis not on time served but on outcomes has also been one that I think has increasingly resonated within the Bologna Process. In terms of the mutual recognition of qualifications in terms of

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mobility, I think Bologna has had a positive impact. That is not to say that it is simply one-way traffic and I think it would be naïve to assume that a process involving 45 would involve 44 walking in lock step with the other one.

Q110 Mr Chaytor: But are there specific issues or examples of good practice elsewhere in European universities that you think the British HE sector could learn from? Is there anything you would like to see us adopt that we do not currently do?

Professor Eastwood: I think if—and this is using Bologna to some extent for other purposes—we can encourage somewhat greater student mobility, if we can encourage students to study, as it were, outside the Anglophone world, I think the consequences of that both for individual students and indeed for our culture more generally can only be very positive.

Q111 Mr Chaytor: And is there a role for HEFCE in stimulating that greater mobility of UK students?

Professor Eastwood: Certainly we have run a number of programmes which have been designed to try to look at the barriers to that, and I am afraid most of this is fairly banal: the barriers are around linguistic confidence as much as linguistic competence, and we would certainly encourage flexibility in order to achieve greater student mobility.

Q112 Mr Chaytor: Is there a tension in the whole Bologna Process between the driver to greater standardisation and transferability and the need that you have identified within the UK to encourage greater diversity and differentiation between individual universities?

Professor Eastwood: There are points when those two priorities rub up against one another and there is a danger, of course, that in an environment where HE is global, if we are not careful Bologna means that we just look at Europe whereas we need the kind of flexibility to compete with the US, to compete with Australia, and we also need the kind of flexibility that will enable us to remain a major provider of higher education opportunities, not just to countries in the Far East but also to India, to countries in the Middle East, and in due course, one hopes, to African countries as well. The kind of flexibility and quality that UK HE is perceived as offering will be critical to our ability to operate in that market and we are a significantly larger player in that international market than most of the other Bologna signatories.

Q113 Mr Chaytor: So do you think the UK brand will come out stronger from the Bologna Process or do you think the UK brand is threatened by Bologna and by the rapid growth of HE in India and China? *Professor Eastwood:* Providing we retain this emphasis on quality which I was talking about earlier in my comments, then no, I think the UK brand will continue to prosper. We cannot compete on price, as I have said, unless there is a government

which is going to devalue the pound, and that would be painful for other reasons, so we must compete on quality.

Q114 Mr Chaytor: On the quality issue, just going back to our earlier discussion before I had to leave the Committee, is there any evidence that the introduction of variable fees has led students to be more discriminating on quality and, even though the drop-out rate in British higher education is amongst the best in the world, is there any evidence that students are leaving their courses because they are dissatisfied with the quality of teaching or the level of individual support and personal tuition?

Professor Eastwood: If by the impact of fees we are talking about post-2006, I think it is too early to say.

Q115 Mr Chaytor: The fees have been in for a number of years. Does the emergence of a market indicate that students are beginning to act as consumers in the market rather than as passive recipients of what is offered to them?

Professor Eastwood: There was a lot of speculation in the run-up to 2006 as to whether or not the new fee regime would impact differentially on particular subjects, would there be a flight towards subjects which were vocational subjects, where there was what you might describe as easy employability, and we have not seen that. I think students do make discriminating choices but they make quite complex choices and they are choices not just around career aspiration and institutional preference; they are also choices around intellectual stimulation and in a large number of students' cases they are also choices which are constrained by their own individual circumstances which mean that they can only study in a particular range of institutions. I think we are seeing students being discriminating but, as I say, it is a complex picture that we are seeing.

Q116 Mr Chaytor: But, specifically on this question of quality of teaching and tutorial support, are students becoming more assertive in respect of any dissatisfaction with the quality of teaching?

Professor Eastwood: There is some evidence that some of that is beginning to take place but, as the National Student Survey suggests, in the round students remain broadly very satisfied with the nature and quality of their student experience, and I think where we are beginning to see that assertiveness there is quite swift institutional response.

Q117 Mr Carswell: On the subject of Bologna, why do we need Bologna? Surely the implication of it is that not only can the UK not run its own universities but, more serious than that, our universities cannot run themselves? We hear this argument about portability, mobility. A good degree surely speaks for itself. Top MBAs, or even not such top MBAs, are recognised and accepted around the world. As far as I am aware there is no Bologna Process for MBAs. Please explain to me specifically why we need technocrats in higher education to achieve portability. In fact, Bologna has not resulted in more

mobility, I put it to you, because there are other far more important factors to do with labour mobility that explain portability. Please can you explain to me how Bologna actually achieves the central justification for it: portability? I just do not get it.

Professor Eastwood: In order to understand the Bologna Process one in part has to understand certain counter-factuals, and one of the counter-factuals here would be a different kind of process which was a process of greater imposition of standardisation within the European Union. I think the Bologna Process has been a very interesting example of the way in which higher education sectors have chosen to come together, pool their experience and as a result of that head off some of the issues which we might have seen in terms of the reputation acceptability of certain kinds of qualification, so in that sense, granted that that is a counter-factual, I think there is a positive story that one can tell around the Bologna Process.

Q118 Chairman: Professor Eastwood, in what you have said today, and we very much value your contributions, and we have tried to provoke you, you have remained very calm and you have kept to your own territory. If you had a conversation with Lord Dearing, as we will, would you say to him, "Your idea of a 10-year review is not really necessary because basically the 20-year trajectory is on course"?

Professor Eastwood: I think if we did not have the 2009 review in prospect and if we had not had the 2003 White Paper and the 2004 legislation then Lord Dearing would have been absolutely right that now we would have needed a further impetus to the process. I think we have had those developments and we have had those periods where there has been a very intense discussion around the role of higher education and the funding of higher education, and we have in prospect a very significant reflection and review of that in 2009. I will listen attentively to what Ron says when you speak with him but I think it would be perfectly reasonable for Ron to conclude that in the current context the sorts of investigations and conversations that your Committee is having

are an admirable way of taking stock and an admirable way of preparing for the review that we are promised in 2009.

Q119 Chairman: I can understand that you do not want to venture onto other people's territory and I wanted at one stage to ask you whether you think there should be a post-16 funding council for all education and if you had ambitions to be chief executive of that, but what I really want to ask you is this. There are signs that the Government is getting more centralist in its attitude to higher education. If that manifested itself in a way that was damaging to UK higher education have you got the grit and the resolve to stand up and bang the desk in the Secretary of State's office and tell him he is wrong? Professor Eastwood: My career has been a career in higher education and the one thing I am passionate about is higher education and universities and the attraction, when I was asked to do this job, of doing this job was to play a role in the further enhancement and enrichment of English higher education, so I will do everything in my power to ensure that I play my full role in that.

Q120 Chairman: Is there anything you would bang his desk about at the moment, a top priority, top concern, top worry?

Professor Eastwood: When I came into the job I thought there might be a number of things that I would need to be banging the desk around because I thought that there was a prospect of this being a year of considerable turbulence. As I said earlier, that has not been the case and in a number of important areas, working with the sector and with government, we have moved to sensible resolutions, sensible resolution around the funding of teaching, sensible resolution around the future of research assessment, and we will continue to have confidential and appropriate discussions around the resourcing of higher education as we move forward.

Q121 Chairman: Professor Eastwood, thank you very much for your contribution today. We have enjoyed it.

Professor Eastwood: It has been my pleasure. Thank you, Chairman.

Supplementary memorandum submitted by Professor David Eastwood, Chief Executive, Higher Education Funding Council for England (HEFCE)

GRADUATE EARNINGS

At my appearance before the Education and Skills Select Committee on 29 January 2007 the issue of the graduate earnings premium was raised. I quoted a figure of around £150,000 which led you to mention a figure of £400,000 that Ministers had used previously. I promised to let you have a note on authoritative sources.

The figure of £400,000 was cited in Parliamentary debates and written answers during the period 2001 through to 2003 primarily by Margaret Hodge, the then Minister for Lifelong Learning and Higher Education. We have been advised by the Department for Education and Skills (DfES) that this estimate was based on an analysis of the Labour Force Survey (LFS) which added up the earnings gap between graduates and the rest of the population over a working lifetime, on average. Whilst this can be described as a

"graduate premium", it is a somewhat simplistic measure based on gross income which takes no account of personal characteristics or earnings growth and perhaps most importantly, does not represent the additional earnings in present value terms.

Since then, the DfES and others have carried out more sophisticated analyses of the LFS and the present "official" statement on this matter from the DfES is:

"Over the working life, we believe the average graduate premium remains comfortably over $\pounds 100,000$ after tax and in today's valuation, compared to what a similar individual would have earned if they just had A levels".

In February 2007 Universities UK published a report of work carried out by PricewaterhouseCoopers (PwC) *The Economic Benefits of a Degree* which is available at:

http://bookshop.universitiesuk.ac.uk/downloads/research-gradprem.pdf

In this report, PwC estimate the average additional gross lifetime earnings of graduates to be in the region of $\pounds 160,000$. The report also considers the returns to different subjects and includes a lengthy bibliography of other relevant work in this field.

So, to conclude, the £400,000 figure dates from 2001 and is a very broad and simple estimate in gross cash terms that compares graduate earnings with the earnings of the rest of the population over a working lifetime, on average. This includes a very large number of individuals who are not qualified to go onto study at higher education level. More recent studies quote figures above £100,000 and in the region of £160,000. These provide more refined estimates by comparing the earnings of graduates with those in the working population who completed their education at A level. They also discount future additional earnings to net present value. However, it should be appreciated that even these more sophisticated estimates involve judgements and assumptions about what graduates would have earned had they not entered higher education, and about future earnings of both graduates and non-graduates.

March 2007

Monday 19 February 2007

Members present

Mr Barry Sheerman, in the Chair

Mr David Chaytor Jeff Ennis Paul Holmes Helen Jones Fiona Mactaggart Mr Gordon Marsden Mr Andrew Pelling Stephen Williams

Memorandum submitted by Professor Michael Arthur

1. This submission provides the Committee with information on the National Student Survey (NSS), which I would like the Committee to be aware of prior to my oral evidence.

SUMMARY OF MAIN POINTS

2. The NSS forms part of HEFCE's quality assurance framework. Its purpose is to support potential students and their advisers make decisions about what and where to study. In addition, it provides detailed results back to institutions and students unions (SUs), which can identify areas of good practice and for improvement.

3. The survey is now in its third year with the 2007 NSS currently underway. For both 2005 and 2006 over 80% of students were satisfied with the quality of their courses. The overall response rates are high at 60% in 2005 and 56% in 2006, demonstrating the robustness of the survey results.

4. Higher Education Institutions (HEIs) and Students Unions (SU) are already using the survey to improve the student experience. For example, the University of York is providing longer library opening hours and the University of the Arts London have asked all departments to create action plans in response to their results. HEFCE will be commissioning work to further analyse how institutions and students unions are making changes following the outcomes of the survey.

5. The recent review of the quality assurance framework (QAF) confirmed that the survey can make a valuable contribution to student choice. However, some improvements need to be made to meet this objective more fully. This is currently being implemented, with the appointment of UCAS to re-develop the Teaching Quality Information (TQI) website, where the NSS results are published, to make it more userfocused and friendly. A new site, with a new brand and identity will be released in early August 2007.

6. Sector wide analysis of the 2005 NSS results has been completed, which showed that students viewed their higher education courses very positively with over 80% of students agreeing that "overall, I am satisfied with my course". However, this report also highlighted that assessment and feedback is an area where students are overall satisfied, but relatively less satisfied in comparison to other elements of their experience. This is also the case for students from an ethnic minority, who overall are satisfied but are relatively less satisfied than their white counterparts. HEFCE is working with the Higher Education Academy and the Equality Challenge Unit to identify why this is the case and how we can support institutions to make improvements.

7. Analysis of the 2006 NSS results is currently underway and will be published during the spring. It will identify changes between the 2005 and 2006 NSS results.

PROFESSOR MICHAEL ARTHUR

8. Professor Michael Arthur is Vice Chancellor of the University of Leeds (1 September 2004). He was formally Professor of Medicine (1992), Head of the School of Medicine (1998–2001) and Dean of the Faculty of Medicine, Health and Life Sciences in Southampton (2003–04). He is a hepatologist with research interests in liver cell biology which were developed at the University of California, San Francisco (1986–88) and more recently as a Fulbright Distinguished Scholar at Mount Sinai School of Medicine in New York (2002). Professor Arthur became a Fellow of the Academy of Medical Sciences in 1998. His national contributions have included roles at the Wellcome Trust (Cell and Molecular panel), at HEFCE (Strategic Research Committee) and at UUK (Research Policy Committee). He has recently become Chair of the Teaching Quality Information and National Student's Survey Steering Group.

THE NATIONAL STUDENT SURVEY

Background

9. As part of the revised quality assurance framework that followed the completion of subject review, a Task Group chaired by Professor Sir Ron Cooke was set up in 2001 to make recommendations on the information about the quality and standards of teaching that the new quality assurance framework should generate. The NSS was first mooted as part of this new package of information.

10. The Task Group concluded that as part of the public information package, a national survey would need to be introduced to support students making choices about what and where to study. The Student Feedback Project Steering Group, also chaired by Sir Ron Cooke, was established in the summer 2002 to scope the new survey.

11. The NSS Pilot Steering Group (NSSPSG) made recommendations for the conduct of the first full scale survey in 2005, in the light of evidence from two pilot exercises and consultation outcomes.

12. In parallel to piloting the NSS, the Teaching Quality Information (TQI) website was developed by HERO as the mechanism for publishing the public information aspects of the new quality assurance framework. This included publishing the NSS results, HESA derived statistics (such as continuation data) and the Destination of Leavers of Higher Education (DLHE) survey.

13. A review of the Quality Assurance Framework (QAF) has now been completed, which evaluated TQI (which included the NSS). The review group concluded that these initiatives can make a valuable contribution to student choice, however the group recommended re-focusing the TQI site on the needs of applicants and their advisers, as the purpose of the site should be to help potential students choose what and where to study. The outcomes of this are currently being implemented, with UCAS being appointed to develop a new site with a new "brand" and identity.

14. The National Union of Students (NUS) are a key partner in implementing the NSS and HEFCE has funded a post at the NUS to support Student Unions (SUs) to promote the survey and use the results to identify good practice and areas for improvement.

Scope and coverage of the survey

15. The coverage of the NSS is as follows:

- (a) all publicly-funded HEIs in England, Wales, Northern Ireland (and some institutions in Scotland and the University of Buckingham from 2006) are included.
- (b) All full-time and part-time undergraduate students registered at these HEIs are surveyed, during their final year of study (or, for flexible programmes where the final year cannot be predicted, during their fourth year of study).
- (c) Teaching and Development Agency (TDA) for Schools funded students were included in the NSS for the first time in 2006.
- (d) NHS funded students are included for the first time in the 2007 NSS.

16. Currently the Scottish Funding Council does not fund the NSS, however some institutions (currently eight) are now voluntarily taking part in the NSS.

Questionnaire

17. The questionnaire (which was devised and thoroughly tested through the pilot process) consists of twenty one questions grouped into six "scales" covering the following:

The Teaching on my course.

Assessment and Feedback.

Academic Support.

Organisation and Management.

Learning Resources.

Personal Development.

Question 22 measures overall satisfaction.

18. NHS funded students are asked an addition "scale" of questions covering their experience of practice placements.

19. In addition, there is the opportunity to give positive or negative comments on the student experience.

20. In the 2007 NSS, a new bank of questions is being piloted. These were devised from institutions' own internal questionnaires by the Higher Education Academy. Institutions (if they choose to opt-in) were able to choose a maximum of 5 question scales (from a possible 12) and then students would be asked if they were happy to complete further questions, once the full NSS was complete. This was via the online method only. The results will be published back to institutions only and not publicly available.

21. HEFCE will be commissioning a full review of the questionnaire (including the additional questions for NHS students and the pilot bank of questions) so the steering group can consider how it will develop in the future following the 2007 NSS.

Methodology

22. The target list is generated automatically by the Higher Education Statistics Agency (HESA) at the point when institutions make their HESA return. Institutions then populate the target list with student contact details. HEIs have the opportunity to choose which week, over a five week period between January and Easter, when they would like to start the survey.

23. The survey uses three methods of data collection: online, postal and telephone. This is also the sequence in which data is collected. Ipsos MORI complete the survey on our behalf and contact students directly requesting a response.

24. Institutions and SUs are provided with marketing materials to promote the survey and encourage students to respond.

25. For the 2006 NSS significant changes were made to the telephone methodology to address concerns that some HEIs and SUs had regarding the number of attempts that were made to seek a response. The number of attempts to call a student has been reduced by half (to a maximum of 8), no number is called where more than ten students share the same number and no messages are left. An attempt is counted even where there is no answer to a call. This did result in the response rate dropping slightly for the 2006 NSS.

26. We are aiming to increase the online response rate over time, therefore reducing the need for telephoning. However, the analysis of the results (completed by Paula Surridge at the University of Bristol) concluded that students from an ethnic minority or those that have a disability are more likely to respond by telephone. It is important that this student group has the opportunity to respond to the survey, so telephoning will remain.

27. HEFCE will be commissioning a full review of the methodology so the steering group can consider how it can develop in the future following the 2007 NSS and the further analysis from the University of Bristol on the methodology of the 2006 and 2007 survey.

Publication of results

TQI website

28. The results of the survey are published via the TQI website. Users are able to compare results at subject and institution level on the site. Institutions are also able to make a commentary on the results of the survey and other data included on the site. Following the outcomes of the Quality Assurance Framework Review HEFCE¹ appointed UCAS to re-develop the website, so that it is focused on potential students and their advisers. The NSS will continue to form a key part of the data available on the site.

29. The NSS results are subject to a "publication threshold" of 50% response rate and 30 students on the existing site. 93% of institutions had data published in 2005 and 2006 and we are working to achieve 100% coverage to ensure that potential students have as much information as possible when making choices: HEFCE has funded a post at the NUS, to support SUs to promote the survey and the use of the results. They are targeting those SUs where the response rate was below the threshold for publication in the previous surveys. Ipsos MORI (the survey agency) is also working with institutions to promote the survey and monitor response rates. HEFCE is working with HEIs to promote the survey and continually improve the quality of the HESA data and therefore increase response rates.

30. Following the outcomes of the QAF review, HEFCE has consulted with the sector on the development of the TQI website, to make it more user-friendly. A key issue was in relation to the threshold on the site: the proposal was to reduce it to 40% response rate and 20 students. This was supported by the sector, however further expert statistical advice is currently being sought to consider this issue further.

Results provided back to HEIs and SUs

31. Institutions and Students Unions have access to more detailed results of the survey, via the Ipsos MORI dissemination website. This has a data protection threshold of ten students, so more data is available including for those institutions which do not have data on the TQI website. This also includes the comments students included on the questionnaire (these are "cleaned" so no individual can be identified).

32. This has enabled HEIs and SUs to enhance the quality of the student experience, such as the University of Essex's department of Biological Sciences which has established a student mentoring scheme. Evidence from the QAF review has also suggested that SUs found the survey extremely positive in securing beneficial

changes for students such as anonymous marking. Work is currently underway with Ipsos MORI and the Higher Education Academy to make improvements to the dissemination website, to make it more useful to HEIs and SUs.

ANALYSIS OF RESULTS

33. HEFCE commissioned Paula Surridge from the University of Bristol to analyse the results of the NSS. The analysis of the 2005 results has now been published and focused on the institutional, student and subject characteristics of the results. This analysis found that overall the majority of students are satisfied with their experience of higher education with over 80% of students agreeing that "overall, I am satisfied with my course". However, this report also highlighted that assessment and feedback is an area where students are overall satisfied, but relatively less satisfied in comparison to other elements of their experience. In addition, although overall students from an ethnic minority are satisfied, they are relatively less satisfied than their white counterparts.

34. HEFCE is working with the Higher Education Academy and the Equality Challenge Unit to identify why this is the case and how we can support institutions to make improvements.

35. Analysis of the 2006 NSS results is currently underway, This will be published during the spring.

February 2007

Memorandum submitted by The National Union of Students (NUS)

1. Introduction

1.1 NUS is a voluntary membership organisation comprising of a confederation of local student representative organisations in colleges and universities throughout the United Kingdom which have chosen to affiliate. The organisation has nearly 750 constituent members (CMs)—virtually every college and university in the country.

1.2 NUS is one of the largest student organisations in the world and provides research, representation, training and expert advice for individual students and students' unions.

1.3 NUS welcomes the opportunity to contribute to the Education and Skills Select Committee inquiry into the future sustainability of higher education. The organisation has chosen to focus on those questions, within the purposes, funding and structure of higher education, which are most pertinent for students in the UK.

UNIVERSITY FUNDING

2. Should the cap be raised?

2.1 The National Union of Students (NUS) has long supported the principle that education is a public service and that free education is a route to tackling inequality, poverty and differential access to education opportunities and life chances.

2.2 With the introduction of variable fees the debate on how education should be funded has moved on. It is too early at this stage for ourselves or the DfES to come to any definite conclusions about the system, which will of course be reviewed in 2009.

2.3 In this paper we will set our concerns. Many of our arguments remain the same, although our fears over several of the emerging aspects of marketisation will also be discussed. We have also consulted with our member students' unions and their thoughts are incorporated in the response.

2.4 NUS believes students should not pay for their education through tuition fees, either paid up front or after graduation, and so as a result opposes the idea of raising the present cap on tuition fees. Indeed, NUS argues that education should be free at tertiary level, and that tuition fees should be scrapped.

3. What would be the consequences of lifting the cap?

3.1 Were the cap to be lifted, NUS believes the consequences for students, for higher education and for society in general would be grave. Student debt is already at unprecedented levels and continues to rise. Not only is it manifestly unfair to expect students to accumulate such debt—particularly as debt continues to hit the poorest and most vulnerable students hardest—it also has detrimental effects on wider society.

4. Debt is increasing

4.1 The exact level of graduate debt is disputed. Surveys by banks and other financial institutions usually place the graduate debt figure well above the figures provided through official government reports, but all show a general trend since the 1990s towards ever-higher levels of graduate debt at a pace that far exceeds the rate of inflation.

4.2 For example, the Barclays Bank Graduate Debt Survey showed that in 1994, the average graduate debt was £2,212. By 2005, this had increased to $\pounds 13,501$.¹

4.3 Even the most conservative estimates of anticipated average graduate debt such as those recorded in the DfES' Student Income and Expenditure Surveys show that debt is surging. Debt levels in those surveys rose from £3,465 in 1998–99 to £7,900 in 2004–05—an increase of 127%.²

4.4 Whichever figure is correct, the increase in tuition fees and introduction of the loans to pay for them, coupled with the increase in loans for living costs means that this figure will almost certainly continue to rise. The former Education Secretary Charles Clarke estimated that students who attend universities that charge the full top-up fees will graduate with debts of $\pounds 21,000.^3$

4.5 For some students, particularly those on longer courses, debt can be even higher. According to research by the British Medical Association (BMA), a fifth of medical students owe more than $\pm 30,000$ in their final year—and this before top-up fees were introduced.⁴

4.6 Official figures confirm that such students are burdened with higher debt: DfES research shows that medical and dental students have the highest levels of debt of all full-time students. In 2004–05 they anticipated having average graduate debts of $\pounds12,946.5$ For these students, therefore, increases in tuition fees will have an even greater impact.

5. Debt affects the poorest disproportionately

5.1 Debt does not affect all of society equally. Debt levels are, unsurprisingly, higher among those from lower socio-economic backgrounds. The DfES' own research showed that those students in the lowest groups predicted average debts of £9,842 in 2004–05, compared to £7,733 among the middle groups and \pounds 6,905 for those from the highest.⁶

5.2 As a consequence, many of these students take up part-time work, either to reduce the amount of debt they have to incur, or simply to make ends meet. Indeed, research from Universities UK (UUK) shows that large proportions of students are working, most of whom (83%) reporting that they do so to cover basic essentials.⁷

5.3 In that survey, 30% of students said they worked more than 20 hours a week,⁸ jeopardising the quality of their degree given that a student working 16 hours per week has up to a 60% chance of getting a poorer degree than a similar non-working student.⁹

5.4 This too affects poorest students the most, as they are far more likely to have to work during termtime. In a UNITE/Mori survey, 51% of C2DE students compared to 35% of AB students reported they worked during term-time. They also worked longer, on average 14.3 hours per week, compared to just 12.2 hours for AB students, and for less money £5.94 per hour on average for C2DE students compared to £7.21 per hour for AB students.

5.5 NUS welcomes the increase in maintenance grants for the poorest students, and the requirement for universities and colleges to provide bursaries to such students, but we remain extremely concerned that much of this money is being used for high-profile schemes which benefit richer students.

5.6 One such instance can be seen at the University of Gloucestershire, which is offering a 20% discount on their tuition fees where these are paid at the beginning of a course, worth around £900 for students on courses charging the full £3,000 fee.¹⁰ This is essentially a massive subsidy to the richest students, being paid for by those who cannot afford to pay their fees upfront and must take out loans.

5.7 Other schemes which offer large bursaries to students with high A level marks without any reference to their family income are similarly taking from the poor to, potentially, give to the rich.

5.8 NUS believes the Office for Fair Access (OFFA) should be required to prevent such misuses of money intended for widening participation groups, and given the powers to enforce this where necessary.

¹⁰ University of Gloucestershire: http://www.glos.ac.uk/shareddata/dms/AAE66F70BCD42A039BF348C89358120D.pdf

¹ Barclays Graduate Debt Survey 2005.

² Student Income and Expenditure Survey 2004/05-RR725, DfES, 2006.

³ Breakfast with Frost, 20th Jan 2003.

⁴ Survey of Medical Students" Finances, BMA, 2005.

⁵ Student Income and Expenditure Survey 2004/05-RR725, DfES, 2006.

⁶ Student Income and Expenditure Survey 2004/05-RR725, DfES, 2006.

⁷ "HE Students' Attitudes to Debt and Term-Time Working", UUK, 2005.

⁸ "HE Students' Attitudes to Debt and Term-Time Working", UUK, 2005.

^{9 &}quot;HE Students' Attitudes to Debt and Term-Time Working", UUK, 2005.

5.9 Debt also disproportionately affects female students, due to the gender pay gap. Under the new system, a female graduate with two children, earning £36,000 and with a student loan debt of £26,000 will take 19 and half years to pay back what she owes. A man on the same salary would take 15 years.¹¹

6. Debt is a deterrent

6.1 Research shows that reluctance to take on huge debts is a prominent factor determining access to higher education, particularly amongst those from poorer backgrounds. For example, UUK Student Debt Project shows that the groups the Government is trying to attract into HE are likely to be the most debt averse and the most concerned about the costs of HE (ie low-income groups, lone parents, students from certain minority ethnic groups).¹² In this research, 84% of sixth formers and college students believed student debt deterred entry into HE and 88% of those questioned from the lower income groups believed that more people would go to university if grants were available. These findings were repeated in NUS" Funding the Future research.¹³

6.2 The 3.7% drop in UCAS applications for 2006 entry compared to 2005 confirms that, at the least, many 2005 entrants sought to avoid the enormous increase in fee levels, and NUS believe this may be the start of a decline in applications for future years.

6.3 The severity of the situation is in part being masked by an increase in the absolute number of young people in the wider population. The Higher Education Initial Participation Rate (HEIPR), measuring participation by young people in HE, shows a decline in participation of 0.3% in 2004–05 compared to the figure in 2003–04, which in turn had been 1.1% lower than in 2002–03¹⁴—and this before the introduction of top-up fees.

6.4 The number of 18–20-year-olds in the wider population is forecast to increase by 11% between 2002–03 and 2010–11, and the Higher Education Policy Institute projects that due to such increases in that age group and in others, 87,000 more students should enter the system. This may help to ensure UCAS applications do not decline in absolute numbers, which will be of some political comfort to those who advocate variable fees. However, in order for the HEIPR to remain static or increase, the number of applications must markedly increase, or else the HEIPR will continue to drop, very likely at the expense of those groups who are already underrepresented. NUS firmly believes that an increase in fee levels would only have a yet more detrimental effect.

6.5 Although the increase in non-repayable support is welcome, and though NUS fully supports the Government's target of increased participation in HE, its parallel policies to increase tuition fees is wiping out the incentives to access.

7. The value of a degree is declining

7.1 There is evidence that this graduate premium is in decline. Indeed, research by economists at the University of Cardiff has shown that for some types of student on some types of course (eg white, male students on arts courses) the graduate premium may even be less than the cost of a degree, once fees and living costs are included.¹⁵

7.2 NUS believes the benefits of higher education are far more than merely financial, and graduates receive a range of benefits beyond higher wages. However if the cap were to be lifted, and this increase justified by reference to the graduate premium, some prospective students may start to make the judgement that the benefit of higher education will not in fact outweigh the cost.

7.3 In any case, if university graduates have higher wages then they should pay more in income tax and National Insurance. And, if the taxation system is not as progressive as it ought to be then this is where public policy should focus rather than placing greater financial burdens on students and graduates. Charging tuition fees in the first place, let alone raising them, is merely a pernicious form of double taxation.

8. Student debt will make demographic problems worse

8.1 A report on young people's finances by Reform suggests that by 2012 young graduates will face a tax burden of 48% due to the costs of higher education and compulsory pension scheme payments.¹⁶

8.2 The generation which has introduced tuition fees and top-up fees, and that is currently arguing to lift the cap, is the generation which benefited from free higher education, and will have contributed less proportionately to their pension schemes, and found it easier to purchase a house and afford to start a family.

¹¹ House of Commons Library Research, December 2003.

¹² Callender et al, Student Debt Project, UUK, 2003.

¹³ Watson and Church, Funding their Future: the attitudes of year 10 pupils to HE, NUS, 2003.

¹⁴ Participation Rates In Higher Education: Academic Years 1999–2000 to 2004–05, DfES SFR 14/2006.

¹⁵ O'Leary and Stone, The Changing Wage Return to an Undergraduate Education, 2005.

¹⁶ Bosanquet et al, Class of 2006-a lifebelt for the IPOD generation, Reform, 2006.

8.3 This is clearly unfair and in part a result of higher earners in that generation being regarded by politicians as unwilling to pay higher taxes. The implications for the UK are wider than merely equity between the generations however.

8.4 A report by the Chartered Institute of Personnel and Development (CIPD), the cost of study is already impacting on the finances of recent graduates. According to the report, just over half of 2005 graduates (51%) feel that the cost of education will have a major impact on their chances of purchasing a property, and around 30% do not save for a pension because of debt.¹⁷

8.5 In Australia, which has a system similar to that in England, the introduction of fees and incomecontingent loans has contributed to an increase in the proportion of young people living in the parental home after graduation. The median age of first homebuyers has also risen.¹⁸

8.6 Evidence also suggests than Australians are also delaying having their first child, and choosing to have fewer children in recent years. The median age of Australian mothers at the birth of their first child rose from 24 in 1975 to 29 in 2000.

8.7 Not all of this movement can be ascribed to higher education fees. Nevertheless, as the population ages, the current structure of the social security system becomes more and more difficult to sustain. Placing a higher burden of tuition fees on young graduates will hardly serve to improve this situation.

9. Impact on the sector

9.1 Whilst the level of fees, and the resulting increase in graduate debt is of great concern to NUS, the Higher Education Act introduced another damaging principle to student finance: marketisation.

9.2 The market in HE has in most cases arisen in the provision of bursaries, rather than in fee charging. One of the criticisms levelled at the current system by those who would advocate some or all universities being able to charge more than the current $\pm 3,000$ is that the cap was set too low, and as a result no market in fees appeared as the greater majority of institutions chose to charge the full amount. Richard Sykes, Rector of Imperial College, has said that he believes,

"... the big mistake was the £3,000 because it didn't create a market. Everybody charges £3,000. I insisted on £5,000 because it would have created a market: some would have charged nothing, some would have charged £1,000, some would have charged £5,000."¹⁹

9.3 It is impossible to know for certain whether or not he is correct in this assertion (though NUS rather doubts any institution would have provided their courses for free) but it might be reasonably expected that an increase in the cap would result in a greater variation in fee levels.

9.4 Such a situation would, we believe, have several detrimental consequences for students and for the sector as a whole.

9.5 If the cap is lifted, those institutions already rich would get richer as they could charge higher amounts and still expect to attract students. This has already happened to a very small degree, with a handful of the newest universities having charged slightly less than the full £3,000 perhaps in anticipation of a drop in applications had they not.

9.6 Bursaries provide a further illustration of this principle. Many richer institutions offer a relatively small number of large, high profile bursaries, in contrast to those poorer institutions with higher numbers of widening participation students who provide a greater quantity of smaller bursaries, and in many cases receive much lower incomes from fees as a consequence.

9.7 Marketisation means that the financial divide between the poorest institutions and the richest will only increase, which will damage students, the sector and wider society.

9.8 There are also other difficulties that arise from the introduction of a market. In pushing for higher fees, institutions may have opened a Pandora's box. Students who pay more will expect more from their institutions. This is in some respects to be welcomed: too many institutions take their students for granted. However, the increase in consumerism will be detrimental to the relationship between institution and student and result in a more litigious environment where institutions will be spending large sums defending themselves against students who believe the quality of their education does not match the price they have paid.

9.9 This in some ways highlights the fundamental problem of introducing such a market to higher education. HE is unlike purchasing a car or a washing machine, as the return on the investment is rather more abstract than a material possession. It is very difficult to define what quality in HE means or how it can be measured,²⁰ and therefore is very difficult for a student to know precisely whether their institution is providing an education worth £1,000 or £10,000—but this is the choice that proponents of fees would ask them to make.

¹⁷ Graduates in the workplace—does a degree add value?, CIPD, 2006.

¹⁸ The social and economic impact of student debt, Council of Australian Postgraduate Associations, 2003.

¹⁹ Reform, 2006—www.reform.co.uk/filestore/pdf/Research%20Qulaity%20-%20Sir%20Richard%20Sykes.pdf

²⁰ Brown, "Information about quality", Higher Education Digest, 2006.

9.10 In an attempt to reduce some of this risk, institutions have begun to introduce student contracts, placing many responsibilities on students whilst usually avoiding stipulating an equal number of responsibilities on the part of the institution.²¹ This is neither fair nor in the interest of fostering trust between student and institution.

9.11 In any case, poorer students cannot make those choices freely. For example, the more expensive a course the more likely a poorer student will choose to stay in the parental home to save money. This inevitably reduces range of courses they can undertake, especially the more rural their situation. In 1995–96, before fixed tuition fees were first introduced, 12% of full-time students lived in the parental home during term. In 2004–05 this rose to 20% of students.²² Whilst the relative merits of living at or away from home are not for debate here, it should not be the case that the choice is made on financial grounds.

9.12 There are other potential problems for students if fees are raised. Richer institutions that wish to charge exorbitant fees justify criticisms about the impact on access by arguing that such fees would allow them to provide higher bursaries to poorer students. However, this could disenfranchise those students: as soon as they become reliant on the largesse of their institution to pay their fees and ensure their access, it becomes more difficult for students to raise complaints about quality or service.

10. Impact on part-time students

10.1 The situation for part-time students is in some ways a lesson to those who would apply greater variability to full-time tuition fees. Part-time fees are unregulated, and though limited grant funding is available this is often inadequate to meet the level of fee charged. The Government has also recently increased the level of grant funding available to enable universities to charge more.

10.2 Raising the level to which full-time fees can be charged would only serve to increase pressure on parttime fees to be raised to match, and unless grant funding follows this will place part-time study further beyond some of the students for whom part-time study is the only viable option.

10.3 Many part-time students also suffer from the lack of adequate childcare support, and higher fees would be a further barrier to their study.

11. Conclusion

11.1 Higher variable fees would be bad for students, for higher education and ultimately for society in general.

11.2 The poorest students, when they are not deterred from higher education in the first place by the prospect of debt, are more likely to have to work during term time, often for longer hours than is advisable. They do this to make ends meet and to reduce their debt levels, but risk jeopardising their chances of a receiving a good degree mark.

11.3 Rising debt levels across all groups of students mean graduates save for pensions less, start families later and are less able to get onto the housing ladder. Consequently, the demographic problems of an ageing population are made worse, to the detriment of all citizens, and we risk making the young of today resentful of the comparatively wealthy older generations.

11.4 Variable fees mean that poorer students will choose subjects and institutions based on cost rather than suitability, whereas richer students can make that choice freely.

11.5 Increasing fees for full-time students will have an inflationary impact on part-time fees, with the worst impact on the widening participation groups who most benefit from such study.

11.6 NUS wants a free, fair and funded higher education system. This will mean more money is required, especially if we are to match international competitors; the United States of America spends 2.4% of its GDP on higher education, whilst Britain spends just 1.1%, and the OECD average is 1.4%.23 But individual students simply cannot meet this gap in funding and it is unimaginative and unsustainable to expect that they should.

11.7 Public money is of course limited. The debate is often phrased in terms of Government having to make a choice between greater funding for Higher Education and greater funding for early years education. NUS rejects that such a choice has to be made: what Government should be doing is making a choice between greater funding of education and other areas, or in raising taxes on those who can afford to pay them.

January 2007

²¹ "Students told: turn up or face expulsion", Guardian, September 2006.

²² Ramsden, Patterns of higher education institutions in the UK: sixth report, UUK, 2006.

Witnesses: Ms Gemma Tumelty, President, and Mr Wes Streeting, Vice President (Education), National Union of Students, Professor Michael Arthur, Vice Chancellor, University of Leeds, and Chair of the National Student Survey Steering Group, and Ms Tabitha Aldrich-Smith, Corporate Affairs Director, UNITE, gave evidence.

O122 Chairman: The Committee welcomes the witnesses to our inquiry. Some of them have been before the Committee before and others are here for the first time. This is not a Committee that tries to be unpleasant to witnesses; it seeks to extract information from them and it always does it in the nicest possible way. This is a very important inquiry into higher education. If you remember, 10 years ago at the publication of the Dearing report which had all-party support Lord Dearing painted a 20-year scenario and said that after 10 years he wanted a thorough inquiry to see how it was going. We have not heard that the DfES or anybody else is doing that, so we are undertaking it. This is a thoroughgoing, across-the-piece inquiry. We are now writing up our views on Bologna and getting on with the main part of the inquiry. There is no better way to start than with student satisfaction and experience, and that is what we want to get from you this morning. Perhaps I may ask whether one from each side would like to make a two-minute introduction; otherwise, we can go straight to questions.

Ms Tumelty: Thank you for inviting us to be part of the panel. Obviously, this is something that matters greatly to our present and future members. When talking about student experience one tries to look at it in terms of expenditure. That is not just about money, which I am sure we will come to shortly, but about time. The expenditure of money and time encompasses quite a lot of it. In our opinion, what it really boils down to is that there is not really a homogeneous or single type of student experience and we need to break it down a little. It depends on numerous factors: the reason for entering higher education-what you want to get out of it-who you are, your background and whether entering higher education is a traditional thing or a first experience. As you have seen from the National Student Survey results, the higher education institution that one enters and the type of qualification, whether it is a foundation degree, access course or medical degree and so on, impact on the student experience. It also depends on where one lives, which is a matter we would like to deal with later, and the accommodation costs, whether one goes to the private rented sector, private hall sector, halls of residence or chooses to live at home. That may have an impact under the new funding regime. We would like to move away from the idea of students as customers and see them as co-producers of their education. That is a huge part of the student experience which inputs into academic representation and student representation and means the student taking an active partnership role with the institution or student union in what the educational environment is like, which is quite empowering. Obviously, the student experience needs to look at all aspects of student life: before one applies to university, the academic experience whilst there, teaching hours, contact time, quality of teaching, the pastoral support that is received, any extracurricular activities in which the student takes part, which are hugely beneficial, accommodation and health, graduation and beyond. One also needs to look at student experience with the benefit of hindsight. In summary, we want to see a movement towards an experience which does not depend on who you are and where you go.

Professor Arthur: I have submitted a written report² and will not repeat what is in it. From my perspective, the National Student Survey has been a very significant addition to the sector. I think it has been pretty successful considering how large and complex the project is. In particular, I believe it is the first time that the students of the nation have had a collective national voice. When the results come out each time it is very important for each institution to take the results and be seen to be responding to them. There is evidence of significant enhancement of education as a consequence of the results of the survey. That is particularly pleasing because it was designed to act as an opportunity for prospective students to see what other students on courses in universities were thinking of those courses, but because it is public, relates to a single point and is national there is good evidence that institutions have been responding to the findings of the survey.

Ms Aldrich-Smith: I noted that at the beginning the Chairman referred to "each side". As a representative of UNITE, a student accommodation provider, rather than having "sides" in the sense of students and universities—

Q123 Chairman: I meant to refer to sides of the room. It was not an ideological observation.

Ms Aldrich-Smith: That is good, because I want to advocate the opening up of the higher education experience to business and the community as well. We believe that the higher education experience is about the academic experience. It is a social experience and independent living away from home is absolutely part of the whole transforming experience. When one is living away from home one is also working. Forty per cent of students work part-time during term time. One is living in a new community. 37% of graduates indicate a preference to stay on in that community when they finish their studies. I believe that the higher education experience needs to be broadened to encompass those other areas, including businesses like ours which are committed to supporting the higher education sector. As for the debate about students as customers, we see them in that light because they are certainly our customers. Whether universities see that differently is another matter, but they are consumers of the education experience and we must think about them in that way, too.

Q124 Chairman: I should like to open the questioning by asking Professor Arthur about the shortcomings of the survey. I looked through it

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again last night and noted that it did not cover all universities. It is a bit patchy. We know that there are over 100 universities and some are not there. I declare an interest as governor of the London School of Economics. I was intrigued to see that the LSE is not there. In addition, I was not quite sure whether this covered all students or only some.

Professor Arthur: It is a survey of undergraduate students in their final year, so it does not cover postgraduate students at this point. To cover the postgraduate student experience would require a very different survey. It has been set up to cover the undergraduate student experience. The shortcomings are fairly obvious and they are the ones you mention. In order to report in the National Student Survey the current request is that 50% of students on any one course should respond; it should be at least 20 students. The reasons for those thresholds relate to statistical advice when the survey was first set up about three years ago. I would describe that as a platinum standard of statistical validity, and inevitably a few institutions drop below that threshold. You are quite right that there are three institutions where the student unions have actively boycotted the national survey: the Universities of Oxford, Cambridge and Warwick. We have been working hard to try to persuade them to participate, and I think we have had some success this year-the proof of the pudding will be in the eating-with the University of Warwick. I would now describe the University of Oxford as being at least neutral and only the University of Cambridge has boycotted the survey this year. I believe it is a great shame that they have done that. This is an opportunity for those students to say nationally and in public what they want to say about their institution. Several issues concerned them originally: first, the invasiveness, if you like, of the survey on student time. We have listened to that issue and cut back the number of contacts we make with each student deliberately to make it more studentfriendly. They were also concerned about reporting outcomes versus the level of expectation. They had the notion that the latter would be much higher at Oxford or Cambridge than at other universities. I believe that that is complete nonsense. The expectation of all students going to all universities is of a high standard. We have been working away at that. I am a little concerned about widening participation issues for those universities if they have students that come from low income families and go onto the website and cannot get information. I imagine that that would put them off. I have been using that line with students and vice chancellors. I have spoken to all three vice chancellors of those universities and am pleased to say that they are now much more supportive of the survey than they were originally. As to other limitations of the survey, certainly the first incarnation of the website was not good enough. We have recently recommissioned a new provider and the new website will be very closely linked to UCAS. The new website will be run by a combination of UCAS and Hotcourses so that students who go in through UCAS, select

universities, look at entry criteria and are able to link up to the courses through the UCAS site can quickly go to the new website, which will probably change its name, and see what students think of the courses that they are looking at. That will be a great improvement. It is very much a response to the review undertaken this year by the quality assurance framework review group.

Q125 Chairman: Mr Streeting, what are your views on the fact that some universities do not participate? Is this a conspiracy between the leadership and student unions locally? Do you think that all universities ought to co-operate?

Mr Streeting: I am glad you have asked that question. I think it is important to highlight that in all three cases, and certainly in the case of the University of Cambridge, where I was present at the student union in the first year of the rolling National Student Survey, there was-who would have thought it?---an enormous degree of complicity between institutions and student unions in terms of opposition. Student unions were certainly prodded and pushed towards a state of active opposition, and it is important that that institutional perspective is also brought to light. It certainly was not the case that the student union avoided participating in or boycotted the survey in direct opposition to their institution. There was enormous complicity and it was deeply unfortunate. Professor Arthur has touched on an important point, which I made early in the academic year when the results were released, that in the case of Oxbridge they have particular issues to deal with in terms of the ongoing myths to do with the admissions system-the notion of the old school tie and secret handshakes. They will do themselves no favours when in future applicants click onto the UCAS website and find NSS student satisfaction data for almost every HEI in the country except Oxford and Cambridge. I believe that that sends a very worrying signal. NUS very much supports the National Student Survey and it was something for which we campaigned over a number of years. When the survey first arrived we still supported the concept. We were less sure about supporting this particular National Student Survey, but many of the problems in terms of the intrusive nature of the phone call and other methodological dimensions of our concerns have been dealt with. To elaborate some ongoing issues that need to be dealt with as we look to reviewing the NSS after three years, one matter the survey does not do is report the results of joint honours students in a meaningful way. Currently, there is very little distinction or opportunities to offer students on joint honours courses. For example, if I was reading history and politics at the University of Leeds I might be very happy with the politics component of the course but not necessarily the history part of it. I cast no aspersions on those particular departments; it is just an example. It does not help when reviewing the data to drill down to find out where the problems are and how the experience can be enhanced. Another area of outstanding concern that sticks out like a sore thumb is not the methodology but the level of student dissatisfaction in the areas of assessment and feedback. That is an area of concern which institutions in terms of the policy agenda locally as well as the sector nationally really need to address.

Q126 Chairman: We published the pretty wideranging nature of this inquiry into higher education, but Ms Tumelty in her introduction and Mr Streeter just now have mentioned some interesting broader concerns. There is almost an obsession about student finance and fees in the written submissions. It is extraordinary that for a union that is supposed to represent students right across the piece the only thing it wants to give evidence to us about in its written submission is fees.

Ms Tumelty: The remit of the inquiry of the Committee is very far-reaching. There are many areas that we would want to contribute to if we did not have such finite research resources. To be fair, the issue of fees and funding is consistently prioritised by our membership through the democratic processes. I believe that we submitted something on Bologna as well.

Q127 Chairman: Yes. We asked for that separately. *Ms Tumelty:* We do an extensive amount of work on this and that is why we are pleased to have this opportunity to come now. We will be able to follow that up by backing up all the research we have done on it, for example through the accommodation cost survey, some bullying research done recently, work on health and other matters that we do in the National Student Survey.

Mr Streeting: The context is really important here. It would be unfortunate to suggest that the NUS is the only organisation in the sector talking about fees and funding.

Q128 Chairman: I am just saying that your evidence concentrated only on that to the exclusion of all the other areas in which your students might be interested.

Mr Streeting: If I am honest, I believe we were surprised to see fees and funding included in the inquiry at this stage, bearing in mind there is a review in 2009. It is absolutely right that we monitor evidence across that period and see how the system beds in. Without meaning to be too critical of the inquiry itself, at the beginning you made a comparison with Dearing. We and many other voices in the sector are concerned about the expansive nature of the review and short timescale in which to respond. Look at the volume of work and evidence that went into Dearing and all the staff support that went into it. It is almost as if the Select Committee set out to produce a "shearing" report but with a smaller budget and on a shorter timescale. I believe that it is totally appropriate for the NUS to focus on the big ticket issues such as fees and funding.

Q129 Chairman: I quite like the reference to "shearing report", but the fact of the matter is that the Select Committee does things differently. It conducts its inquiries harder and faster, and it has a great deal of experience in doing them. If before we finish this inquiry you want to add anything to the evidence we shall welcome it. You have been around long enough to know that that is not a hard and fast time limit.

Ms Tumelty: We shall definitely follow up the points raised today, put it all together and submit it to the Committee.

Q130 Chairman: But you must have been encouraged by the way student numbers have held up in England over the past decade.

Ms Tumelty: The NUS has always campaigned for the expansion and widening participation in higher education, long before it became politically expedient to do so by the university sector. Last week we welcomed the increase in applications. What we did not have at the time—I presume that they are now up on the UCAS website as of Friday was the breakdown of the socio-economic groups, ethnicity, gender, class and subjects. Obviously, we have been preparing for this hearing. We shall look very closely at those figures and at where the impact, if any, will be. Essentially, all of the issues to do with fees, funding and sustainability of the sector are not just to do with admissions; it is concerned with a number of factors.

Ms Aldrich-Smith: As to the broader issues, in a normal distribution curve UNITE tends to look at the tails to find the trends and what may be different. Certainly, within the student experience the service that one receives from university welfare services, availability of paid employment and careers services are some of the matters that students in the survey appear to be slightly more dissatisfied about in general. Overall, satisfaction is really high, but thinking about how we may be able to improve those matters as part of the student experience could be areas on which to focus, as well as the big ticket issues.

Q131 Mr Chaytor: Mr Streeter, can you say a bit more about the complicity between the NUS and individual institutions in blocking participation in the survey?

Mr Streeting: It was certainly not NUS complicity. I will hold up my hands and be honest. That was a decision we took during my year in office as president of the student union.

Q132 Mr Chaytor: To clarify it, you advised your members at Cambridge not to participate? *Mr Streeting:* Our student union did so, yes.

Q133 Mr Chaytor: You now regret that and would not advise any other student union in any other university to do that?

Mr Streeting: Absolutely—and I am doing quite the opposite. When the survey first began we had a number of concerns about the methodology. To the

full credit of HEFCE and Ipsos MORI, the whole way that the survey is approached has been constantly adapted and changed wherever possible without affecting the validity of the survey and ability to compare data over a number of years. Significant change has occurred. I am far more comfortable with the NSS as it stands now and am incredibly positive about the discussions that are taking place in the steering group about the forthcoming review and where we might go in future with an additional bank of questions. The survey has adapted and evolved. It is unfortunate that institutions have chosen not to take part. As far as concerned my university, there was a concern about the time implications and how useful the data would be, but one of the best things to come out of the NSS is not just the usefulness of the data to potential applicants but the fact it has acted as a catalyst to drive up standards in quality at an institutional level. To the credit of many HEIs they have seen the results and areas of concern, drilled down into the data and worked with the students union. Where that has happened we have had the most productive results in all sorts of areas, particularly in assessment and feedback. I hope that that is reflected in the future, but it has been a driver for improvement.

Q134 Mr Chaytor: My next question to Professor Arthur is: are there specific examples where individual universities have taken on board the results of the survey and started to change their practices? Can one or two examples be quoted?

Professor Arthur: Certainly. I am sure that we can also let you have written evidence in the form of a survey taken by HEFCE last year. Perhaps I may start with my own university. We have improved our induction process for students. We have started a new peer mentoring scheme where existing students help freshers. We have started a new and much more detailed campus-wide student survey asking questions of all three years so we have local information and can improve things before we get to the final year. There is a major review under way of our internal learning and teaching processes. To pick another example, the University of East Anglia comes to mind. They have increased the amount of anonymous marking that has been going on. It is very commonplace for universities to set up a specific action plan related to the results of both the 2005 and 2006 surveys. The results of both surveys are very similar, which is hardly surprising. We had the results of the 2005 survey only late in the year and the next survey starts before we can even change anything. I am expecting most of the improvements to emerge from this year onwards. I would encourage people to think in a five-year, not yearby-year, timeframe. A number of the things that universities are trying to change will take some time. I have here a list of about 10 universities which responded, and I shall be very happy to submit them to the Committee.

Q135 Mr Chaytor: But your steering group has not actively recommended that there should be an action plan in response to the survey?

Professor Arthur: No. The steering group is concerned largely with making the survey run and trying to refine it. It does not really have the power to do that. I think it is inevitable. I know that QAA will do this during an institutional review. It will have access to the results of the National Student Survey: they are in the public domain. I presume that it can also ask for access to the local results that are available only through the dissemination website. I anticipate that QAA will certainly be using the results of student surveys in their overall assessment of the quality of higher education institutions. If I was a member of the QAA I think I would be asking harder questions of the three universities mentioned just now-Oxford, Cambridge and Warwickwhere the data is not in the public domain. I believe that there will be a consequence for those institutions that do not actively participate. That is another matter that hopefully will persuade them they should do so. I am delighted to hear that Mr Streeter is repentant about his earlier activities.

O136 Mr Chaytor: Ms Tumelty, in your opening remarks you referred to students as customers. How do you explain that the only university with an overall satisfaction score of 4.5 is one where all the students are customers, that is, the Open University? Ms Tumelty: In that case some of our feedback is concerned mainly with the style of learning and flexibility because obviously it is done part-time. The quality of the teaching materials is obviously one of the key points that students have made. Other factors are student support and academic and nonacademic feedback, and also whether the provision is flexible enough to fit in with their lives, which is another key issue. I do not quite understand what you mean by your question because obviously all of the students are customers.

Q137 Mr Chaytor: Do you not see a relationship between these results and the fact that individuals who follow an OU degree are contributing financially from their own resources to that extent? They are putting a lot of their own investment into that degree. Does that have any relationship to the satisfaction of the student?

Ms Tumelty: I think that financially all students now contribute significantly to their degrees, further education course or postgraduate courses, but it would be really sad if we lost the notion of learning for knowledge and learning sake as much as for future earnings, experience and everything else. If we go down the route of talking solely of customers there is a very different relationship with the institution. The relationship is not necessarily based on, "You give us this and we give you that." We would like to see them much more as students who are co-producers of their education and their education experience.

Q138 Stephen Williams: Professor Arthur, the National Student Survey has 21 questions grouped around different themes such as feedback, teaching and learning and personal development. The outstanding statistic from the biggest grouping—assessment and feedback—is that 40% of students are unhappy with what they get, which must be the largest finding in that survey. That must send shockwaves through the higher education world.

Professor Arthur: It did not send shockwaves to the extent you might imagine. We already knew that from subject reviews. This is always the area that causes the greatest issue. It is very difficult to know precisely what is going on, but I suppose there is an expectation when students come from school of a very high level of feedback through the assessment process. Compared with the national curriculum where there is very regular feedback and a lot of help during feedback to get through to the next stage, going to university is rather different, so there is an adjustment to a different and much more open learning scheme. This finding just repeated what has already been found in the subject review. Having said that, one of the benefits of the national survey is that it really has lifted out that issue and shown how prominent it is, because in essence it was the lowest scoring sector of the National Student Survey in every single institution in the country. The prominence of the finding is now very apparent. This has led to a number of us looking at what we do in terms of assessment and feedback within our institutions and all sorts of new ideas have cropped up. If I think of my own institution, one school in particular has started a complete feedback week; it is a kind of open door policy for all the students in that school to come and get whatever feedback they feel they have lacked in the past. The view of HEFCE is that probably quite a lot more work needs to be done on it, and it has asked the Higher Education Academy to work particularly with HEFCE and institutions to try to improve assessment and feedback. I believe that if that starts to happen up and down the land it will be a tremendous outcome.

Q139 Stephen Williams: In terms of how the questions are analysed, as I understand it the 21 questions are given equal weighting when the report is collated, yet research done by the University of Bristol, an excellent institution, found that assessment and feedback in students' own minds was not terribly important. Although it was the worst finding in the survey, in terms of how students ranked its importance it did not feature that high, but because all the questions have equal weighting it distorts the results. Is that something which HEFCE will look at as well?

Professor Arthur: I believe that is a valid point. Any survey like this will be a balance between the simplicity of the survey and, therefore, the willingness of students to complete it—the survey takes between five and six minutes to complete—versus the complexity and level of detail that one might get back from the questions asked. We thought it particularly important to keep the

questions identical for the first few cycles of the survey. These questions are jealously guarded, and we are very reluctant to add further ones unless we can be assured they will be of extra value, but over time the questions will be refined. As to weighting different outcomes, of course that would be possible. I think we would need to come back to what the survey was originally intended for. It was originally intended to inform prospective students about the quality of the course they were thinking of taking, or the quality of the institution that they were thinking of going to. Therefore, as the student is looking and comparing, say, French at Leeds with French at Manchester with French at Oxford, Cambridge or whatever, and pulling up the data there is at least a comparison of like with like across the various institutions that he or she is thinking of attending. In terms of the original intention of the survey, I think this is a reasonably valid methodology. By the way, what it was never intended to do was create a league table of the quality of institutions. If one wants to think of creating a league table one might wish to start weighting many different factors, but that was never the intention of the National Student Survey. It was intended to inform students, and it has had the wonderful secondary effect of creating greater enhancement of the learning, teaching and other aspects of student experience.

Q140 Stephen Williams: Ms Aldrich-Smith, obviously UNITE's survey is a different one with different respondents. Did your findings bear out those of the National Union of Students?

Ms Aldrich-Smith: Our survey has been quite consistent over the seven years we have done it in terms of how satisfied students are overall in during the 1990s. With the help of TNS we have had a look at other service sectors in comparison with universities overall. Universities are in the top 10% of satisfaction when one compares it with other service sectors generally.

Q141 Chairman: What other service sectors do you have in mind?

Ms Aldrich-Smith: One thinks of hotels, for example.

Q142 Helen Jones: You do not spend two years in a hotel.

Ms Aldrich-Smith: Exactly. One is just thinking of the service sector in terms of business services and so on. One cannot compare it directly, but I believe it shows that a good level of customer satisfaction is being derived.

Q143 Paul Holmes: Professor Arthur, if I may just refer to one health warning to be applied to the survey that you carried out, it is all to do with third-year students who are nearing the end of the course. An 80% overall level of satisfaction is very good, but how does one allow for all the ones who drop out in the first and second years and who by definition are not satisfied with the course but do not get to fill in your survey?

Professor Arthur: The short answer is that we are not sampling those students and have no easy way of so doing. The survey works off the HEFCE statistics submission, so it is really a survey of those completing their courses. The point is well taken that we will not be surveying those students who have dropped out.

Q144 Paul Holmes: Do you know approximately the rate of drop-out in the first two years?

Professor Arthur: I can tell you what it is for the University of Leeds: it is about 6%. Most British universities have very high completion rates in comparison with overseas universities, in particular America where it would be considered an excellent performance if 70% of students completed their course. We have a very high completion rate, but you are right that we will not be sampling that group. When the survey was first devised there was a notion that we should sample people six months after leaving, but getting hold of people and good response rates is an issue. Therefore, it is done between January and March in the final year, so the survey is active at the moment.

Q145 Paul Holmes: But is it fair to say that people should not simply say 80% are satisfied because they must allow for the ones who have previously left?

Professor Arthur: The 80% has a health warning. That represents 80% of people scoring four and five and does not include the ones scoring three. Only about 10% score at one and two. Therefore, it is at least 90% who are pretty satisfied.

Ms Tumelty: I should also like to give a health warning about the UNITE survey as well. When it looks at satisfaction there is an issue about methodology, in that the survey is done in the first month of the student's best year at university. If they are not highly satisfied and happy and excited to be there with loads of money and have not really started their lectures yet I would be really worried about those first experiences. That is our concern with the methodology. I do not think that it would necessarily pan out. It would be really useful if the study was done longitudinally to see the changes once the teaching and learning had taken place and money issues and work had started to kick in.

Q146 Helen Jones: Ms Tumelty, there seems to be a contradiction between what you are telling us now and the written evidence you provided to us. What the NUS says in its written evidence is that it has chosen to focus upon those questions which are most pertinent to the student's experience, but what it actually focuses on is fees. You are now sitting here talking to us about lots of other aspects of the student experience. Do you not think those are equally important, and why do they not figure in your written evidence?

Ms Tumelty: Obviously, they are as important. Our membership does prioritise fees and funding, but we are pleased to be here today and to be given the opportunity to speak. We shall follow it up with a written report.

Q147 Helen Jones: Perhaps I may ask you a question on your methodology. Is it your membership or activists that prioritise fees and funding? What surveys have you done of your membership as a whole to see what the priorities are for them?

Ms Tumelty: Obviously, we are a democratic organisation and students get involved through their student unions and then through their national union. We are looking at how to get a broader student involvement. If one looks at the democracy within individual student unions the majority of student unions through referendums and votes within their own institutions have taken positions on fees and funding.

Q148 Helen Jones: What are the participation rates in those cases?

Ms Tumelty: It varies dramatically.

Mr Streeting: I imagine that participation rates are somewhat higher than you suggest with the line of questioning you adopt.

Q149 Helen Jones: Can you leave us to adopt the line of questioning? Perhaps you can just give us the answers, because that is the way it usually works.

Mr Streeting: It is really important to bear in mind as we look forward to the 2009 review that the system of funding and culture that that brings and the direction of travel that is applied to the sector will have an impact on all of those aspects of the student's experience. All of those things will be linked in terms of both demand and expectations, what institutions are able to provide and on which budget and where the funding is coming from, as well as all kinds of aspects to do with the market, albeit limited ones. If one takes student support, for example, and looks at the huge market in bursaries and the impact that that has on both take-up rates and choices, not just in terms of institutions but what students choose to do and how they spend their time and money when at university, I would say that funding is central to the student experience.

Q150 Helen Jones: One of the matters on which you have not given us any evidence—perhaps you can do so now—is where that money is going. Very little is said in your written submission about things like teaching, contact hours and resources. Has the NUS any evidence to give us on the students' view on that matter and on where they think the extra money from fees ought to go?

Ms Tumelty: Essentially, in terms of expenditure of that money we have recently carried out an accommodation cost survey with Unipoll, which we can certainly provide to the Committee. The vast majority of the money that students get particularly through student loans will go on those accommodation costs in the first year where rents in private halls of residence are significantly higher than university accommodation. Between 2003–04 and 2006–07 there has been on average a price hike of 23% in private halls of residence. That is a significant figure. Therefore, that will account for about three-quarters of the student loan.

Ms Aldrich-Smith: That is not the position according to us. It is a very simplified overall picture. If we go back to student satisfaction, we have seven years of longitudinal data in the student experience report. We also measure first, second, third and postgraduates. I can tell you that 53% of first-year students versus 45% of third-year students are very satisfied. We have quite a lot of data which we can submit in written evidence. Going back to the accommodation cost survey, within our student experience report one of the corporate providerswe are not just talking here about UNITE-is significantly lower than the university halls of residence. The difference is £10. We find that it is very different in different markets. Rent is really driven by different markets. One does not want to look at an overall cost. Although over the past five or 10 years we have driven this new choice for students, the market out there is very competitive. We find that both the private and university sectors are increasing the standards of their accommodation to match and keep up with our standards and also generally to improve it, because that is what students want. To improve standards they must spend money on the accommodation which translates to rents. Overall, rents are quite competitive. Corporate provision is an average of £70 a week versus a university hall of residence cost of £89 a week versus private rented accommodation of £77 a week.

Q151 Helen Jones: I do not really want to get into a long debate on student accommodation costs. I am asking whether the NUS has any evidence from its membership of student views on where the extra money from fees should be spent. You mentioned accommodation, but all the evidence given to us so far tends to focus on full-time students following what I call the traditional model: they go to university at 18 and come out at 21 or 22. What about the experiences of part-time and older students for whom accommodation may not be an issue and who have very different needs? Can you tell us anything about their experiences and what they would like to see?

Ms Tumelty: The varying needs of part-time students are often overlooked, and sometimes potentially by the student movement as well because of the levels of participation. I welcome the fact that you have raised the point. Often the most vocal concerns expressed by part-time students are to do with pastoral support, access to child care and other much-needed facilities. It is really to do with small things. For example, if you arrive in the evening is there anywhere to park your car? Is the path to your course or library lit? What are the library opening hours? Do student services have different opening hours to allow part-time students to use them? Do they open between six and eight? That is not often not the case. Often, some of the facilities that are used by the traditional student to whom you refer are not there to be utilised by the part-time students. **Q152 Helen Jones:** I used the word "traditional" as well, but the student body is changing radically, is it not? Therefore, when looking at the student experience do you agree that we need to look at very different types of experience? Having done both full-time and part-time study with a small child I can tell you that it is a very different experience and a different set of needs.

Ms Tumelty: As I said in my opening, it is certainly not homogenous. We have to look at the needs and expectations of international students, part-time students, mature students and students of faith and of none. We are starting to pull together a lot of those experiences using a vast range of different local institutional data as well as national data.

Q153 Helen Jones: If you have any information we would be grateful to receive it. *Ms Tumelty:* Absolutely.

Q154 Fiona Mactaggart: The first question we asked—I do not think we have yet got an answer— is what students wanted from universities. Can each of you respond to that question and tell me how you know the answer that you give me?

Ms Aldrich-Smith: Are international students covered by your remit?

Q155 Fiona Mactaggart: They are covered explicitly by the terms of reference which the Committee sent out when asking for evidence. What do students want from universities? What should the student experience involve including that of international students?

Ms Aldrich-Smith: I should like the Committee to know that we also did an international student experience with UCOSA last year, which I can supply if that is needed. What do students want? I believe that they want a quality academic experience and a social experience. What they are looking for are new experiences and a chance to live independently and try the experience of living away from home, managing their money and learning to live in a new community. I think that in particular they are learning new experiences in an environment which is the next step on. That is what our research shows. In particular, it is to do with independence and the desire to be treated as an adult.

Professor Arthur: We survey our students as they come in and ask them why they come to the University of Leeds. The top issues are the academic reputation of the institution and learning from high-quality and world-class academics. They are looking for occupations at the end of their time at university which are fulfilling. They are not usually looking for highly paid occupations but jobs that are exciting and fulfilling. They are also looking for personal development.

Mr Streeting: One of the matters that we have been exploring with the 94 Group, which as a group of institutions has a particularly proactive focus on the student experience, is how the ethos that has been adopted by groups of institutions as the sector expands is very different. Well-informed students do

the background reading and think about the institution and courses that they want to go to. Not only does that aid retention; students tend to be far more happy with the course. But when they apply to different institutions now students want different things. That is why we are seeing more part-time students. The way that higher education is delivered both in terms of degree products and different types of institution is changing, because student expectations are different. One of the things that we need to do is tie together how we take the cultures and different degree products that institutions are developing either individually or as groups and collectives, like CMU, the Russell Group and 94 Group, and think about how we provide accurate information, advice and guidance to students so they can make informed decisions. I am not entirely convinced that with all the information we provide to applicants-it is getting better all the time-it is necessarily broken down for students and explained what they can expect from, say, a 94 Group institution that is different from, say, a Russell Group institution. One thing that students do expect-more work needs to be done on this-is to think about students paying more and therefore expecting more, whether that is possible within the constraints of higher education funding and what improvements have been made as a result of additional income for HEIs and how that develops over time. That is something on which we shall certainly be focusing in the run-up to the 2009 review in terms of our research programme.

Ms Tumelty: The sort of things I can talk about fall within stereotypical roles. To reinforce what Ms Aldrich-Smith and Professor Arthur have said, obviously academic experience is important. Teaching time contact hours is something that we hear about increasingly on the ground. That reinforces a recent report done by the University and College Union. The more contact time there is the better the teaching quality and the greater the opportunity to explore those ideas, but obviously one needs safe, secure and affordable accommodation, pastoral support, access to extracurricular activities, employability and career development, volunteering in the community and good local relationships with local communities which can sometimes harm that experience when there are clashes between local communities and students. One is talking about access to good health services, pastoral care and student support.

Q156 Fiona Mactaggart: You are talking about different products. One of the striking features of the survey is that the university which seems to come top in most categories is the University of Buckingham which actually sells the product; it charges students the full cost of its product. Would not that approach, therefore, end up producing this differentiated product more efficiently? I am not necessarily advocating it, but it sounds to me as though it fits what you argue for. Would it not work better than the present arrangement?

Mr Streeting: Absolutely not. I certainly do not believe in privatising our institutions. Institutional autonomy is often used too much as an excuse not to do things which are just and valid. Without tied funding through the state and that steer of public funding we would not have seen the widening participation of gender being pursued so actively and rigorously, where that is taking place, by the higher education sector. That is one pertinent, key example of how government policy can impact on the sector and produce positive change. I certainly would not advocate the University of Buckingham model for the rest of UK higher education. I think there is a vital public link there. This may be a theme to which we will return in later question, but too often institutional autonomy is raised as a barrier and excuse not to do things that need doing.

Q157 Mr Marsden: Professor Arthur, very much on the back of what my colleague Helen Jones said about the experience of part-time and older students and the growth in the sector, to what extent do you feel that at the moment the survey adequately reflects the concerns of part-time and older students? We do not have a statistical breakdown of them by category—at least not in what has been submitted to us.

Professor Arthur: Not in what we have submitted, but we have that breakdown. All part-time students and all the older age groups of students, if they are undergraduates and in their final year, are surveyed. That data is available through Paula Surridge's analysis for both 2005 and, very shortly, 2006. I am afraid that I cannot remember the detail, but I am more than happy to provide written answers to those specific issues. From memory, nothing particularly striking stands out. I seem to remember that the older one is the more likely one is to be satisfied.

Q158 Mr Marsden: I am tempted to say that that is the triumph of hope over expectation. Perhaps I may press you a bit further. Clearly, as my colleague Helen Jones has said, the profile of the student body has changed and will change more significantly in that direction. Another aspect of the inquiry that has come up is the extent to which part-timers and older students can move in and out, ie issues of flexibility and portability. In the survey have you asked about those issues in terms of both existing courses in universities and when people perhaps need to take out a year and move on?

Professor Arthur: No, we have not asked about that issue in the current 22 questions. It would be possible to start to introduce those sorts of questions. We have an additional bank of questions this year but they are not compulsory: institutions can ask to have them added.

Q159 Mr Marsden: Do you think it would be useful to have such questions?

Professor Arthur: Yes, I do.

Q160 Mr Marsden: Ms Aldrich-Smith, you referred to the longitudinal nature of your surveys. What do your surveys tell you about satisfaction rates of older and part-time students? Are they getting better or worse or staying the same?

Ms Aldrich-Smith: Our survey does not cover parttime students. In terms of older students, we find that they are less satisfied than the younger first-year students. That has held quite constant over time. There have not been dramatic shifts in satisfaction over the seven years we have done the survey. In terms of first-year students, they tend to be more satisfied and that level declines as they go through the university experience.

Q161 Mr Marsden: Is there a particular reason why you do not look at part-time students at the moment?

Ms Aldrich-Smith: No, apart from funding.

Q162 Chairman: Presumably, they do not stay in your accommodation?

Ms Aldrich-Smith: No, and that is another factor.

Q163 Chairman: The same goes for people who stay at home and go to university, so you do not know about them?

Ms Aldrich-Smith: Yes. To be clear, this survey comprises 1,500 face-to-face interviews and online interviews of all students, so they are not just from UNITE accommodation. They come from 20 universities across the country, so I am not talking here of UNITE customers but about a representative sample, although it does not include part-time students.

Q164 Mr Marsden: Ms Tumelty, we have already discussed with you the focus of your written evidence as opposed to the broader issues that you have talked about today. Given that the student experience is more than just fees, although that is an important part of it, what are you doing in terms of either your activities or survey to ensure that students who live at home during their study period have as well rounded an experience as possible?

Ms Tumelty: This has always been one of our concerns, and we have talked to the DfES about home students having that student experience.

Q165 Mr Marsden: I am not asking you necessarily what the DfES should be doing; I am asking you what you should be doing.

Ms Tumelty: We have seen a couple of examples of really good practice in some of our student unions where specific representation for home students has been introduced to try to build a little more integration and movement between home students and social experience, for example by way of clubs and societies. Birmingham University Guild of Students is one example. It now has an elected home student officer to try to bridge that gap. There has been more home student participation in that

student union. That is something which we are looking at as a model of best practice that we would encourage other institutions to look at. Whether it is a staff member or an elected officer, it should be somebody.

Q166 Mr Marsden: Therefore, as a union you are committed to spreading that best practice and putting greater focus on it. I ask because, frankly, in the past when NUS has come before the Committee it has been quite critical of its lack of focus in that area. I am not talking about you personally but about previous years.

Ms Tumelty: Essentially, whilst there is plagiarism within academic establishments there is no such thing when it comes to really good student representation. We try to share best practice across the country. Where something works it tends to have a really good knock-on domino effect round the country as well. We shall be looking at that and taking it forward.

Q167 Jeff Ennis: Representing as I do a fairly deprived constituency in South Yorkshire, obviously I am interested in the Government's widening participation agenda. I am just wondering whether any of the witnesses have any evidence about the success or otherwise of the Aimhigher programme and its impact on the student experience.

Professor Arthur: I was not expecting the question and so do not have specific data, but my impression is that it has been a good thing and is beginning to be effective. For my own institution, the Widening Participation agenda data has remained unchanged following the recent introduction of fees, *et cetera*. We have seen almost no impact on WP at least in the first year.

Q168 Jeff Ennis: As part of the survey are you able to identify students who have participated in the Aimhigher programme?

Professor Arthur: I am not sure. Unless it is identified on the statistics we would not be able to do that.

Q169 Jeff Ennis: Is it something that you believe may need to be looked at in future so that the Government can analyse the success of the Aimhigher programme?

Professor Arthur: Certainly, it is something of which we have taken note.

Q170 Jeff Ennis: Does the NUS have any comment to make on that?

Mr Streeting: I certainly agree with that. One requirement is a proper review of the success of the initiative. Some things work better than others; some institutions have tried different things and have had different rates of success. Last week the UCAS figures were quoted by Bill Rammell in a comment in *The Guardian*. He noted the increase in students from lower socio-economic groups for this year, which is welcome, but one matter that

surprised me was the level of glee about it given the great ambition of the Government in the Widening Participation programme. We have always supported it. In the context of the cat-and-mouse game about fees, admission numbers and that side of the debate I would not want to see the Government lose its commitment and become complacent about rather smaller increases given its overall, overarching and welcome ambitions on wider participation.

Q171 Chairman: It must have been of interest to the NUS to see Wales, Northern Ireland and Scotland not doing as well as England.

Mr Streeting: It is interesting. There is an interesting Northern Ireland dimension as well. With the restoration of the Stormont Assembly hopefully, we will see what decisions the elected Members in that area take in the field of higher education funding given our views.

Q172 Paul Holmes: On the wider issue of the student experience, when I went to university in 1975—a long time ago—I was told not to work during term time to earn money and certainly not during vacations because that was for wider reading, but in your submission you point out that these days on average 40% of students work in term time and among working class students it is 55%, and they work longer hours. What effect does that have on the wider student experience, quality of degree, result and that sort of thing?

Ms Tumelty: That has been one of our key projects this year. We have found that there has been a 50% increase in students working over the past 10 years. Bill Rammell says that it is a good thing that students work, and we believe that getting that well-rounded experience where one takes on a bit of extra work is a good thing. On average students work 14 hours a week and one fifth of them work over 20 hours a week. Full-time students who undertake that amount of work believe that it has a detrimental impact on their studies. Obviously, there is lack of equality. If one is working 20 hours a week and sitting next to somebody in a lecture theatre who does not have to work there will be an impact. It is those students from lower socio-economic

backgrounds who have to work a bit more because they are not getting additional money from their parents.

Q173 Chairman: Is there data on that? *Ms Tumelty:* Yes.

Q174 Chairman: Are working-class students from poorer backgrounds forced to work or, as some may suggest, is it the case that all students want to spend more money clubbing and having a couple of pints? Ms Aldrich-Smith: 67% of students work to buy basic essentials, so in some way there is a need to work, but we have quite a big chapter on this. The Committee may want to review it. There are three main reasons why students say they work: to be able to continue studying, which is an important reason; to have a more enjoyable studying experience because they learn from their work; and to gain experience so it looks good on their CV. Students think about why they work and they manage it. They say that one of the things universities could do better is help students juggle their part-time work commitments with their university courses.

Ms Tumelty: We have done a report with the TUC called *All Work and Low Pay.* It is based on a comparison of official labour force service statistics over a 10-year period. We have that report and are quite happy to send it to the Committee. It reveals some interesting things. On the back of that we have been quite pro-active about trying to encourage students to become members of trade unions so that their rights are protected off work as well. They tend to work in the low-paid sector of retail hospitality with poor conditions where rights are not necessarily upheld all the time. We are also doing some proactive work in that area.

Chairman: I am sorry that we have been pushing you to answer briefly which seems scandalous given the quality of the evidence we have, for which we are very grateful. I bring this session to an end. This has been a very good session and on the way home it will make you think of all those things you should have told the Committee if you had had more time. Keep in touch. We want to make this an extremely good inquiry, whether or not it is called the "shearing" report.

Memorandum submitted by The Institute for Employment Studies (IES)

The Institute for Employment Studies is an independent, apolitical, international centre of research and consultancy in human resource issues. It works closely with employers in the manufacturing, service and public sectors, government departments, agencies, and professional and employee bodies. For over 35 years the Institute has been a focus of knowledge and practical experience in employment and training policy, the operation of labour markets and human resource planning and development. IES is a not-for-profit organisation which has over 60 multidisciplinary staff and international associates. IES expertise is available to all organisations through research, consultancy, publications and the Internet.

IES aims to help bring about sustainable improvements in employment policy and human resource management. IES achieves this by increasing the understanding and improving the practice of key decision makers in policy bodies and employing organisations.

1.1 The Institute for Employment Studies

Since it was established in 1969 the Institute has been a focus of knowledge and practical experience in employment and training policy, the operation of labour markets, and human resource planning and development. IES is a not-for-profit organisation that has over 60 multidisciplinary staff and international associates. IES expertise is available to all organisations through research, consultancy and publications.

Higher level skills are also an important element of our research in the area of higher education and the Institute has a long tradition of studies into the flows to, through, and from higher education; the higher education experience; and graduate and post-graduate labour market entry. In recent years we have conducted a range of regional studies into graduate labour markets throughout Britain.

Together these studies have enabled IES to gain a unique perspective of the changing nature of the graduate population, of their experiences at university, their expectations for the labour market and career outcomes.

1.2 THE FOCUS OF THE IES RESPONSE

The IES response on the House of Commons inquiry into HE will focus on five of the sub-themes identified under the heading of the "role of universities in the next five to ten years". These sub-themes are:

- Widening participation in higher education and its social consequences (section 2).
- What do students want from higher education? (and do they get it?) (section 3).
- Demand for graduates in a high-skilled economy (section 4).
- What do employers want from higher education? (section 4).

A selected bibliography is provided in section 5.

1.3 SUMMARY OF KEY POINTS

Our response is based upon a selection of research undertaken by IES over the last few years. The main points from our response, together with the relevant references, are summarised below.

1.3.1 Widening participation in higher education and its social consequences

1. Although higher education has expanded rapidly over the last two decades it has failed to encourage significant increases in representation by individuals from lower socio-economic groups (Connor *et al*, 2001a).

2. Decisions to enter higher education are usually made early, ie by Y11/S4. Key influences on these decisions are high exam expectations and parental/school expectations, usually related to social class (Connor *et al*, 1999).

3. Minority ethnic groups are more likely to participate in higher education than the white population but there is wide variation between ethnic groups (Connor *et al*, 2004). Also, there is a high level of clustering (eg around post–92 universities in London).

4. Different minority ethnic groups have different trajectories into higher education, eg in terms of A level success (*ibid*).

5. Ethnicity and participation needs to be considered in a wider context eg family support and expectations (*ibid*).

6. The level of higher education participation among lower socio-economic groups is adversely affected by the desire to earn money at an early age and concerns of student debt (Connor *et al*, 2001a). This is understandable as students from lower socio-economic groups are likely to incur higher debt (Finch *et al*. 2006).

7. Participation among lower socio-economic groups is promoted by intermediaries, eg friends and family or school tutors (Connor *et al*, 2001a).

8. However, looking at the longer-term, graduates from lower socio-economic groups appear to do less well in the labour market than their higher socio-economic counterparts.

9. Research from IES (Connor *et al*, 2001a) suggests a number of policy recommendations that should be considered to widen participation in higher education among those from lower socio-economic groups:

- the benefits of higher education need to be better and more widely communicated;
- mentoring and "HE champions" should be used to promote contact between higher education and school pupils; and
- relevant and timely information on student finances and support is needed.

10. Among people from minority ethnic groups, Connor *et al* (2004) propose a number of recommendations aimed at improving participation, including a need to:

- reduce the attainment gap (especially among black pupils) at A level;
- monitor the impact of changes to student financial arrangements on participation among different minority ethnic groups;
- improve the statistical monitoring of participation, more generally and by detailed minority ethic groups; and
- recognise and understand how some minority ethnic groups have higher participation than white people.

1.3.2 What do students want from higher education? (and do they get it?)

11. Career benefits are crucial: four out of the five top reasons for wanting to go to university are career related; the other key reason to enter university is interest in the subject (Connor *et al*, 1999).

12. There are gender differences: among school pupils, girls are more likely to cite subject interest as a reason for wanting to enter higher education while boys were more likely to emphasise financial and career motivations (*ibid*).

13. There are ethnicity difference: among university students from minority ethnic groups, aspirational and expectational reasons for entering higher education are more significant than among white students (Connor *et al*, 2004).

14. There are differences by social class: students from lower social classes are more likely than students from higher socio-economic groups to suggest that the career benefits of higher education were key motivators for participation (Connor *et al*, 2001a).

15. Higher education students are usually satisfied with their choices and experiences (Connor *et al*, 2001b). Male students and students from "traditional" entry backgrounds are the most satisfied.

16. There is room for improved information, advice and guidance and careers support targeted at new graduates in the labour market.

1.3.3 Demand for graduates in a high-skilled economy/what do employers want from higher education?

- Graduates do better than non-graduates in the labour market in terms of earnings, employment rate and the quality of employment (Bates *et al*, 2006; Tyers *et al*, 2006).
- There is evidence that the nature of graduate jobs is changing and an increased proportion of graduates appear to be employed in more associate professional or technical occupations (Bates et al, 2006; Tyers et al, 2006).
- The demand for graduates remains strong (Wilson *et al*, 2005) although their economic contribution is of greater consequence for some sectors (eg high technology manufacturing) than others (eg service sector) (Jagger *et al*, 2005).
- There is evidence from SMEs in Wales that employers often seek graduates as a degree qualification acts as a signal for potential rather than for specific subject knowledge (Tyers *et al*, 2006).
- Large employers predominantly seek graduates with leadership potential:
 - eg "intellectual ability" (linked to strategic thinking), "interpersonal skills" (linked to motivational ability) and "drive". However, there may be a shortage of graduates with technical and numeric expertise (Barber *et al*, 2005).
- Employment success depends on a number of factors:
 eg subject choice and willingness to travel for work (Pollard *et al*, 2004).

2. WIDENING PARTICIPATION AND CONTRIBUTIONS TO SOCIAL MOBILITY

2.1 Expansion does not mean diversification

Interest in the economic performance of graduates has been fuelled by continued expansion in the higher education sector. Graduate numbers have more than doubled since the 1980s, indeed earlier this year it was reported that first year enrolments to HE exceeded one million (HESA Press Release 83), and as a group they have become far more diverse. Women now make up well over half of those graduating in the UK, and the aggregate participation rate amongst young people from minority ethnic backgrounds exceeds the average and together they are better represented in HE than in the working population (Connor *et al*, 2004). This growth has been stimulated by a range of factors including demographics, the mainstreaming of higher education through the use of participation targets, and rising levels of educational attainment (*ibid*). Although it should be noted that there remains a wide disparity in participation across social groups, with lower socio-economic groups significantly under-represented in higher education (Connor *et al*, 2001a).

Finally, in terms of the modes of study, most of the expansion has been among students doing full-time undergraduate degrees. The number of part-time undergraduates has increased only very slightly. The numbers involved in more vocational sub-degree programmes, such as HNCs and HNDs have declined, while take up of the new vocationally-oriented (two-year) foundation degrees have so far been fairly low.

2.2 Participation decisions are taken early

Decisions about going into higher education are usually taken early and expectations regarding the benefits of university may evolve across an individual's educational career. In terms of when key decisions are made, Connor *et al.* (1999) suggests that in many cases, students' career plans (in particular decisions about further study) are largely formulated by Y11/S4; ie long before they have to apply for higher education. The key influences on their plans were found to include: expected attainment levels at GCSE/Scottish Standard grade, earlier school experiences, access to careers advice, and expectations from school and home. Those most likely to participate in higher education were those with high exam expectations: Scottish students, those from higher social class groups and some ethnic minorities.

2.3 Higher education participation among people from minority ethnic groups is high

Other research by IES (Connor *et al*, 2004) found that minority ethnic people are more likely to enter higher education than are people from the white population. However, the minority ethnic population does not participate in higher education in a uniform way. The minority ethnic undergraduate student body is highly heterogeneous. Across individual minority ethnic groups, participation rates vary considerably, and their representation varies between universities, subjects, geographic regions, and course types.

2.4 ... but participation of minority ethnic groups is clustered around certain universities and specific subject areas

Minority ethnic students are clustered at certain institutions, eg the post–1992 universities in London. Their representation among undergraduates at many universities is low (under 10% at around half of them) and mostly low in pre–1992 universities. This pattern relates to locality (eg with a high representation in London as many students stay locally), and differences between universities in their entry requirements and range of courses and subjects on offer (*ibid*).

2.5 Minority ethnic groups also have different trajectories of entry into higher education

Minority ethnic young people are equally as likely as the white population to gain entry qualifications to go to university by age 19 (which contrasts with the situation at 16, at GCSE level) but the type of highest qualification held and their schooling post-16 vary significantly. Minority ethnic degree entrants have lower entry qualifications on average, fewer take the traditional "A" level route, and more are likely to come into HE from FE than are white entrants. These overall results mask divergences between groups:

- Indian and Chinese groups are the most likely to take the traditional "A" level highway to HE and are better qualified as HE entrants.
- Pakistani and Bangladeshi groups do not gain as high "A" level qualifications as do Indian or Chinese, but perform better than black students.
- Black groups, particularly Black Caribbean, are generally older on entry, with a wider range of entry qualifications than the average.

These are generalisations, but serve to illustrate the distinct trajectories prior to HE, which influence HE participation levels and patterns, and can have an effect on subsequent progress and graduate outcomes *(ibid)*.

2.6 There is a need to consider ethnicity in context

An important conclusion from the research undertaken by Connor *et al* (2004) is that the influence of ethnicity on decisions about higher education entry is powerful, but not equally so for all minority ethnic groups. Being a member of a particular ethnic group is one of a variety of factors affecting decision-making about going on to higher education, some of which interact with each other. In particular, it is likely that strong positive parental support and commitment to education mitigates some negative effects, such as being in a lower socio-economic class. This would explain why minority ethnic groups disproportionately enter full-time degree courses, despite having lower than average class profiles.

2.7 Among those from lower socio-economic groups, higher education has to be balanced against the desire to earn money and fear of costs

IES research on higher education participation among lower social groups (Connor *et al* 2001a) found that the primary discouraging factors to participation in higher education among people from lower social classes were employment and finance related. The main reasons why people from lower social class groups had decided against going into higher education, though qualified to get a place, were twofold:

- they wanted to start employment, earn money and be independent at an earlier age (39%); and
- they were worried about the cost of studying (28%).

Concerns about the costs of study were expressed by both potential and current higher education students from lower social class groups, but the majority felt that the investment was worthwhile in the long run. These concerns are, perhaps, understandable as students from lower socio-economic groups are more likely to incur higher levels of debt (Finch *et al.* 2006). However, finance was just one of a range of issues of concern expressed by respondents when discussing their decisions to enter higher education. Others include being able to cope with academic pressures and workload, gaining the entry qualifications, the application process itself, and personal issues such as childcare.

2.8 Participation among those in lower social classes is encouraged by intermediaries

The research found that intermediaries were key to promoting participation in higher education by lower social classes (*ibid*). These intermediaries may either come from informal relationships (eg parents or friends) or formal ones (eg school tutors). Prior education and family background can influence decisions about higher education entry in numerous ways. Various people have important roles to play in the decision process. In particular for lower social class potential entrants, FE college tutors could be a key group of positive "influencers" on potential students, as were friends and family members with current/recent higher education experience.

2.9 Information on higher education available to people from lower social classes may be insufficient

The IES study concluded that while there was plenty of information about higher education available to potential entrants who are on higher education qualifying courses, it is often seen as being too general and overly complex. The main gaps in information content are on the financial aspects of higher education study and its likely benefits in terms of employment and financial returns.

There is a wide variation in the amount and detail of information on higher education costs and funding/ support that is received by potential students prior to entry. Three-quarters of the full-time students in the survey, and slightly more from lower social class backgrounds, did not feel that they had sufficient information (when deciding about going to university) about how much it was likely to cost to be a student.

2.10 ... however, after graduation those from lower socio-economic groups perform less well in the labour market

Pollard *et al* (2004) has found that nearly two years after graduating the less advantaged individuals (from lower socio-economic groups and with lower family incomes) found it the most difficult to move to permanent work. Those earning the higher salaries, and in what they perceived to be good quality jobs, tended to be male, from higher socio-economic groups and from families with higher incomes (ie "traditional" graduates). Those in poor quality jobs tended to be the less advantaged (from lower socio-economic groups and with lower family incomes), and to have been less successful in higher education. They were also less likely to think about jobs and careers and take action whilst in higher education.

2.11 Policy implications

Finally, we conclude by outlining the key policy implications and recommendations that were drawn from the IES research into higher education participation among minority ethnic groups and among those in lower socio-economic groups.

2.11.1 Improving the participation of lower socio-economic groups requires better promotion, "use of HE champions" and timely information, advice and guidance

The research findings from the IES study by Connor *et al* (2001a) on higher education participation among lower socio-economic groups suggests a number of policy implications:

— The benefits of higher education study should be better and more widely communicated. In particular, outcomes associated with improved employability and finance need to be given more prominence, though it is recognised that this is an area of variability across the student body,

especially in the first years after graduation. For example, colleges and schools could make better use of past students" achievements and progress through higher education. This is relevant for young students, especially in pre-16 education, also for mature students.

- Mentors or "HE champions" should be more widely used to help those potential students who have little contact with people who have recent higher education experience. These could be former school/college students, recent graduates, or teaching/careers staff. Current students from a wide range of backgrounds could be encouraged to visit schools and colleges in low participation neighbourhoods to discuss with potential students their hopes and fears, and explore how they can be addressed. Examples of current good practice of the use of mentors or "champions" should be more widely disseminated.
- More relevant and timely information on student finance is needed, as well as greater financial assistance made more accessible to those students in greatest need. Affording the costs of HE, while not by itself the single prohibitive factor, is a discouragement. The research clearly shows that more needs to be done to support potential students from low income families. In particular, they could be helped by better guidance on the financial support available and the likely net costs of different options for them, according to their different circumstances. This information should be presented in a more user-friendly way and available earlier in the decision-making process.

2.11.2 Improving the participation of people from minority ethnic groups requires focus on school/college performance and better (more detailed) overall monitoring

Connor *et al* (2004) has highlighted the considerable diversity in the higher education participation of minority ethnic students, which means that a detailed understanding of minority ethnic patterns and their various causes is important in developing future policy. Various recommendations are made on the need to be more focused in policy approaches and in further research:

- More needs to be done to raise earlier attainment and to close the A level gap, especially for some black students.
- A better understanding is needed of the influences (positive and negative) of parents in the decision-making process about HE and their interaction with other interventions (eg careers guidance).
- Further work needs to be done on improving statistical measures of HE participation for subgroups, including ethnic groups, and we recommend greater use of Census data.
- Although student finance was not any greater deterrent for minority ethnic than white students overall, it is important to monitor the impact of the proposed changes on individual ethnic groups (and sub-groups).
- Further research and analysis is needed into retention and degree performance of minority ethnic student groups, and the significance of various factors (including student satisfaction, and family/ parental support to students).
- Further research is required on graduate career choices, including minority ethnic students' preference for further study, on the effectiveness of the various diversity programmes of universities and employers, and other measures designed to improve graduate employability.
- Finally, there is a tendency to focus mostly on relative disadvantage. Some minority ethnic students are doing much better than comparative white groups. This should be given greater recognition.

2.12 Summary of key points

1. Although higher education has expanded rapidly over the last two decades it has failed to encourage significant increases in representation by individuals from lower socio-economic groups (Connor *et al*, 2001a).

2. Decisions to enter higher education are usually made early, ie by Y11/S4. Key influences on these decisions are high exam expectations and parental/school expectations, usually related to social class (Connor *et al*, 1999).

3. Minority ethnic groups are more likely to participate in higher education than the White population but there is wide variation between ethnic groups (Connor *et al*, 2004). Also, there is a high level of clustering (eg around post-1992 universities in London).

4. Different minority ethnic groups have different trajectories into higher education, eg in terms of A'level success (*ibid*).

5. Ethnicity and participation needs to be considered in a wider context eg family support and expectations (*ibid*).

6. The level of higher education participation among lower socio-economic groups is adversely affected by the desire to earn money at an early age and concerns of student debt (Connor *et al*, 2001a). This is understandable as students from lower socio-economic groups are likely to incur higher debt (Finch *et al*. 2006).

7. Participation among lower socio-economic groups is promoted by intermediaries, eg friends and family or school tutors (Connor *et al*, 2001a).

8. However, looking at the longer-term, graduates from lower socio-economic groups appear to do less well in the labour market than their higher socio-economic counterparts.

9. Research from IES (Connor *et al*, 2001a) suggests a number of policy recommendations that should be considered to widen participation in higher education among those from lower socio-economic groups:

- The benefits of higher education need to be better and more widely communicated.
- Mentoring and "HE champions" should be used to promote contact between higher education and school pupils.
- Relevant and timely information on student finances and support is needed.

10. Among people from minority ethnic groups, Connor *et al* (2004) propose a number of recommendations aimed at improving participation, including a need to:

- reduce the attainment gap (especially among black pupils) at A level;
- monitor the impact of changes to student financial arrangements on participation among different minority ethnic groups;
- improve the statistical monitoring of participation, more generally, by detailed minority ethic groups; and
- recognise and understand how some minority ethnic groups have higher participation than white people.

3. WHAT DO STUDENTS WANT FROM UNIVERSITY? (AND DO THEY GET IT?)

3.1 Career benefits are important

A survey of year 11 students reported in Connor *et al* (1999) identified that the five key reasons young people wanted to enter university are to:

- study a subject of interest to them;
- have a professional career;
- improve their job prospects; and
- gain entrance to a well paid career and to have a professional career.

Although in each of these cases, between 78 and 83% of the sample suggested that the reason was extremely or very important there were differences by gender. Girls were more likely to focus on subject interests, while boys looked towards financial and career motivations. Career motivations were also of greater importance to minority ethnic students than to white students.

3.2 ... especially to those from minority ethnic and lower socio-economic groups

Differences in the motivations to enter higher education by minority ethnic groups were also observed in Connor *et al* (2004). The research found that aspirations and expectations of the value of, and benefits from, higher qualifications are a more significant positive "driver" for minority ethnic than for white students, especially most Asian groups. This combines with greater parental and family influence to play a more significant role in encouraging higher education participation among minority ethnic than white young people, and also in choices of what and where to study in higher education.

Among students from lower socio-economic backgrounds, a belief that a higher qualification will bring improved job and career prospects, and also improved earnings and job security were key motivators for entering higher education (Connor *et al*, 2001a). Students from lower socio-economic backgrounds take account of a wider range of issues than their counterparts in higher social class groups when taking the decision to enter higher education, and they tend to place more emphasis on the expected beneficial outcomes of higher education than do students from higher socio-economic groups.

3.3 Higher education students are usually satisfied with their choices

Satisfaction with the decision to enter higher education and choice of institutions were the subject of a follow up study to Connor (1999): *Making the Right Choice?* (Connor *et al*, 2001b). The research found that, overall, the majority (around 80%) of university students were satisfied with their choice of institution and course. However:

- Students who failed to get their preferred choice of institution had slightly lower satisfaction levels, as did students who switched institutions and courses and those who had left higher education altogether.
- Students were most satisfied with aspects relating to their studies, ie the learning experience, teaching and study facilities; and less so with non-academic aspects. The main area of dissatisfaction was cost-of-living in the area. This concern was highest in the South, and in Scotland and Northern Ireland. Other main areas of dissatisfaction were sports/social facilities and personal support from tutors.
- Male students and students from traditional higher education entry backgrounds were, on the whole, more satisfied with their choices of course and institution than others. Also, students studying at pre-1992 universities were, on the whole, more satisfied than those at newer universities on average. The differences by university type are, in part, explained by different subject balances and clusterings of different student groups.

3.4 . . . but non-traditional students are less so

The research found that it was students from some of the non-traditional entry groups (eg mature, ethnic minority, vocational entry qualifications, low family income) were:

- more likely to leave higher education before completion of their courses, or change institution;
- less likely to be satisfied with their choice of institution and course;
- more likely to feel they made the wrong choice of institution;
- more likely to feel that better information pre-entry would have helped them to make better choices.

There was, however, no singular set of findings that enabled a particular student group to be identified clearly as being more dissatisfied. In aggregate, institutional differences were evident but these are linked to economic, social and educational variables, and the diverse pattern across higher education.

3.5 Most graduates value higher education

Evidence from new graduates from the IES *Right Choice*? study (Connor *et al*, 2001b) suggests that most paint a very positive picture of their choices of, experiences in, and after higher education. Higher education had helped them with their future prospects. Even though many anticipated, and left, with sizeable levels of debt, the vast majority felt that the benefits they gained (and would continue to reap) from higher education outweighed the costs. They would, however, have welcomed more advice as to the nature and financing of these costs. The majority of early leavers, who did not complete their degrees, were still positive about the value of their time in higher education; the experience had encouraged them to continue to learn (and many successfully returned to higher education or some other form of study), increased their self-confidence, and increased their (perceived) attractiveness to employers.

However, traditional graduates (younger, white, middle class) tended to have the best outcomes, while those from less traditional backgrounds achieved lower results and were more likely to have weaker labour market outcomes and lower satisfaction (also see section 4.5.1).

3.6 . . . but there is room to improve the student experience

While most were satisfied with their choices, experiences and outcomes, further improvements in careers advice and support would add value for future students. All students need to take well informed decisions, consider the full range of options both within and out of higher education, undertake more visits to higher education institutions, and to talk to more students in higher education. Prior to entry they need better information as to the likely costs, managing their expenditure, sources of funding, and the pros and cons of paid work during term-time and vacations.

Once in higher education, students need an early understanding of the value and importance of work experience. They also need to consider their choice of career, the ways to access their chosen career, and the importance of lifelong learning. Advice should be particularly targeted at non-traditional students, and the least mobile, as they are most likely to end up in poor quality jobs.

The *Right Choice*? study concludes that good practice in retaining and advising potential early leavers should be disseminated widely. It should focus on the identification of those most at risk of leaving, encouraging them to seek advice early, helping those who wish to remain to do so, or to transfer them to a more suitable course/institution (or to manage their exit from higher education).

Finally, careers support after leaving is especially important for those moving into lower quality jobs. This is a particular challenge for graduates returning home after their studies and who are often unclear as to what support may be available locally, eg through their local higher education institutions and careers services.

3.7 Labour market expectations are realistic

It may be constructive to ask whether or not student expectations of higher education are fulfilled immediately after their graduation and in the longer-term? The evidence suggests that graduates have a realistic understanding of the labour market (see, for example, Perryman *et al*, 2002; Pollard *et al*, 2004 and Pollard *et al*, 2005). In these studies, the majority of recent graduates did not expect to enter graduate level work straight after graduating but expect to have achieved this eventually, eg three years on. There is a realisation for many that they will need to progress through a number of short-term (not necessarily defined by contract length) "stepping stone" jobs to develop relevant work experience that will increase the currency of their degree qualification before developing a clear career path (Pollard *et al*, 2004). These expectations are matched by the reality of the UK's labour market, in which the majority of graduates who do not find higher level jobs immediately after graduating do enter such jobs eventually. Indeed, the Student Income and Expenditure Survey (Finch *et al*. 2006) suggests that students in the highest socio-economic groups then to have the highest salary expectations. The realistic expectations are found to be accompanied by expectations of modest salaries, expectations of working in smaller companies, and a desire to work for employers offering interesting and challenging work, and training and development opportunities.

3.8 ... although there is a need to support some graduates with the transition into work

There is a danger that, for some, they can become stuck in jobs that were only meant to be for the shortterm, to allow breathing space and delay career decisions, and to begin to pay of student debts. It would appear that graduateness could depreciate the longer individuals stay in these roles (Pollard *et al.* 2004). Those most active in job search while studying were the most successful in the labour market. Family and friends were particularly important for careers guidance after graduation. Thus, those from families and communities with little experience of higher education may get less broad-ranging advice.

3.9 Summary of key points

1. Career benefits are crucial: four out of the five top reasons for wanting to go to university are career related; the other key reason to enter university is interest in the subject (Connor *et al*, 1999).

2. There are gender differences: among school pupils, girls are more likely to cite subject interest as a reason for wanting to enter higher education while boys were more likely to emphasise financial and career motivations (*ibid*).

3. There are ethnicity differences: among university students from minority ethnic groups, aspirational and expectational reasons for entering higher education are more significant than among white students (Connor *et al*, 2004).

4. There are differences by social class. students from lower social classes are more likely to suggest that the career benefits of higher education were key motivators for participation than students from higher socioeconomic groups (Connor *et al*, 2001a).

5. Higher education students are usually satisfied with their choices and experiences (Connor *et al*, 2001b). Male students and students from "traditional" entry backgrounds are the most satisfied.

6. There is room for improved information, advice and guidance and careers support targeted at new graduates in labour market.

4. Demand for Graduates in a High-skilled Economy/What do Employers Want from Higher Education?

4.1 Graduates are in demand

Much of the research from IES has consistently indicated that graduates have better labour market prospects than their non-graduates peers, ie those qualified to enter higher education but chose not to do so (Bates *et al*, 2006; Tyers *et al*, 2006). The vast majority of graduates working in the UK work in higher level occupations, with just under a half of graduates working in professional occupations. An additional fifth work as managers or senior officials, and a further fifth work as associate professional or technical workers (Bates *et al*, 2006).

Among recent graduates, however, are some signs that the nature of graduate jobs is changing. Over the last decade there has been a relative shift in graduate employment, from professional to associate professional and technical occupations (*ibid*). This may either reflect a growth in graduate numbers that has exceeded the growth in demand for professional workers, or alternatively, an upgrading in associate professional and technical jobs, for example, the professionalisation of jobs such as occupational therapists and nursing. However, the picture is somewhat complicated by changes in the classification of occupations over this period.

4.2 ... but there is a need to get the right skills mix

Macroeconomic forecasts confirm that the quantitative availability of graduates and those with high level skills appears to be broadly adequate for current needs, although the mix is inadequate for certain sectors such as advanced engineering and biotechnology. Recent IES research has found that, high-level education is important for productivity in high technology manufacturing and some, but not all, of the service sectors (Jagger *et al*, 2005). Although holding a degree still commands a wage premium, there are some signs of over-supply as the premium attached to a degree shows some signs of diminishing.¹ However, the demand for graduate and higher level skills is set to rise (Wilson *et al*, 2005). and there is evidence that the proportion of the workforce with higher level skills in the UK may be inadequate to meet future needs. While the numbers in higher education in the UK are high relative to some competitors, they are low compared to others (eg Ireland and Finland); in other competitor economies the proportion of high-skilled individuals is rising fast and, in numerical terms, outstrips or will soon exceed that of the UK (eg India and China).

4.3 Many employers use degrees as a indicator of potential rather than because of the subject knowledge acquired

Research conducted with SMEs employing graduates in Wales found that less than half of these employers are looking for graduates in specific disciplines, the majority simply using a degree as an indicator of more generic skills (Tyers *et al*, 2006). We should note, however, that this does not mean that subject choice is unimportant as those employers who do require specific skills or knowledge may be prepared to pay a premium for it (eg see section 4.5.2).

The research found that half of all employers surveyed, including three-quarters of those with no recent experience of working with graduates, saw some benefits to employing graduates. However, employers who currently, or had recently, employed graduate staff were far more positive about their potential benefits, including the positive benefit of graduates adding IT skills and bringing innovative or creative thinking to their workplace.

4.4 Employers value leadership skills but there may be a shortage of "technical" graduates

In the same way that graduates do not form a homogenous group, neither do graduate employers. A review of the graduate recruitment programmes in large enterprises found that employers predominately seek graduates with leadership potential, defined across three clusters of competencies (Barber *et al*, 2005):

- intellectual ability, linked to analytical skills and strategic thinking;
- interpersonal skills, seen as linked both to influencing skills and the future ability to manage and motivate staff; and
- drive to achieve results, seen as linked to personal effectiveness.

Although leadership skills were the most widely sought, some of the organisations that were surveyed in this study wanted high-quality technical graduates, especially scientists and engineers, IT graduates or simply graduates with high levels of numeracy, and had serious concerns about supply in the UK. They did not always fill all their vacancies and some saw other parts of the world (at times beyond western Europe) as outstripping the UK in both numbers and quality.

4.5 Employment success requires more than a degree

Overwhelmingly, graduates value their time in higher education and even those who leave early gain benefits in terms of a continued interest in learning, and increased self confidence (Pollard *et al*, 2004). Graduates feel higher education improves their long term prospects: setting them up for a good career, increasing their attractiveness to employers, and equipping them with skills and qualities that employers value. However, benefits of higher education are not evenly distributed, and it is traditional graduates that are most positive about their higher education experience. However, the research suggests that the initial success of recent graduates in the labour market depends upon a number of highly inter-related factors, including the socio-economic background of those graduates, their willingness to relocate for work and the subject from which they graduated.

4.5.1 "Traditional" students do better

Our research would indicate that traditional students gain the most from higher education. They gain better degree classifications, have higher satisfaction ratings of their higher education experience, and better labour market outcomes in terms of higher average salaries, higher level occupations and perceived to have better quality jobs (jobs that have high entry requirements, offer skills development, and are well regarded positions). Conversely, those from lower socio-economic groups find it harder to move on from stepping

¹ Centre for Economics in Education, cited in Skills in England 2004 (Wilson et al. 2005).

stone jobs. It would appear then that higher education and the labour market may still be oriented to traditional students and not really meeting the needs of, and recognising the potential of, diverse students confidence (*ibid*).

4.5.2 Subject choice is important

Employment outcomes are still contingent on choice of degree subject made by graduates. Graduates who have studied professional subjects such as veterinary science, education and medicine are consistently more likely to enter (and enter quickly) into a graduate level occupation than those who have studied more general arts and humanities type courses. Indeed, those following professional courses are most positive about the value of their higher education and are the most satisfied with their careers. Whereas, arts and humanities students are among the least satisfied in relation to career opportunities, have lower average earnings, and are the most likely to anticipate changing career direction in the medium term. This group will need support to build relevant work experience, and to identify and access suitable careers.

Professional or vocational subjects have more clearly defined career paths and visible entry points to the labour market, and for many this accelerates the transition from higher education. It may appear that this group need little careers support, however, there is a danger that those following such routes may become aware that they are no longer interested or suited to that career but be unable to move away from the field. These graduates will need help to adapt their skills and experiences to alternative careers.

4.5.3 Success is related to geographic mobility

The graduates who show themselves to be hypermobile, in terms of their willingness to move away from home to study and then again to find work, are also the most likely to be employed in higher level jobs, to have above average salaries, and to be in perceived high quality jobs. They operate in a national or international labour market—moving to the location that offers the best jobs. These graduates, once again, tend to have traditional backgrounds, are more likely to come from higher socio-economic groups, to be male and to be younger; they are also the most highly qualified, with high entry qualifications and good degree classifications.²

A key location for migration, either expected or actual, among these hypermobile graduates is London and the South East. This is not surprising as our research shows this area has the highest concentration of graduate workers, the highest concentration of advertised vacancies (in publications targeted at graduates), and is the most popular destination for those intending to move away after their studies (eg see Pollard *et al*, 2004).

Those that fare less well in the labour market are graduates who have limited mobility, and particularly those who return to their home region after their studies. This group are often returning to live with their parents to save money, may have relatively poorer degree outcomes, and have limited links with local careers services. There is a very real danger that this group can become trapped in unsuitable temporary jobs, making more applications for graduate level jobs but with less success.

4.6 Summary of key points

1. Graduates do better than non-graduates in the labour market in terms of earnings, employment rate and the quality of employment (Bates *et al*, 2006; Tyers *et al*, 2006).

2. There is evidence that the nature of graduate jobs is changing and an increased proportion of graduates appear to be employed in more associate professional or technical occupations (Bates *et al*, 2006; Tyers *et al*, 2006).

3. The demand for graduates remains strong (Wilson *et al*, 2005) although their economic contribution if greater consequence for some sectors (eg high technology manufacturing) than others (eg service sector) (Jagger *et al*, 2005).

4. There is evidence from SMEs in Wales that employers often seek graduates as a degree qualification acts as a signal for potential rather than for specific subject knowledge (Tyers *et al*, 2006).

5. Large employers predominantly seek graduates with leadership potential eg "intellectual ability" (linked to strategic thinking), "interpersonal skills" (linked to motivational ability) and "drive". However, there may be a shortage of graduates with technical and numeric expertise (Barber *et al*, 2005).

6. Employment success depends on a number of factors—eg subject choice and willingness to travel for work (Pollard *et al*, 2004).

² The importance of migration is explored in numerous studies, including: Pollard *et al.* 2005; Pollard *et al.* 2004; Perryman *et al.* 2003; Bates *et al.* 2006 and Tyers *et al.* 2006.

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December 2006

Witnesses: Mr Jim Hillage, Institute for Employment Studies, Ms Anna Vignoles, Centre for Economics of Education, Institute of Education, Mr Ken Mayhew, Director, Skills, Knowledge and Organisational Performance (SKOPE), Mr Peter Elias, Institute for Employment Research, and Mr Carl Gilleard, Chief Executive, Association of Graduate Recruiters, gave evidence.

Chairman: Before we start, I am embarrassed that, as in the case of the previous session, we have such a distinguished group of witnesses before us. We have even more witnesses this time and so the management process in an hour is difficult. Please accept our apologies that we are trying to crowd into the timetable as much oral evidence as we can. Mr Pelling, who has a very important meeting with the GLA after this hearing, will begin the questions and then must leave. This is not intended as a discourtesy. **Q175 Mr Pelling:** In the view of the witnesses, why did the Leitch report adopt the approach of benchmarking UK skills needs for 2020 against international competitors? Is it an unusual approach to take to analysing skills?

Mr Mayhew: As a preliminary comment, I do not know why Leitch did it; that is their business. My reaction is that it is not unusual, but it is a very dangerous thing to do. It is dangerous because the skills and educational profiles of countries are so very different, so to try to get an aggregate picture to show that one country is better or worse than another can be very misleading unless you are extraordinarily careful about bilateral comparisons. For example, we look worse than some comparator

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countries in the proportion of people with Level 4 qualifications. If one looks at the selfsame countries this country is better at Level 3. One then finds other comparisons where it is exactly the reverse. Benchmarking is a crude start, but it is only that and it must be accompanied by rather more sophisticated analysis of the economic needs of each country which may be different.

Mr Hillage: If one sets oneself the task of identifying how this country can be world class, which Leitch did for himself or had set for him, one has to survey the world and see where it fits. As I understand it, if one sets oneself that task however one measures it most of what are called the developed economies or whatever in the world will have 40 or 45% of their adults going through higher education and have some kind of Level 4 or equivalent, taking all of Mr Mayhew's points about equivalence degrees. That maybe why they set that as a benchmark.

Ms Vignoles: In fairness to Leitch, they considered the evidence on rates of return as well as benchmarking approaches. In terms of the evidence of rates of return to degrees at least it lines up. The UK is exceptional in the highness of the return generally but specifically to degrees, so that is consistent with the idea that we still have a long way to go and we can expand further without causing an oversupply.

Q176 Mr Pelling: Does it matter that Leitch did not really analyse our needs in terms of the economy's demand for high-level skills?

Mr Mayhew: In my view it does. I think there is a huge range of uncertainty as to what the demands might be. Mr Elias has much more evidence than I on this, but there is an array of evidence, which is sometimes in conflict, about just how effectively our present stock of high-level skills will be used. We have ambitious expansion targets and therefore we have to think very carefully about usage. I cannot resist just one comment on rates of return. I totally take Ms Vignoles' point, but the OECD figures on comparative rates of return show quite a strong correlation between how high the rate of return is to Level 4 and how widely dispersed the earnings dispersion is anyhow, which is capable of many interpretations.

Mr Elias: It is a very complex picture. We cannot simply talk about comparisons on the international side looking at the demand for high-level skills or skills more generally; we must also consider the supply. When we have countries like India and China producing every year millions of high-level graduates for whom English is the language in which they have had their education, or is their first foreign language, we can see that, comparing the wage costs of graduates from these countries, there is often a great incentive for employers to take advantage of the new multinational approach to the employment of graduates.

Q177 Chairman: Does it matter that we nitpick over this? Is there not a level at which politicians have to say it is commonsense that we must have more graduates? I remember interviewing Sir Michael

Bischard and asking him about the 50% target for students going into higher education. I asked whether it was based on international research or any research or whether it was just a good round, sexy number. He grinned. There was no evaluation of that 50%. Everybody thought it was a good idea. Ms Vignoles: It matters because targets drive behaviour, resources and ambition. If one focuses on the 50% target as a uniform aim one misses the point that when drilling down in the data one sees downturns in the value of certain types of degree by particular subjects, or for more recent graduates there is a slight downturn in the return on their degrees. It is that kind of evidence on which one needs to focus when asking whether one should expand further rather than some arbitrary target, surely.

Q178 Chairman: I thought research showed that we had three million lower skilled jobs that would disappear in a very short time and we would have only about 600,000 jobs for less skilled people. Surely, it is commonsense to push people on to higher skills, is it not?

Mr Mayhew: One could question those particular demand projections which are very dangerous. To go back to your specific question and to add to Ms Vignoles' point, it matters for two reasons: first, there is an opportunity cost of such an expansion because it is still largely a publicly-funded system and public money can be spent in other ways, not least on other bits of the educational system; and, second, it matters because the degree of expansion must affect the product that universities provide. Today the typical university student ceases to be the same person that he or she was 20 years ago and, with further expansion, there will be a difference in 10 years. That is not of itself necessarily a bad thing, but it means that university institutions must look very carefully at the nature of their product and what they are offering.

Q179 Chairman: It sounds a bit like "more" means "worse", as Amess would say?

Mr Mayhew: I would not dare to suggest that, but "more" means "different".

Q180 Mr Pelling: I want to turn from the supply to the demand for skills. The Treasury and DfES have said that evidence suggests the supply of skills is not the key issue; rather, it is necessary to stimulate demand. Do you agree with that view? If so, what is the evidence that supports such a postulation?

Mr Elias: The question is: is it appropriate to stimulate the demand for high-level skills?

Q181 Mr Pelling: Rather than be concerned about supply, should we be addressing it from the other end? I suppose the question is: is it possible to stimulate demand?

Mr Elias: I do not think it is possible to formulate ways in which externally we can stimulate the demand for high-level skills. What we observe is that the demand for high-level skills has changed very significantly over the past 20 years. We have seen

types of work change quite significantly over the period and high-level skills are being employed in many different ways compared with the past. If one takes a typical job like a Personal Assistant, 20 or 30 years ago a PA would essentially have been the same as a secretary. He or, most probably, she would have been a good typist and looked after someone's diary. Now a PA is essentially a graduate-level job. It requires good software skills and a high level of organisational and interpersonal skills. Effectively, one is deputising for the person whose assistant one is. That is a very different job. That has happened because there are people who are willing to step into that role. The job title may not have changed, but the content of the job has changed dramatically. There are many other examples of jobs which 20 years ago were not graduate jobs but now are. People say that that is simply because there are more graduates around, but our research indicates that in many cases that is not so. These jobs have changed significantly and graduates are using high-level skills, whereas before they were not.

Mr Gilleard: I agree with everything that Mr Elias said, but today it is also about multi-skills. It is the skills that are made redundant, not people. A graduate emerging from university in 2007 is likely to be working for another 45 or 50 years. No one in this room can predict what kind of employment we will have in 20 years' time, never mind 45 or 50 years, but the one thing we can guarantee is that everybody who graduates this year will have several jobs, if not several careers, and need constant retraining. The kind of skills that employers look for is the ability of individual graduates to manage their learning, careers and lives. We have to get that message across to graduates because ultimately they are responsible. It was very interesting to read in Leitch the point about attitudinal change. We have to get across to people that it is their careers and lives and ultimately they must take responsibility for it. We provide them with the means, but it is their future.

Mr Hillage: That is not exclusive to graduates; it may be true of everybody. As to stimulating demand, one can do it mechanistically by requiring people to have Level 4 skills or skills that they did not have before and thereby raise the number of people, as we see in some professions where a degree is now a requirement, whereas before it was not, and what was previously training has become a degree level.

Q182 Chairman: One increases the number of doctors, teachers and nurses. Judging by Oxford, a number of graduates want to go into the City and become very wealthy.

Mr Mayhew: Perhaps I can provide one small compilation of facts on the question of demand and make a general observation. I think that in the second school survey which was based on a representative survey done in 2001 respondents were asked whether they needed their degree to get their job and whether it was fairly essential to carry out the work competently. As a result, 13.4% of the sample replied in the affirmative. If one added non-degree Level 4, at that time it was 22.7% of the

sample, which was an increase on a similar survey conducted 15 years before in 1986. But it raises the issue that, given we are increasing the stakes in terms of the percentages, we have to look carefully at utilisation and how good it is. My very brief general point is that it is important to stimulate demand for high-level skills because the 50% and all the rest goes back to the high skills vision first espoused in the States, then here and elsewhere in the OECD. It is all about as big a percentage of our employers as possible competing internationally on high-value added output and high-skill intensive production processes. Beyond the narrow area of education, in terms of the country's competitive strategy, if you like, it is very important that we keep an eye on that.

Q183 Fiona Mactaggart: I want to return to Mr Mayhew's point about people taking responsibility for their careers. Are the universities at present equipping graduates to do that in the required way? If Mr Mayhew is right that we need to compete on a high skill vision, are we doing the things that we need to do to achieve that?

Mr Hillage: First, looking at the survey data, the average graduate who comes out of university these days compared with 10 or 15 years ago is far more aware of the labour market and is career conscious. I do not think that university necessarily does that: the student goes in and comes out like that. Second, I do not know whether university gives graduates the equipment to do that, but bear in mind that university is the one major educational intervention that graduates will have in their lives, but as we and Mr Gilleard say they are likely to have many more. What one needs to be able to do for the rest of one's life one will not necessarily be able to get all in one go. The key point is that the individual needs access to opportunities to develop those high-level skills through either formal or informal learning in the work place or otherwise. I am not sure that universities are gearing themselves up to getting people back in at a later stage with short course or various other things to enable them to develop their skills over a period of time.

Ms Vignoles: We may want to move away from the idea that a degree is a homogenous thing. The evidence we received when looking at graduates in non-graduate jobs, for example, suggested that those who ended up in such jobs were less skilled; they were less literate and less numerate than their peers who managed to secure graduate-level jobs. That suggests two things: first, all degrees are not the same; second, potentially there are HEIs which are not fulfilling their remit in terms of producing employable graduate-skilled individuals.

Mr Gilleard: I believe that today universities are doing a lot more to support their students. One of the initiatives is a personal development plan which every student is supposed to have where he or she can reflect on the learning experience not just in the academic sense but also in the extracurricular activities that they might undertake. I believe that that is very important. Whilst universities have endeavoured to do more, I think that the demands of the world of work have increased yet again and

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more is to be done. Certainly, the employers I have talked to are uneasy about that; they feel that too many candidates coming forward for a career-I am sorry to say this to Mr Hillage-do not understand what the company expects of them, even though it is very easy to find it out through its brochure and website. They do not prepare as well as they might do for the process. They do not necessarily understand that they are in a competitive situation. Very often, when they go through that process they show that they have not really grasped what it is the employer is looking for. I find that quite frustrating. Earlier we talked about diversity and wider participation. For me, the best equal opportunities initiative that you could have in a university is to level the playing field by making sure all your students really are equipped to cope and compete for the jobs out there.

Mr Hillage: I do not really disagree with Mr Gilleard. Certainly the younger students are more aware of why they are going and what they want to do in the labour market, but that does not mean they are very good at doing it.

Mr Mayhew: As a personal observation rather than evidence, in my experience I have found myself sitting on the executive committee of my university's career service. I have been immensely impressed by the professionalism of that service and some of the other better ones. Equally, I have gained the impression that there is huge heterogeneity across the university sector in the effectiveness of careers services, and I believe that it would really be worth looking at that.

Mr Hillage: We have strong evidence of that.

Q184 Chairman: It is very surprising. You said that universities were different. If one looks at the league tables of employability of graduates they certainly are different in terms of the number of people they get into employment.

Mr Mayhew: But that may be inevitable. What goes in does come out not totally unchanged, but my impression is that some career services, whatever the level, need to be looked at.

Q185 Chairman: Mr Mayhew, if I may tease you a little, you come from a university that, as the evidence in the first session suggested, colluded in the non-participation in the student satisfaction survey. Is that because you are concerned and worried about what it might say?

Mr Mayhew: I bear no responsibility for my employers.

Q186 Chairman: Or your students?

Mr Mayhew: I bear a bit of responsibility for them; nor am I here representing them. The honest answer is that I do not know. Local surveys are done within the university.

Q187 Chairman: But do you think that people at Oxford should become involved in the survey?

Mr Mayhew: I do not see why not, and I do not know why the authorities in their wisdom took that view.

Q188 Chairman: You have the right connections here, but some are still excluded.

Mr Elias: We are working on our vice chancellor. *Mr Mayhew:* I think that whatever the level of the university for the different types of degrees that are coming out I suspect that there is a lot of evidence that some career services at different levels do a superb job for their students and others are not so good. I think that it is something worth looking at.

Q189 Fiona Mactaggart: Listening to your evidence, I am just wondering whether, going back to the issue raised by Mr Pelling about the supply side, there is an issue about the relationship between employers and universities and whether, instead of a student starting at school, going to university and then heading towards employment, there is an argument for encouraging employers to value higher skills and prepare students for further employment and create opportunities for relationships with employers before students go back into universities. I am just thinking about that as a response to what has been said. Perhaps you would respond to that thought.

Mr Gilleard: I think that is a very good suggestion. In particular, newer and smaller businesses that traditionally have not recruited graduates may shy away from taking graduates; they may think that they are taking on too much, and it is only by having the experience of a student working for them that they may see the value added that that individual brings to the organisation. That is a two-way process because it is also good for the student to get insight into different kinds of organisations and what they have to offer. As a personal view, if I had my way I would not want anyone leaving a sixth form to go straight to university. I would like that student to have at least a year's experience that could be of any kind-it could be voluntary work or paid employment-for a variety of reasons, not the least of which is the one to which you have just alluded. If you ask employers what are the key tick points on an application form when looking at vast numbers of applicants from universities for jobs work experience comes very near the top of the list. If it is relevant and it is structured work experience it probably comes first, probably before a first from Oxford. That is how important employers value it. The downside is that too many employers are not providing sufficient opportunities for students to take up those placements.

Q190 Helen Jones: Is there any evidence to show that employability does not just relate to the quality of the graduates—earlier someone said that what comes out depends on what is put in—but also the type of courses? I have particularly in mind that a lot of the newer universities offer directly vocational degrees. Are their employment rates better than some of the others that do not, or is it a patchy picture across the whole sector?

Mr Elias: At the moment our evidence is particularly thin. We have tended to rely rather a lot on information based on first destination vivas of higher education which, as the Committee knows, is a survey conducted shortly after leaving higher

education. My colleague Professor Kate Purcell of the University of Warwick and I have done a survey of those who graduated in 1995 looking at them three and a half years after graduation and those who graduated in 1999 and looking at them four years after graduation. We are trying to find a match between what kind of courses they have taken and what the outcomes are in terms of jobs, salaries, their satisfaction and so on. These surveys have been quite informative and we have published the results elsewhere. The problem is that we have always been rather limited in terms of how many organisations we can contact. We were also rather concerned that we had a small sample, often only about 10,000 graduates. With those concerns in mind, we persuaded the higher education career services unit to fund what is now the largest tracking survey of applicants for higher education that has ever been conducted in the country. This covers all those who applied for higher education in 2006. We will track them for six years, and probably after that, although we have funding for six years. We are following them from the moment they apply to higher education backed up with the statistical information from UCAS. Already we have 122,000 students signed up for this survey, so it is on its way to becoming very successful and important. That will provide us with a lot more information than we have had hitherto. It will allow us to address the employability agenda, because we can look at what particular institutions do and at the effects of outcomes associated with that. We can look at small groups in the population, for example those from particular parts of the socioeconomic structure who have not previously been well represented in statistical information, and, quite importantly, those from ethnic minority groups or religious affiliation groups. Again, we have had great difficulty in the past in collecting that kind of information and pursuing it rigorously. The answer to your question from my perspective is that we do not have very good information at the moment but over the next year or two we expect that situation to change dramatically.

Ms Vignoles: We do not have good information on the employability of specific vocational subjects, but we have information on the wage premium and employability associated with broad-brush academic subjects at degree level. As you might expect, the return to a degree for males taking arts degrees is virtually zero which contrasts with fairly substantial returns in the field of medicine, chemistry, engineering and science. There is a lot of information out there that can tell you which particular subjects are highly valued at least by employers.

Mr Mayhew: One very specific piece of evidence—I do not know how relevant it is to your important question—is that one of my students did a little thesis which basically involved talking to a careers officers at a variety of universities across the spectrum. At one post-1992 university he found one interesting matter, which may or may not be of general application. This university put on an array of quite specific vocational courses as well as more traditional academic courses. What he found was

that in relation to a course on estate management, which brought in the obvious employer recruiters, the recruiters had gone to that university because historically that establishment had put on such courses, but they were now recruiting people not from the vocational course but the general academic courses because they thought that that signalled they were the sorts of persons they wanted to train. Whether or not that is of general application I do not know.

O191 Chairman: This inquiry into the future of higher education is a very serious one. This is an interim inquiry into Dearing 10 years on. From the point of view of your competencies, what issues should we not fail to cover when writing up a report which we hope will be a serious one? What should we not ignore in this inquiry from your point of view? Mr Mayhew: Let us put the right numbers to one side at the moment. One obvious issue that picks up something said by Leitch is that basically that report said expansion could not continue without expansion of foundation degrees which are a relatively small percentage of the whole and without a significant initiative on participation by the over-30s. If you accept the Leitch target numbers as sensible given the structure of demand in the economy-or even if you do not-it raises some very profound issues about what a university by 2020 will look like and how heterogeneous the sector would need to become as compared with what it is today.

Ms Vignoles: I reiterate the point I made earlier. Higher education now represents a continuum of experience and it is a very diverse sector, but we still tend to turn to policy solutions that are applied to the sector as a whole. No doubt this is not a subject for today, but when one is thinking of the current flat fee, for example, that does not apply particularly well if one has an HE sector that is extremely diverse, whatever one's views on fees.

Mr Elias: Even if we do not expand the higher education system further than it has already expanded the output of graduates over the next three years will continue to rise because of what has happened in the past. Messages will start to flow back to those who want to enter higher education and there will be a lot more information in the future in the age of the Internet and surveys being available online and so on. People have access to a lot more information that can help inform their decisionmaking. I believe that we will see much better decision-making when people have more information about how they might participate in higher education and what it will cost them. They will become more discerning in their choices in terms of the way in which they expect higher education to be delivered to them and the relevant costs and their prospects having participated in it. I believe that that is all positive, although it means that we need to keep a close eye on the kind of information that is being generated and prevent a polarisation within our higher education system between what would become the elite institutions and the rest. That is something that must be looked at very carefully. I am very concerned about issues to do with social class and participation in higher education. Targets and opportunities have been missed. What is happening at the moment will not help to address that agenda in any significant way. As a result, we see the possibility further down the line in terms of future generations of increased polarisation in society as between those who have had access to higher education and have resources and those who have not had access and have limited resources. Any way that we can act now to prevent that kind of polarisation arising in future is extremely important.

Q192 Chairman: The results last week of the recent changes in terms of the introduction of fees and with it grants and other stimuli looked rather good, did they not?

Mr Elias: In my book, "rather good" would be a much more significant change than that which we saw.

Q193 Chairman: But we are doing better than Scotland and Wales, for goodness sake. Everybody was saying that Scotland and Wales were doing so much better than us. It has not happened. We have an increased number of applications, particularly from kids coming from more socially deprived backgrounds.

Mr Elias: Yes, but the scale of those increases is not very significant in my view.

Q194 Chairman: Why?

Mr Elias: Because if we want to bring about a true widening of participation we have to see a much faster rate of increase particularly of young people in higher education than we are seeing.

Q195 Chairman: But perhaps that takes us back to Mr Mayhew's point. We will need a massive expansion in foundation degrees and post-30 higher education involvement. Would that not be part of the answer?

Mr Elias: I hope it is. At the moment I simply hope rather than base it on the firm expectation that it will happen. We need more evidence in future and we must collect more information and find out whether these very recent changes have a profound impact on the social class distribution of applicants to higher education. My view is that they do not.

Mr Hillage: I want to endorse the point made by Mr Mayhew. The key point is that the changing nature of higher education will lie in the way it adapts, if it can, to facilitating greater participation by adults who already have some experience of the labour market and some qualifications but want to enhance their skills and maybe their qualifications, not necessarily doing a full degree. The question is whether higher education can link into that need. At the moment I believe that about one or two% of employers' continuing professional development needs are met through higher education. There is an enormous market for professionals, managers and so on to continue to develop their skills and higher education is not tapping into it. Therefore, there is a market and resource opportunity. That means that higher education and employers have to link much more closely together in a far more strategic way than they do now. The evidence is that at the moment it is very much ad hoc and can be quite successful but it does not last very long; and it is certainly not embedded throughout the universities and institutions.

Mr Gilleard: My shopping list is slightly different. I should like you to look at preparation for university particularly with young people coming out of schools. I think that the information, advice and support available are generally inadequate. A recent survey by the Chartered Institute of Personal Development showed that one third of graduates regretted the choice of degree they had taken. Imagine spending three years reading a subject in depth that you really do not have your heart in. That may explain some of the issues. I think that the foundation very much starts in the way one prepares one's commitment to go to university and what one hopes to get out of it. That should continue from the first term in university. My second agenda item is better engagement with employers. Mr Hillage has mentioned the training of postgraduates. There is a vast market for that. I also believe that we can invite employers into our universities-almost force them in-to help us develop a curriculum. Two weeks ago I received a phone call out-of-the-blue from someone who had been charged by his university to build a new business studies block. He wanted an employer's perspective on the design. My father was an architect. I could not build a cardboard box. The more I got into it the more I realised that one could create an environment in a learning institution that could be more reflective of the world beyond. We will take that further. The thought is that anything that is developed in universities should seek some engagement from employers. My key point is that it is a degree-plus. Far too many graduates still believe that the degree is what matters. A very high proportion of final-year students abandon the search for a job until they have their 2:1, as if that is some sort of magic grade or attainment. They forget that employers have plenty of candidates with a 2:1. What is important is what they have in addition to that. Linked to that is a return to Dearing's employability agenda. Colleagues with whom I have worked on the enhanced student employability team would never speak to me again if I let anyone get away with the notion that employability is about getting a job. That is the trouble with the first destinations report; it is about the first job. Whether or not that job is appropriate is not considered. To be employed is to be at risk; to be employable is to be secure, and that is what we should be aiming at for the next generations of graduates coming out of our universities.

Q196 Jeff Ennis: Mr Gilleard, is a degree just a signal of potential? Is that what employers are looking for? Do they just want the status of someone with a degree to be considered for a particular type of employment and it does not really matter what the specifics of the degree are, certainly not as much as it did in the old days.

Mr Gilleard: In the bad old days in that sense one would make assumptions about what a graduate was. I find it incredibly difficult. I work in this market day in day out. It is difficult to define what a university graduate or degree is, as both evidence sessions today have shown. We are not talking any more about homogeneous groups. I like the first part of what you said; I could not disagree with "signal for potential". I thought you were saying something very positive, but you went on to talk about the status of a degree. I believe that it is too expensive for recruiting employers to fall for the line "I have an allgraduate workforce". It means a great deal. Most of the employers I work with do a great deal of assessment of the value added that graduates bring to their organisations. Although I did not submit this in the papers for this session, we undertook some work with Dr Anthony Hesketh at the University of Lancaster into the value added of a degree. He came up with a measurement. He did that work by talking to employers. I believe that employers with a long tradition of recruiting graduates do it only because they recognise that those graduates bring added value, in particular the value of speed: they are very quick to pick up the skills and take senior positions within their organisations. I do not think that the status bit applies any more.

Q197 Jeff Ennis: I do not know whether any of the other witnesses have an alternative view.

Mr Mayhew: I take your question to be almost a student exam question for third year labour economics which is: does a university education of itself increase somebody's productivity and capability, or does it just signal to potential employers that they always are better, as it were? It is a question which labour economists empirically have found very hard to resolve. It is an important question and my guess is that it is a bit of both. Whether the proportions are changing over time is an even more interesting question that we have not resolved.

Ms Vignoles: You are right that to distinguish between the signalling effect and productivity effect of a degree is an incredibly hard thing to do, and it has not been satisfactorily done by labour economists. But there is new international evidence that graduates are measurably more productive and the value they add to firms is in excess of the gain to their wages; in other words, the contribution to firm productivity exceeds the benefit as measured by their own increase in wages, which is indicative of genuine productivity.

Q198 Chairman: We have been waiting for you to talk about productivity. Here we are committed to this vast expansion in higher education, but there is worrying evidence that in spite of a big increase UK productivity still languishes. Why is it not cause and effect? Why do we not see more graduates creating more productivity? We have a pretty healthy economy, but the measure of productivity is worrying, is it not?

Ms Vignoles: The latest estimate of the OECD is that an additional year of education increases growth by three to six percentage points. As a labour economist I have suggested it is quite hard to prove causality and we will not resolve our low productivity problems simply with a skills agenda. There are other issues, particularly capital investment, that need to be considered alongside any skills initiatives. *Mr Hillage:* I endorse that. If one wants to put a number on it, it is probable that skills and education account for 20 or 25% of the problem. There are other bigger things that affect our productivity which I had understood had been quite good over the past few years compared with previously. I do not believe that it is too bad a record.

Q199 Stephen Williams: Are you saying that the return to an employer who employs a graduate is greater than the return to the graduate himself or herself?

Ms Vignoles: We have found that is the case in both training and productivity.

Q200 Jeff Ennis: I turn to the so-called graduate premium. I believe that the UUK report estimates that the premium is an additional £160,000 over the lifetime of the particular graduate's working life. Is that an accurate reflection? To what extent can we hang our coats on that particular hook?

Mr Elias: I think the reason the Department for Education and Skills funded the 1999 survey of graduates which we conducted in 2003 and 2004 was to try to answer this question. We could not answer it directly because we were asked to conduct a survey only of graduates, not those who had not gone through higher education. That is part of the problem. The other part of the question is the issue of selection. We were, however, able to compare the earnings of graduates some three to four years after graduation from our earlier survey with those in the 2003 and 2004 survey. We found evidence that the earnings of these graduates was not keeping pace with the growth of average earnings over the period, which implied that on average the graduate earnings premium was falling. We were asked, therefore, to put a figure on it that the Minister could stand behind. We refused to do that simply because we had insufficient information. That remains the position. We know that the graduate's earning premium is on average falling. I stress, however, that the graduate's earning premium is not just a fixed amount or a magic figure that means an increase in earnings when an individual graduates. It is a wide distribution. There are those who earn less as a graduate than they would have earned if they had not gone to university; and there are those who earn significantly more than the 15 to 20% that is often bandied around. In terms of international comparisons, I note that as we have expanded our higher education system probably the graduate's earning premium is on average coming down to something more in line with that in other countries. It is also still there and we must not lose sight of that. We must recognise that many employers are, therefore, paying significantly more for a graduate three to four years after graduation;

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in other words, they know something about that graduate and are willing to pay. My bet is that it is due to the productivity of the graduate.

Q201 Jeff Ennis: Is that premium likely to fall as we try to recruit or train more graduates?

Mr Elias: As the output of graduates continues to increase, yes, it will continue to fall. I for one who look at it simply from an international perspective do not believe that it will fall so dramatically that we should start to worry about what graduates are being paid. It is still the case that graduates will command on average a higher salary than non-graduates.

Ms Vignoles: Perhaps by way of clarification, if one measures the average return to a degree across an entire working age population it does not appear to have fallen, but Mr Elias is talking about the very early careers of a specific group of graduates which is a warning sign of what is to come. It is a small fall for the most recent cohorts. I did some digging around to try to clarify the Universities UK estimate. Basically, they come out with a premium of 25% per annum for a degree over A levels. That is broadly consistent with our best estimates derived from somewhat different methodologies, but the return is higher for women. For men we are talking of 18 to 21%; for women it is 25 to 27%. That is the premium for a degree over A levels or Level 3 qualifications or equivalent. Therefore, it is in line.

Q202 Chairman: It is not all doom and gloom, is it, if the graduate premium is stabilising a bit or even coming down. Presumably, if we do believe in other streams of education, like further education and vocational education, we should be quite happy if people are in good and gainful employment as non-graduate productive workers. Should we not be quite happy if there are highly paid electricians, plumbers, builders, plasterers and others who do useful jobs?

Mr Gilleard: Except when you have to pay the bill! I have to say that as someone who has just moved house. One of the thoughts that I have had throughout this discussion is that it is not just about graduates. Many of the employers I represent employ a lot of graduates in non-graduate jobs and a lot of non-graduates in non-graduate jobs. One would hope there is sufficient flexibility and adaptability in those organisations for individuals to find their level. There are some very famous examples in this country of people who have been incredibly successful in their careers in every respect who did not go to university, and good luck to them. The more people there are like that the better.

Q203 Chairman: We often get into that question and there is reference to people like Richard Branson. It is a very good, valid argument, but this Committee has been looking at the sustainable school and the transformation or nature of education through building schools for the future. It is not just the physical structure but the way they can transform communities. What we have got into in a bigger way than I expected at the beginning of the inquiry is the

transformational nature of teaching and learning experiences in schools. How far do you think we are up to date in what we do with young people and older people in the higher education sector? Some research shows that if someone is standing in front of a class of 25 to 30 people 20% of the knowledge is retained, but if there is team working and kids are given the ability to manage their own learning in the right environment they can retain 70%. Is there a sense that perhaps what we are doing in a university in the way we teach and expect students to learn is a bit old fashioned and perhaps it is the last bastion of conservatism? Is there something wrong with what we are doing? Should we not look at that?

Mr Mayhew: I come from a university which is at the forefront of experiments in new forms of delivery.

Q204 Chairman: And, I note, democracy!

Mr Mayhew: My impression is that universities are experimenting a lot with different modes of teaching. There is an organisation called the Institute for Advanced University Learning which works quite hard on this. Whether they are doing enough or how responsive the average academic is to them I do not know, but they seem to have quite a big influence in the areas of higher education of which I am aware.

Q205 Chairman: Therefore, the way you teach your students is radically different from the way you learnt?

Mr Mayhew: I was going on to say that I think it depends on what one is trying to deliver to one's students. This comes back to the increasing heterogeneity of the products that universities will be offering. Is it the traditional product of teaching them general academic skills through a particular subject? At the other extreme, is it a particular vocational course where they have to learn competencies? I do not know whether or not they are going too slowly, but my impression is that universities have woken up to it. I cite the IAUL as one example of how they are trying to cope with this.

Q206 Chairman: But you have switched from an academic model to a vocational one, whereas I would put to Mr Gilleard that when someone has that "wow" factor at interview he or she has the ability to lead and build a team and organise. It comprises a range of competencies that are partacademic. You know when you have them. Is our education system, especially higher education, delivering those sorts of people?

Mr Gilleard: I think that it is beginning to do so. I do not spend enough time in universities to observe what is going on, but I did spend a day at the University of Warwick which has developed learning clubs. If you go into a learning club you can be in any modern business. You have groups of students working together, so there is team building. Someone will take the lead. They will be working on a project together, so there is another skill: project management.

Q207 Chairman: What discipline?

Mr Gilleard: This was across disciplines. There was a real sense of industry which one does not always associate with students and university campuses. I go back to the out-of-the-blue phone conversation that I had with the university that intended to build a new business studies block. I believe that more and more universities recognise that there are different ways in which they can teach students that might be more appropriate to the 21st century and help those individual students better when they make the transformation to workers.

Q208 Mr Marsden: We have heterogeneity in terms of universities and their output, but do we not also have heterogeneity in terms of skills gaps in different parts of the country? That is one of the matters referred to by Leitch certainly in his interim report. When we say we need more graduates in this, that and the other to what extent are we focusing on the London and South East issue and to what extent are the problems in terms of getting a supply of graduates to fill the sorts of jobs that you are talking about very different in other parts of the country?

Mr Mayhew: If you have not already had it brought to your attention, I cite a piece by two researchers called Hepworth and Spencer which came out about four or five years ago. It made precisely that point about the geography of skills mismatch and demands. It is not just London and the South East; there are other pockets of high demand, but there are large areas of the country where that is not true. What one draws from that depends very much on one's views about the mobility of labour to work in the high-tech and high-skill hubs, whether or not that is a good or bad thing. I believe that the regional distribution is quite concerning.

Mr Hillage: There are a number of tiers in the graduate labour market. The national graduate labour market gravitates around London and the South East, and people in the high-level universities or whatever will tend to move to those areas where they can attract a higher salary and so forth. In the regions the supply and demand vary enormously. Most of the people who go to the new universities stay in those localities, and certainly if one thinks of widening participation older people will tend to be less likely to be mobile. That is another factor to take into account.

Q209 Mr Marsden: But is that necessarily a bad thing? Potentially, it means that damaging heterogeneity is likely to become less.

Mr Hillage: It does not necessarily mean that it is a bad thing, but from an employer's perspective it depends on where the person is located. That is why it is important to build up a relationship with supply and have a good relationship with potential universities or other sources, if that is where one wants to get one's supply.

Q210 Mr Marsden: Is there more that we should be doing centrally, or that universities in terms of clusters should be doing perhaps across regions, to address the skills imbalances that we are talking about?

Mr Elias: I believe that some universities are now acting in clusters to identify their local graduate labour markets and see how they can engage with those markets and bring their graduate careers services together and start to act en bloc. Everything has changed so much. For example, in Manchester we now have one super-university which is dominant in the whole of the North West. I believe that it behoves Liverpool and other universities to join in and link with that to find out how to share their resources. In other parts of the country there are clusters. There are clusters in the West Midlands and East Midlands and in the South West.

Q211 Chairman: There is quite a cluster on the M62 in Yorkshire.

Mr Elias: I am sure there is, but I am not aware of it.

Q212 Chairman: Are you not aware of Leeds, Bradford, Huddersfield and York? *Mr Elias:* Yes.

Q213 Chairman: It is zooming past your own institution in terms of ratings, is it not?

Mr Elias: Yes, that is right. To reflect on the preceding remark about migration, it is the case that in Scotland, Northern Ireland and to some extent in Wales in many instances graduates have left their home universities and taken jobs in London and the South East. One can argue that there is nothing wrong with that; that is where the demand is and they have moved to satisfy that demand and the labour market is working. From the perspective of the Scottish and Northern Ireland university system one gets a very different picture. Here they are producing graduates who then leave and do not benefit the local economy. That is quite an important issue and one that the devolved administrations may want to look at more closely. Chairman: As all of us who are regional Members of Parliament know, universities are part of the answer to this. If we did not have a university cluster in our region and sub-region we would be extremely worried. When Sir Richard Sykes came here and said that he wanted only five or a handful of research-rich universities if carried through it would have rather telling consequences for anyone outside London and the South East.

Q214 Fiona Mactaggart: I should like to follow up Mr Elias's disappointment that the penetration of university education had not gone further into communities that did not have a tradition of university education: working-class people and other socially excluded groups. Tying that to the premium, I was interested to hear that it was higher for women than for men. Is there any evidence about the graduate premium being different for students who have not had an experience of higher education in their families?

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Ms Vignoles: There is evidence from Ray Reardon of the Institute for Fiscal Studies to suggest that the premium for males from working-class backgrounds is higher than for males from other socio-economic backgrounds, quite crudely defined. There is no evidence of that for women, and that is a fairly old cohort. It is not exactly compelling, but it hints at it.

Q215 Fiona Mactaggart: That may be another piece of evidence that by not expanding participation among working-class young men in university we are wasting talent that could increase our productivity substantially. Is there any other evidence of which you are aware that also highlights that?

Mr Elias: There is no recent evidence of rates of return by social class. The evidence to which Ms Vignoles referred concerned a cohort born in 1958. *Ms Vignoles:* That is correct. There is some evidence on wider benefits that differ by socio-economic background. One has in mind health and other potential outcomes. One can say that there is a loss of productivity and non-economic wellbeing, if one defines it as such, but it is pretty weak. If one is looking for an economic groups it would not be because they would get a higher return but simply that they would get the same return as everyone else.

Q216 Fiona Mactaggart: I believe that social justice is enough justification, but I am also interested in other ones.

Mr Mayhew: Commonsense must suggest that there is massive waste of talent there. The striking statistic that as of early in this decade the percentage of university students from the three lowest socioeconomic groups is not much different from what it had been in the mid-1960s, which is quite scary. It suggests that there must be a lot of naturally capable and able working-class kids who are still not getting to university. It is a waste of talent. They would benefit from it, but a lot depends on whether employers will harness it, to go back to the earlier discussion.

Ms Vignoles: If we go back to the effects of the expansion, in the late 1980s and early 1990s that benefited largely less able students from higher socio-economic groups, so the doors were open but the people who came in were not those from the lower socio-economic groups most able to take advantage of the intellectual environment.

Q217 Fiona Mactaggart: Is there something that you would do differently which would significantly increase participation of students from working-class backgrounds?

Mr Elias: I would re-examine the whole issue of fees. A lot more could be done in schools to encourage and engender the view that higher education was the norm. Part of this is a peer association problem in the sense of, "We are not going to go to university; we are not good enough, so we will do something else." Schools, careers advisers within schools and parents have a role to play. It is a very difficult issue but it is one that must be challenged much earlier in

the whole decision-making process through which young people end up in higher education. That may start even at primary school.

Q218 Jeff Ennis: Do you not think that it is also a community-wide issue? *Mr Elias:* It probably is.

Q219 Jeff Ennis: It is not just engaging parents but local communities in raising the profile.

Mr Elias: I have no evidence of it but you could well be right.

Mr Hillage: To pick up the point about fees which was referred to earlier, we were involved with the National Centre for Social Research. The student income and expenditure survey indicates that people from lower socio-economic groups are more concerned than other groups about the potential debt.

Q220 Chairman: Evidence already given to this inquiry is that students are much more worried about their present income than future debt. That comes out very clearly from the evidence. There is a low level of worry about future debt; there is more worry about the income to get them through university.

Mr Hillage: I take the point. Those from the lower socio-economic groups are more concerned about financing their student experience.

Q221 Chairman: To meet Mr Elias's point, the Government has brought back grants and universities have created bursaries.

Mr Hillage: We will have to wait and see whether that has an effect or not.

Q222 Chairman: We had evidence this week that England is doing far better than Scotland and Wales. *Mr Hillage:* I understand that the evidence relates to applicants.

Q223 Chairman: I am putting the facts that have been given to the Committee in its briefing. Come back to us on it because this is what has been presented to us.

Mr Hillage: You have to wait until the applicants turn into people who turn up and survive three or four years of a university education—remember, this is just one group—and see whether they manage to finance their education successfully and their fears are not realised. Prior to the changes that have taken place the people who were most worried about financing their time at university were those who ended up with the greatest difficulties. They had a higher level of debt or expenditure at the end of it.

Q224 Chairman: But it is of interest to us sitting here, because one or two years ago when we conducted an inquiry into this people of your quality told us it would be the end of the civilised world as we knew it because variable fees would mean that working-class kids would not be going to university.

Mr Hillage: I am all in favour of variable fees and I do not have a worry about it.

Q225 Chairman: I am just trying to tease out from Mr Elias and others what their view is.

Mr Hillage: My view is that it is too soon to say.

Ms Vignoles: I disagree that fees would be an issue. The evidence suggests that most pupils regardless of socio-economic background who are adequately qualified to go to university on the conventional measures do so. From the research that we have done, it seems that the problem is in the schools with lack of achievement and perhaps aspiration; it is not to do with whether or not fees are charged. We had 20 or 30 years of no fees and a massive expansion. The relative position of socio-economic groups did not radically change, so that would appear to prove the point.

Q226 Paul Holmes: I think the Chairman has just illustrated that the piece of research he likes shows one thing and research that others like shows the opposite, and that is what my question is about. About half an hour ago Mr Gilleard said that in terms of student experience the aspect that he would most like to change is the advice given to students before they go to university, because one third of graduates say that they do not believe they have undertaken the right course. But earlier this afternoon we heard that according to the national student survey 80 to 90% of third-year students were very happy with what they were doing. How can one survey say that 80 to 90% are very happy but you say that 33% believe they have done the wrong thing?

Mr Gilleard: One could still be reasonably happy with the experience having studied the wrong degree. The CIPD survey went on to say that what they would have changed would be the introduction of business studies. Because they are graduates maybe this is a survey when they are trying to market the degrees they have rather than reflecting on their experience at university. I did not say I thought that was the number one thing to change. I had a shopping list of several items, but I do feel with a passion that when an employer has a graduate trainee for, on average, three to four years he will spend an enormous amount of time, money and expertise in selecting the right candidate, but when it comes to going to university there are many students who get onto courses without any contact with the institution. It makes me wonder why we do not have a higher drop-out rate. Incidentally, I am not altogether against drop-out rates as long as it does not mean the end of the road and people come back. I think that is part of the answer to changing access for people from disadvantaged groups who traditionally have not gone to university. What is wrong with them going to work first and being encouraged by their employers to go to university, which was exactly what happened to me? Together with the graduates to employment unit at the University of Liverpool we produced a publication called If Only I'd Known. My main contribution to that publication was the title. When I went into graduate recruitment in 1989 I thought I had the easiest job going. These were intelligent, welleducated and mature individuals. They would know what they wanted to do. The number of graduates I

saw face-to-face who said, "If only I'd known that I would have done something about it", ran into hundreds. It is not so much that they have not been told; it has not registered because they do not see the relevance of it. When one is 16 or 17 and one is told by someone like me, "It's time you started to think what you might be doing at 21 or 22", one cannot visualise it at all. The system-the school and then university-has to encourage them and take them down that route. I believe that potentially there is a growing problem here. I started to do some work to understand generation *v*, that is, the next generation of young people going through higher education and into the labour market. I believe that employers will have a really big job to match the aspirations of those young people to the careers and prospects they can offer them. I believe that the same issue is beginning to arise in universities. The most negative thing I will say today is that we have placed a lot of emphasis on the experience at university and developing the employability of individuals. I think that we have persuaded the institutions that that is important; employers have always felt that it is important, but I am not sure that we have convinced students of its importance.

Q227 Mr Chaytor: I return to the question of skills and productivity. If 25% of the productivity differential between the UK and France, Germany and the United States is explained by skills what proportion of it can be attributed to the deficit in graduate level skills and what proportion to the deficit in intermediate level skills?

Mr Mayhew: The way that the econometrics is done in the particular study to which you refer would not allow you to distinguish between the different levels. One should also say that not everybody necessarily believes that the 25% is God-given and can necessarily be trusted.

Q228 Mr Chaytor: Does anybody believe the figure for the productivity gap?

Mr Mayhew: I think people believe that figure, but there is an issue about what any incremental change to any bit of the educational system will do to close that gap. As to where there is most agreement, successive governments have pulled a lot of levers and there has been some improvement in productivity performance, but there is still a gap. I suspect that most of the profession would argue that now the gap is probably due to capital investment and infrastructure investment.

Ms Vignoles: I believe that Leitch's emphasis on benchmarking partly reflected the attempt to put together the international comparisons of skills with information on productivity gaps, because logically if we just looked at our international standing at various skill levels we would say that to a large extent the problem was at the intermediate rather than graduate level. But lots of countries in the OECD have much more rapid rates of growth in HE participation than we have. A number of countries have overtaken us. We have lost the lead position

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that we had in 2000, so if we stopped expansion now we might then say that graduate skills would explain part of that differential.

Mr Mayhew: But what the league tables also remind us of is that different countries produce Level 3 and Level 4 skills in different bits of their own national systems, and that becomes very relevant for Britain where I suspect we shall be producing more Level 3 skills in our higher education sector than historically. There is then the issue, in my view, as to whether that is the efficient place to produce them unless we change the nature of some higher education institutions.

Mr Elias: I think this takes us back to a point I made right at the beginning. We must not lose sight of our higher education sector as an exporter of higher education. That is very important. My university has the highest proportion of students from mainland China of any UK university. On the whole, nearly all of these students are going back to their homes following their education and contributing significantly to economic growth in their country. But it is more than just economic growth: they contribute to the spread of knowledge about English culture, society and so on. We must not focus too much on the whole issue of productivity. It is a complex issue and let us not lose sight of the international trends that are taking place.

Q229 Chairman: Nobody has really talked about the different markets for graduate skills. Are small and medium-size companies as employers better at using graduates than the bigger ones? Is there any research on it? There must be more graduates going into small and medium-size companies than there were. Are they better used there? Do they add to greater productivity?

Mr Hillage: Small and medium-size enterprises cover such a wide field. The word of the afternoon is "heterogeneity", but this is an enormously wide group. One has professional and medium-size high-tech companies which will use graduates better or as well as any large company. But a large number of

graduates end up in small and medium-size enterprises and the employers do not know they are graduates, at least to start with.

Mr Elias: There are many graduates in small and medium-size companies which are part of much larger organisations, and that is the way the situation has changed. That itself is very important. We have looked specifically at graduates who have said they entered self-employment at some stage in the three or four years following graduation. These numbers are small despite all the efforts of universities to try to stimulate entrepreneurial skills in particular, but it seems that essentially they fall into two groups: those who are moving into professionalised areas where self-employment is the norm, which may be in medical services-dentistry whatever-and those who choose selfor employment because it either fits in with what they want or it is an alternative to being unemployed. Often those are craft and low-paid jobs. We see a big split between those who are on very high salaries working in finance, software provision, medical services and so on and those who work more in subjects associated with the arts and humanities which are very low paid. When one looks at those two groups and asks about their job satisfaction one finds very little difference between them in terms of job satisfaction.

Q230 Chairman: Do any of the witnesses want a last word before we wrap up this session?

Mr Mayhew: I make one plea and echo something said earlier. If we hit a 50% participation rate and graduates go into a range of jobs which historically they would not have gone into—there is an issue about how well they are utilised and whether they do the job any better as a result of being graduates—the really important question is: what happens to the 50% who do not go into higher education, particularly if this class bias remains?

Chairman: Keep in touch with us. It will take some time to collect all the evidence, and we want to make this a good inquiry. I can tell you that none of the Chairman's prejudices will dominate it. Thank you.

Monday 26 February 2007

Members present

Mr Barry Sheerman, in the Chair

Mr Douglas Carswell Mr David Chaytor Jeff Ennis Paul Holmes Helen Jones Fiona Mactaggart Mr Gordon Marsden Mr Andrew Pelling Stephen Williams Mr Rob Wilson

Memorandum submitted by Professor David Latchman, Master of Birkbeck College, University of London

EXECUTIVE SUMMARY

1. Birkbeck is the leading provider of part-time face-to-face courses in the London area; some 20,000 students are enrolled with the College each year. Nationally part-time students account for 40% of the UK student population. Part-time provision plays a significant part in meeting government objectives, particularly the updating of skills in support of economic development.

2. The present funding system for higher education discriminates against universities that specialise in teaching part-time students. The additional resources available to the full-time sector following the introduction of £3,000 variable fees, made possible by the Higher Education Act 2004, have not been matched by any comparable resources for the part-time sector.

3. As a consequence, universities specialising in part-time provision have a lower level of financial resources available to them even though their operating costs are recognised as being higher than the rest of the sector. This problem will worsen rapidly should the cap on variable fees be lifted following the review in 2009. If no action is taken to ensure that the costs of part-time provision are met, it will become unsustainable for Birkbeck to continue as a specialist provider of part-time higher education.

4. A series of measures is urgently required to ensure that universities specialising in part-time provision have the resources available to ensure their long-term sustainability. These include:

- making use of full economic costing in determining the allocation of teaching funds to recognise the higher cost of part-time provision;
- ensuring that the funding allocation is responsive to the flexible and modular patterns of study followed by part-time students; and
- the funding method recognises the limited scope for increasing part-time fee rates as a means of closing the funding gap.

5. The structure of student financial support for part-time students should be reviewed and a system introduced that eliminates the disparity of provision between full and part-time students.

THE AUTHOR

6. Professor David Latchman became Master of Birkbeck in January 2003. Prior to that he was Dean of the Institute of Child Health and has published extensively in the field of genetics and molecular biology.

SUBMISSION FROM BIRKBECK COLLEGE

Birkbeck and part-time higher education

7. Birkbeck fills a unique role in Higher Education. Its mission is to provide part-time HE courses which meet the changing educational, cultural, personal and career needs of adults; in particular those who live and work in the London region. It is the only UK university multi-faculty institution to specialise in part-time courses that are taught face to face in the evenings. It is the largest provider of this mode of part-time higher education in the London area. Birkbeck offers a flexible model for learning that is highly appropriate to the needs of working men and women who can remain in full-time employment while following their studies. In 2006–07 some 20,000 students are enrolled with the College, 97% of which study part-time. In the 2006 National Student Survey Birkbeck was ranked as the top university in London, with the third highest score nationally, for overall student satisfaction.

8. The College continues to develop to meet the changing needs of London, and in 2006 it has embarked on two major projects both of which will bring long-term benefits to the region.

9. Firstly, Birkbeck is leading the HEFCE-funded "Linking London Lifelong Learning Network", a partnership of 27 HE and FE institutions in Greater London. The partnership is committed to increasing learning opportunities for both full- and part-time students by developing new programmes that facilitate progression (eg between FE and HE, or between different universities), and by increasing vocational learning both at college or university and in the workplace.

10. Secondly, Birkbeck is launching a major initiative to extend part-time learning opportunities in East London. Working in partnership with the University of East London, Birkbeck plans to offer at least 2,000 additional part-time study places by 2012. The initiative is to be supported by a major campus development to be built at Stratford, at a cost of £18 million, which will serve the communities of East London and the Thames Gateway region. £4 million capital funding is being provided by HEFCE but the majority of funds for the campus development will need to be raised by the College. The project underlines the College's long-term commitment to the future of higher education for London.

11. Part-time students account for over 40% of all higher education students in the United Kingdom. The part-time mode of attendance is recognised as an effective means of widening participation. Those in employment or with family commitments who otherwise would not have the time to study are drawn to the part-time route because of its convenience and flexibility. For many, it is the only practical way in which they can embark on studies to acquire new skills and develop their careers. As Professor Eric Hobsbawm, President of Birkbeck, recently wrote: "part-time higher education will become increasingly central to national life, as the sheer amount of knowledge which all but the simplest work in modern economies require, keeps growing".

12. The part-time sector is therefore ideally placed to respond to the recommendations contained in the Leitch Review of Skills (2006). The report recognises higher education's role in extending skills training to encompass the whole working-age population. Birkbeck, an institution that is dedicated to adult education, is committed to the long-term support of the skills agenda. A properly resourced part-time sector is one of the critical factors needed to achieve the vision described in the Leitch report.

Current Shape of the Part-time Sector

13. Our main concern is that the present funding system discriminates against universities that specialise in teaching part-time students. The situation has been exacerbated since the recent introduction of variable fees. While this measure has helped put the full-time sector on a firmer financial footing, no comparable steps have been taken to assist the specialist providers of part-time courses.

14. The 2006 report by Universities UK^1 into Part-time students provides ample evidence of the problems faced by the part-time sector. It draws attention to the potential fragility of the market for part-time higher education, its high sensitivity to price, the inadequacy of public support packages for part-time students, and the need for a better appreciation by government and the funding agencies of the true cost of part-time provision. All of these factors are contributing to the problems faced by institutions such as Birkbeck in maintaining a high quality, bespoke service for part-time students.

15. At the time that the Higher Education Bill was under consideration by Parliament in 2004, the Government gave specific undertakings that Birkbeck and the Open University, the two specialist providers of Part-time HE in the UK, would not be disadvantaged as a consequence of changes to the funding system following this legislation. Birkbeck would contend that it has indeed been placed at a serious disadvantage in relation to the sector at large. Conspicuously the Higher Education Act failed to provide those institutions largely reliant on part-time students for their income with the means to generate equivalent additional income to match that enjoyed by universities now able to charge £3,000 for undergraduate students studying full-time. Nor did it legislate for an equivalent scheme for the financial support of part-time students comparable to that provided to full-time students.

16. This disparity could lead to the long-term decline in part-time provision, given the lack of financial incentive for universities to offer part-time courses. Universities will be more likely to close part-time courses and divert resources into full-time provision. Instead, part-time provision needs to be actively encouraged by government.

17. It is clearly in the public interest to maintain a stable part-time sector within higher education. However, our view is that the present funding system is not fit for purpose and is failing to provide an equitable level of resource to specialist institutions such as Birkbeck. There is a strong case for reviewing the structures used to allocate block grant funding for part-time students and for the distribution of bursary support to the students themselves.

18. There are three specific areas that we would like to bring to the attention of the Committee:

- the impact of variable tuition fees;
- the review of the HEFCE funding model; and
- financial support for part-time students.

¹ Part-time students in higher education—supporting higher-level skills and lifelong learning, Universities UK, October 2006.

Impact of variable tuition fees

19. Birkbeck is almost wholly dependent for its fee income on part-time students. It therefore derives no income from the variable fees structure in which the majority of full-time students now pay £3,000 per annum. The Universities UK (UUK) report found substantial evidence of price sensitivity amongst students in terms of how much they are willing to pay for a part-time undergraduate degree course. This is a major constraint on our ability to charge fees comparable to the FT sector.

20. Universities UK surveyed 2,500 PT students and found that the optimum part-time UG fee would be £600, which equates to £1,200 per full-time equivalent. Birkbeck in 2006–07 charges £1,125 per undergraduate degree student, which equates to £1,496 per full-time equivalent. Birkbeck therefore already charges fees at the top end of the range of what is affordable. Moreover, £1,125 is the top limit of available statutory fees support for students studying at 0.75 of a full-time equivalent, and this is a further constraint against charging higher fees.

21. To generate the levels of fee income now permissable in the full-time sector Birkbeck would need to charge fees of £2,250 (pro rata to a full time fee of £3,000 pa) to its undergraduates. Both UUK's and our own market research tells us that this is not a feasible proposition. The consequence of charging at this rate would be effectively to put our courses out of the reach of all but a minority of students, with the probable consequence of the collapse of the market in part-time undergraduate courses.

22. Despite its efforts the College faces an unavoidable and damaging shortfall in fee income when compared to a typical institution charging the £3,000 fee. We estimate that Birkbeck will lose up to £3.7 million per annum (at current rates) in lost revenue by 2008–09 through not being able to charge fees pro rata to the full-time sector. If the £3,000 cap on fees is lifted after 2009 then the funding gap between Birkbeck and the rest of the sector can be expected to widen to such an extent that the College will no longer be able to compete on an equitable basis.

23. The disparity between the fee revenue that can be earned in the full-time HE sector compared to what the market will bear in the part-time sector is inequitable and poses a major threat to the long-term sustainability of Birkbeck. The College faces the same if not greater (due to the specialist nature of adult education) running costs as any other university. In common with the sector Birkbeck is implementing the national framework agreement for the modernisation of pay. Staff costs are projected to increase by a net \pounds 3.5 million between 2005–06 and 2006–07. By cautiously adjusting fee rates and the temporary deferral of long-term maintenance expenditure, the College will recover £1.5 million of this amount, leaving a £2 million per annum shortfall which at present can only be covered by deferral of expenditure and budget cutbacks.

24. A solution to this dilemma would be to recognise the practical limits of revenue that can reasonably be generated directly from part-time students and ensure that some form of targeted support is made available through, for instance, the HEFCE funding model.

REVIEW OF THE HEFCE FUNDING MODEL FOR TEACHING

25. HEFCE is in the process of reviewing the formula funding method for allocating the block grant for teaching, and the new allocation method is due to be introduced from 2008–09. While Birkbeck is supportive of the proposals that have been announced so far by HEFCE, the proof will be whether the model does indeed successfully target resources with much greater precision to high cost activities, such as the provision of part-time courses. It is clear that the present allocation model fails to recognise fully the high cost of specialist part-time provision.

26. Research commissioned by HEFCE from JM Consulting indicates that part-time higher education is significantly more expensive to offer, due to its complexity of provision, than conventional full-time activities. The research findings demonstrated that the actual costs of part-time provision carried an overhead premium in the range +20% to +44% per FTE student above the cost of conventional full-time teaching. HEFCE, in the current formula, allocate a 10% premium for part-time students. The targeted allocation of grant funds should reflect more closely actual costs. In this context the introduction of a costbased approach to funding (using TRAC) is to be welcomed.

27. A further enhancement to the model that deserves support is the proposal to allocate funding on the basis of credits awarded to students who enrol on a modular basis. Part-time students expect to be able to study at a speed and level of intensity that fits their personal circumstances. The funding system should, within reason, support the inherent flexibility of student choice that underlies all successful part-time provision.

28. HEFCE has indicated that premium funding for specialist activities will in future be allocated separately to the calculation of the recurrent grant. This distinction should enable an institution in future to receive the full benefit of any premium funds, instead of seeing their value substantially eroded as happens under the present all-inclusive method of allocation. This measure alone could help to incentivise universities to offer more opportunities for part-time study, which would support national priorities for widening participation.

29. Conversely the decision by the HEFCE Board in November 2006 to maintain the existing levels of fee assumptions, (currently set at £1,200 for FT students), and to not adjust them before 2009, is especially harmful to Birkbeck. The vast majority of Universities are now introducing £3,000 fees for their full-time undergraduates. It is logical that the setting of fee assumptions as employed in the formula allocation of public funds should reflect this change. If HEFCE were to make this adjustment the few institutions dependent upon fees set at relatively low levels (due to lack of Government financial support and consequent market constraints) would automatically receive additional block teaching funds to make up for their comparatively low fee income.

30. HEFCE has modelled revised fee assumptions and they demonstrate that Birkbeck would receive up to an additional $\pounds 2.7$ million in recurrent grant if the assumptions were adjusted to reflect the actual fees being charged across the sector. This in itself would do much to alleviate the funding shortfall we face at the present time, cited in paragraph 22.

31. The decision by HEFCE to adopt a "wait and see" stance over the next three years before revising the methodology is damaging to Birkbeck. The College is effectively denied the additional resource brought in by charging undergraduate fees at \pounds 3,000, with the result that a funding gap is now opening up between the providers of full-time and part-time education. Moreover, this decision raises doubts as to when or even whether the other potentially beneficial changes to the funding system will be implemented.

Financial support for part-time students

32. Provision of adequate financial support to part-time students is essential to the future sustainability of the PT sector. At present the allocation of resources is weighted heavily towards the full-time student, despite the fact that part-time students account for 40% of all HE students. The Universities UK report makes a strong case for reform of the present support arrangements for part-times. UUK's survey of 2,500 part-time students found that 77% of the sample was ineligible for a course or fee grant, the main sources of student support to which part-time students are entitled. Part-time students often find they are ineligible for support because either they are studying for less than 50% of a full-time course, or they already have a higher education qualification, or their household income exceed the eligibility threshold. This is in contrast to the Full-time sector where there is a much greater expectation that students can be given some help towards the cost of study.

33. As the UUK report makes clear, the reason why a part-time student is ineligible for public support often has nothing to do with their economic circumstance but relates to whether the student is studying for less than 50% of a full-time course or the student already has an HE qualification. This pattern is reflected at Birkbeck where 28% of our undergraduate degree students are in receipt of support towards their fee or course costs. Moreover, almost all of the College's 12,000 continuing education (non-degree) are ineligible for statutory support.

34. A particular problem is that the eligibility criteria for fees grants are much too restrictive. The threshold at which students become ineligible for a statutory award towards their fees and course expenses is currently set too low. For example, a single student with a household income in excess of £23,145 is not eligible for any statutory support at all. For students earning between £15,000 and £23,000 there is only partial grant support available which means that the College has to "top up" grant support. These restrictions are a major disincentive for many people living on relatively low incomes who find that the cost of higher education is beyond their means.

35. The Dearing Report in 1997 concluded that a student support system should underpin lifelong learning by making the choices between full and part-time study financially neutral. This is not the case with the present arrangements. We recommend that a review of financial support for part-time students be undertaken as a high priority.

SUMMARY OF RECOMMENDATIONS

36. The review by HEFCE of the teaching funding method should take account of the full economic cost of specialist part-time taught provision and target funding in such a way as to reflect that cost.

37. HEFCE should ensure that funding allocations are more responsive to the flexible nature of part-time study by calculating block grant allocations with reference to the data that records the credits awarded to students studying on a modular basis.

38. The HEFCE funding method should recognise the difference in the fee rates that apply for full and part-time students and adjust fee assumptions accordingly.

39. The Government should undertake a review of the structure of student financial support for parttime students with the aim of removing barriers to part-time study and eliminating the disparity in support available to both full-time and part-time students.

40. These changes should be introduced urgently or interim support should be provided until they can be introduced so as to prevent lasting damage being done to the specialist part-time sector.

Memorandum submitted by The Open University (OU)

We believe that lifelong and skills-based learning will be the defining feature of higher education in the twenty-first century. We need to plan for a world in which continued learning and development, both structured and informal, will be of critical importance to individuals as they seek to accommodate and embrace change in their lives and work and in the world around them. This calls for two major developments.

First, HE must be made more accessible and flexible. Adults will want access to learning at times and in places that cause minimum disruption to their lives and work. They will look for flexible, modular courses with multiple entry and exit points and with opportunities for credit accumulation and transfer. The Open University has shown that supported open learning, that blends high quality, multi-media teaching materials with personal tutorial support, not only meets those needs effectively but does so in a way that combines high quality with large student numbers.

Not all institutions, however, are able to generate the high student numbers that make such methods costeffective. There is considerable scope, therefore, for collaboration and partnership in the development of study materials and delivery systems, of student support and staff development, and of national networks for credit transfer. A national programme of collaboration between the Open University and conventional universities has the potential to open up a new era of cost-effective expansion in higher education which is capable of supporting lifelong learning in new, more accessible and more flexible ways.

Second, there is a need for a new system of institutional funding and student support that is appropriate to lifelong learning. The present system of resourcing, that funds full-time study more generously than part-time, is neither justified nor sustainable. We urgently need to find a stop-gap solution that restores parity of funding between full-time and part-time study until such time as improved arrangements can be made for the funding of higher education overall. Only then will lifelong learning for all become a practical reality.

INTRODUCTION

1. The Open University warmly welcomes this inquiry into the purposes, funding and structure of higher education, not least because it enables the public debate on higher education to move beyond recent preoccupations with full-time undergraduates at conventional universities to a more expansive view of lifelong learning. As a university that operates within this broader sphere of education, we believe we have a very specific contribution to make to this broader debate and thus to this inquiry.

2. In the submission that follows, we have focussed our attention on the linked lifelong learning and skills agendas believing that submissions from conventional universities and from bodies representative of higher education will cover issues more pertinent to younger students following full-time degree programmes.

THE ROLE OF UNIVERSITIES OVER THE NEXT 5 TO 10 YEARS

The Aims and Purposes of Higher Education

3. The objectives established by the Robbins Committee in 1963 have stood the test of time. However, the world has changed since then and those objectives need to be interpreted for a new environment. The knowledge and skills acquired by young people during an initial period of higher can no longer prepare them for a lifetime of work. The pace of economic and technological change is now so rapid, and the move towards knowledge and skills-based jobs so pervasive, that everyone will need to update and extend their skills and knowledge, and adapt to change, throughout their working lives. This is especially the case in an ageing work force where skills cannot be replenished solely from intakes of newly-qualified young persons and where the task of re-skilling will consume a lengthening period of the lifecourse.

4. Greater numbers of graduates will now wish to re-enter higher education for updating, broadening, and specialist courses and will do so more frequently. Many non-graduates will wish to enter HE late in life, often with support from employers, in order to develop their skills and experience and acquire recognised qualifications. This is already happening. Just over half of all entrants to HE are now mature students and more than half of all students study part-time. The Leitch report, in shifting the HE target away from the participation rate of 18–30-year-olds to the level of qualifications possessed by the workforce as a whole, marks a decisive shift of emphasis towards the education over the working life. This new emphasis on lifelong learning and training gives a vital added dimension to university teaching which was only dimly perceived when Robbins wrote. It is important that this new role be urgently recognised and built into the core activities of HE institutions.

The Changing Nature of Demand

5. In future, universities will need to cater for a broader, more diverse student body. Many students will not have the traditional qualifications for entry. They will want access to local provision at times which cause minimum disruption to their life and work. They will seize on the new knowledge media as a means by which they can construct their own learning programmes at times and in places that best suit them, using resources

from across the globe. They will look for flexible, modular programmes of study which offer opportunities to enter and leave at different points with credits that can be transferred between different modes and between institutions in different places. They will place greater emphasis on skills development, vocational relevance, and value for money. Certificate, diploma and short course opportunities are likely to be as sought after as degree courses. In short, there will be a blurring of the boundaries between education and training, between full-time and part-time study, and between institution, home and work-based learning.

The Role of Government

6. Government has a significant role to play in setting a policy framework for lifelong learning. Throughout the lifetime of the present Administration there has been an overriding target of achieving participation rates of 50% amongst those aged 18–30. But this is only half the story. There is a need, beyond that, to create capacity to update and reskill our existing "stock" of graduates and to offer HE opportunities to a larger proportion of non-graduates who are already in the workforce. The Government needs to take the steer from Leitch and formally embrace targets that seek to increase attainment levels across the whole of the adult population.

7. In addition, Government should seek not only to increase participation but also to widen participation. The removal of the social class gap amongst those entering higher education is as much a challenge for the over 30-year-olds as the under 30-year-olds. Traditional access courses have not proved universally attractive in attracting older students and there remains a need for good quality and accessible second chance routes to higher education, such as those provided by the Open University.

The Contribution of the Open University

8. The Open University is ready to play a leading role in the continuing growth and development of lifelong and skills-based learning. It is already equipped to deal with large numbers of learners. With 160,000 home students, it is the largest university in the UK, teaching 35% of all part-time undergraduates every year. Moreover, the OU's traditional concern for adult students, including those previously disadvantaged in the pursuit of higher education, enables it to make a particularly significant contribution to widening and increasing access for mature students. Nearly all of its students are aged 21 or over—the median age of new students is 32; three-quarters are in employment; one-third have educational qualifications below A level standard on entry; 17% qualify for financial assistance; and 10% are from minority ethnic backgrounds.

9. The University's distinctive provision of supported, open learning, now incorporating new learning technologies as integral elements of the learning experience, enable it to respond flexibly and effectively to the demands of an increasingly diverse studentship. The University offers courses across the full range of academic subject areas (other then medicine and the built environment): it is currently expanding its provision in continuing professional development and it is developing new pathways for work-related learning. And the OU deploys leading-edge information technology to deliver its curriculum. All courses have optional or compulsory online activities and from January 2007 all students will be supported in accessing the University's curriculum and support services online. In all this, individualised student support, whether delivered face-to-face or online, remains fundamental to OU teaching and to student success.

10. Finally, the University is the most cost-effective vehicle in public expenditure terms for delivering the looked-for expansion of lifelong and skills-based learning. Part-time students make smaller demands on the public purse than full-time students and they generate more income to the Treasury through income tax and national insurance contributions. Our calculations, based on our students' income levels, show that part-time students are net contributors to the public purse (contributing on average £6,400 per FTE) whereas full-time students are net consumers of public funds (consuming about £4,700 per FTE). In addition, part-time students and particularly distance learning students create a substantially lower environmental impact than those studying on campus. For the most part they do not need additional housing and educational facilities and their travel demands are substantially lower.

11. At the same time, the quality of Open University teaching is amongst the best in the UK. The OU received the highest rating for overall student satisfaction in the 2005 and 2006 National Student Surveys. Furthermore, 17 of the 24 subject areas assessed by the Quality Assurance Agency for the quality of teaching have been placed in the excellent category, putting the OU amongst the top five institutions in the UK. In addition, the OU is only one of two universities in England to have been given the leadership of four Centres of Excellence in Teaching and Learning by the Higher Education Funding Council for England.

Research and Scholarship

12. Research and scholarship are vitally important in fulfilling the academic and educational objectives of universities. The reasons are well rehearsed—the beneficial interplay between research and teaching, the recruitment of high quality academic staff, the contribution to the national research effort, and the national and international standing of UK universities. Research outputs not only make a major contribution to the intellectual currency of a discipline but also focus upon key issues affecting the social, political and geographical well-being of individuals, communities, cultures and nations.

13. For the Open University, research is also an essential part of the activities of academic staff involved in the preparation of high quality distance learning materials. Our teaching materials are in the public domain in a way that teaching in other universities is not, and so must be demonstrably authoritative, up to date, written by authors who are recognised as fully conversant with their field and able to withstand rigorous critical scrutiny. There are advantages, too, to the transfer of knowledge and innovation to the wider community. Leading researchers are able to reach much larger numbers of people through The Open University, and through its partnership with the BBC, than would be possible in more conventional institutions.

14. In addition, The Open University offers a particular contribution as a provider of part-time routes into postgraduate research both here in the UK and overseas, through our support of key UK-managed laboratories abroad such as the Wellcome Trust and MRC research laboratories in Africa. The Open University has nearly 1,500 research students, half of whom are studying part-time. Many of these students would not have been able to access research opportunities without the unique framework provided by the Open University, either because they wished to combine work with study—many part-time students work in government laboratories, specialist industrial centres and/or small and medium sized enterprises—or because they do not have access to local centres of research excellence.

15. It is imperative that these nationally accessible routes into part-time postgraduate study, and the research capacity that underpins them, are recognised, protected and nurtured as key instruments in widening educational opportunity, building research capacity, and contributing to research, enterprise and wealth creation.

UNIVERSITY FUNDING

Fitness for Purpose and Principles for Funding

16. We welcome the steps that Government is taking to overhaul the system of funding for teaching and student support so that additional funds can be generated to support the enhancement and further development of higher education. We are very disappointed, however, that the new arrangements are concerned principally with the funding of full-time undergraduate study. They do very little to help learners wishing to study on a part-time basis, or institutions seeking resources to provide the sort of flexible, accessible and innovative programmes that part-time students require.

17. If lifelong learning is to become a reality, it is essential that we construct a funding framework that supports structured learning in all its forms. This means that we need to recognise that the distinction between initial and continuing education, between full-time and part-time study, and between campus, home and work-based learning is fast disappearing. A funding system that perpetuates these outdated and irrelevant distinctions is inappropriate to the needs of a learning society. It inhibits participation, constrains choice and precludes the creation of innovative programmes that combine part-time and full-time elements.

The Problem

18. The current situation can be simply stated. The new fees regime effectively generates over £1bn of extra funding for those English universities with full-time students but provides nothing for The Open University or for other universities seeking to provide for part-time students. As a result, units of resource for part-time teaching have fallen behind those available for full-time teaching even though we face the same cost pressures (on salaries and infrastructure) as other institutions.

19. The OU cannot charge the equivalent of £3,000 a year (ie £1,500 for a half-time course) and remain "Open". Our market research shows that and the recent UUK research backs it up (see UUK Policy Briefing, *Part-time students in higher education—supporting high-level skills and lifelong learning*, 2006, paras 3.8, 3.12 and 4.10).

20. Recent improvements in the financial support arrangements for part-time students have, of course, eased the situation. The Government has increased the level of means-tested fee support available to English-domiciled students studying 60 points or more to £750 in 2006–07. The DfES and HEFCE have also improved the support available to poor and vulnerable students by increasing the Access to Learning Fund and the Widening Participation premium. These changes have enabled us to raise our fee levels by an average of 7% in 2006–07 and to plan for a similar increase in 2007–08. We intend to increase the average fee for a 60 point course to the maximum fee support level by 2008–09 or thereabouts. We believe this to be in line with DfES and HEFCE expectations. Indeed, for us too, it has become an economic imperative.

21. Nevertheless, this is a high risk strategy. The most vulnerable students will receive some degree of protection from the enhanced fee and study grants (providing they are studying 60 credits or more and do not already have a degree) but the vast majority of students will receive none. Every piece of market research that we have undertaken, and that UUK has commissioned, suggests that part-time students are price sensitive and that further increases in fee levels will reduce numbers. And, though further research needs to be undertaken, employer support of part-time undergraduate study is minimal—at the OU only 17% of students receive any help from employers.

22. But even if our strategy is successful, we shall only by 2009 have got to the point of generating half the fee income that full-time providers can generate today for an FTE student. If HEFCE funding per student remains as it is now (ie with no distinction made between full-time and part-time students, other than through the part-time premium) the unit of resource per student will be significantly greater for full-time study than for part-time. There is no logical rationale for introducing such a differential and there is no reason for maintaining it. It is an unintended consequence of the HE Act and it needs to be put right straightaway.

23. Over the six years ending July 2009 the adverse effect on The Open University of the differential treatment of full- and part-time study is in the region of ± 55 million; in 2008–09 alone it is about ± 26 million. This shortfall arises not only from increases in full-time fee levels, but also from earlier changes in HEFCE's assumptions on part-time fee levels. These figures would have been much higher if The Open University had not consistently increased fees by more than double inflation over the six year period.

The Solution

24. What then is to be done to restore parity of resource between part-time and full-time students? There are three potential solutions.

Student Support

25. The first is to extend to part-time undergraduate students in England the same sort of facilities to defer or extend repayment of their tuition fees as are available to full-time students and the same pro-rata levels of fee and grant support for students on low incomes. This will enable universities in England to increase their fees for part-time students and thus to increase their unit of resource for teaching part-time students. However, the Secretary of State for Education has already ruled this out. And mature part-time students will, in any case, take a different view of fee loans from young, full-time students who expect to recoup their investment over a lifetime of work. It remains to be seen whether the Individual Learner Accounts recommended in the Leitch report will find favour with Government or, if they do, prove attractive to learners. In either event they are unlikely to be introduced before 2010.

Employer Support

26. The second is to encourage employers to invest more in the development of their workforces. We note the emphasis in Leitch on additional employer support for skills training, but we note that current levels of support fall significantly short of need. Recently published UUK research on part-time study reveals that employer support helps mainly full-time workers from the wealthiest households taking vocational courses. Our own data shows that only 17% of our undergraduate students receive any contribution from employers towards fees.

Institutional Grant

27. The third option is to increase the unit of funding that universities receive for part-time students from HEFCE. This would enable the funding council to bring the unit of resource for part-time students to the same (equivalent) level as for full-time students, taking fees and grant together. We hope that this will be one outcome of HEFCE's current review of teaching funding. However, there is no certainty that this will be the outcome. And such a change would not take effect until 2009 at the earliest.

Interim Solution

28. We therefore need to find a stop-gap solution until such time as improved arrangements can be made for the funding of part-time study. The HEFCE could provide such a measure under the current funding method by introducing an institution-specific allocation to direct additional funding to those institutions with large proportions of part-time undergraduate students such as The Open University, Birkbeck College and other (smaller) institutions with more than 90% of their undergraduate students in part-time mode. If these institutions were to receive the same benefit from increased funding as other English institutions are likely to receive from full-time fee increases, the additional funding required would come to less than £20 million in 2007 and no more than £55 million per annum in 2009.

29. This is not an ideal or long term solution but it restores equity in the short term and it enables us to invest for the medium term. And it honours commitments made to the OU that there would be an improved package of support for part-time study by 2007–08. We believe the OU has much to contribute to national priorities around lifelong learning and widening participation, skills development and employer-led learning but it needs to be funded appropriately to do it.

THE STRUCTURE OF THE HE SECTOR

The Pattern of Institutions

30. The UK has a strong and diverse system of higher education which should be valued and safeguarded. Diversity of mission and provision enables a wide spectrum of demands to be met in a multitude of different ways. It encourages flexibility, responsiveness and change. It militates against uniformity of thought and action and the tyranny of central planning.

31. It is not necessary—indeed, it may be counter-productive—to force institutions into a number of broadly defined typologies for funding purposes. It is important that institutions are able to compete on fair and equal terms for public funds. There must be a level playing field. A funding method that attempts to discriminate between one sort of institution and another, and favours one above the other, does not produce equity and introduces an unacceptably large element of central planning and control.

Collaboration and Flexible Learning

32. Open learning and the new knowledge media will be of critical importance to the development of higher education over the next few years as institutions look to more flexible and effective ways of accommodating the growing demand for lifelong learning. The Open University has just launched "Openlearn", the first of the second-generation open educational resource projects, funded by the William and Flora Hewlett Foundation. This will make available a broad sample of curriculum and learning support tools free of charge to national and worldwide learners. This experiment has the capacity to make a profound impact on raising aspirations for learning amongst the socially excluded, and amongst the large under-skilled population identified in the Leitch Report.

33. Nevertheless, the use of new technologies for learning and teaching is still at a developmental stage and investment in the development of high quality materials and in the creation of an IT infrastructure is substantial. Not all institutions are able to generate the resources or the high student numbers that make such methods cost-effective. The OU, by contrast, has substantial experience and expertise in this area and is of a size to make resource-based learning more cost-effective than other teaching methods. What it lacks are the staff and resources to provide an extensive curriculum in all subjects.

34. There is considerable scope, therefore, for collaboration and partnership in the development of open learning materials and systems and of curricula to support lifelong and skills-based learning. And there is a critical opportunity now for developing an ambitious programme of open educational resources and other learning technology which grows from within the sector rather than being developed outside it as in the failed UKeU initiative. A broadly-based national initiative supported by the OU could help to provide strategic direction and coherence, the development of multi-purpose courses and materials to meet common needs, and the delivery of those courses through the OU (in distance learning mode) and through other institutions (in other modes). Such collaboration need not be confined to HE or even to the UK, but could draw in a range of institutions elsewhere in the UK and Europe, the Commonwealth, and the wider world with academics working through internet links as virtual course teams and with materials transported around the system in similar ways. Such an approach would transfer expertise (academic and pedagogic) around the sector, share costs, widen markets, and reduce duplication.

35. A national programme of collaboration between the Open University and conventional universities has the potential to open up a new era of cost-effective expansion in HE which is capable of supporting lifelong learning in new, more accessible and more flexible ways.

Bologna

36. The Open University supports the Bologna agenda. It notes however that the ambition to "enhance the mobility of students from the UK" (and between European countries more generally) is unlikely to be achieved whilst the emphasis remains on physical mobility. At present less than 1% of the UK student body takes part in the Erasmus exchange programme, and any foreseeable expansion of that scheme will leave the great majority of students lacking a European dimension to their studies. We strongly urge that the Government foregrounds the concept of virtual mobility as a means of radically increasing the integration of the European HE community. This would imply supporting the creation of on-line programmes, transnational advice and guidance, common credit systems, translation services, compatible learning platforms, which would enable students to move virtually across the rich and diverse learning resources of Europe. Only by this means can any serious progress be made to this crucial Bologna target by 2010.

December 2006

Further memorandum submitted by The Open University (OU)

IS THE CURRENT STRUCTURE OF HIGHER EDUCATION FIT FOR PURPOSE IN THE 21ST CENTURY?

Following its detailed submission to the Education and Skills Select Committee, The Open University would like to summarise its case as follows:

There are two fundamental drivers for change:

1. *Technology*. The information revolution has enabled the production, dissemination and exchange of knowledge to be immediate and global. This will have a profound structural effect on higher education. Students are now driving change, harnessing the technologies available to them in their quest for more education. They are escaping the confines of set curricula in their acquisition of knowledge and are moving outside the boundaries of their institutions in their creation of communities of interest.

2. *Scale.* An increasingly competitive, technologically sophisticated knowledge economy demands that a high proportion of the population acquires and maintains relatively high skill levels throughout their lives—a demand which cannot be met solely by the current bricks-and-mortar campus-based model of higher education. The Leitch Report (2006) quite rightly questions whether the conventional three-year degree can meet the volume or type of Level 4 skills training which the country now requires. We need to be able to respond much more rapidly and flexibly and we need to do so at scale.

These drivers for change require seven actions by higher education, Government and users working in partnership:

1. *Total Flexibility*. If students are to move freely between levels and modes of education over a working life, there must be simplified credit frameworks, effective credit transfer, and credit-based funding for universities. A radical re-appraisal of the way in which teaching funding is allocated to the sector is urgently required: HEFCE's decision to postpone consideration of a system of credit-based funding until 2009 at the earliest is disappointing. The Welsh HE Funding Council has already successfully moved to credit-based funding.

2. *World Class Quality*. The world-class skills referred to by the Leitch Report cannot be measured in volume alone, neither can they be guaranteed by the efficient expression of demand. The adoption of processes to maintain world-class quality in a complex media environment is critical. The Open University, top of both the National Student Surveys, has demonstrated how to combine quality, flexibility and scale.

3. Complete Equality of Funding. High quality leading edge educational technology delivered at scale requires investment. The 40% of higher education students who choose to study part-time receive a poorly resourced level of teaching compared with their full-time counterparts—an inequality ameliorated only in part by substitute funding subsequently made available to the part-time sector. This can only damage the system's ability to meet the requirements of Government and society in the new century. Parity of funding between full-time and part-time study is a necessity to enable lifelong learning to be a present reality rather than an unattainable aspiration.

4. *Large Scale Employer Engagement*. The levels of current employer support for part-time education are at present unknown and must be established. The potential of future employer support must be stimulated by genuine flexibility in university offerings, by active intervention by government, and by radical use of information technology.

5. *Imaginative Engagement with the Web.* The OU's Hewlett-funded leadership of the new generation of open education resources demonstrates how the old constraints of intellectual property can be broken down to promote cultures of learning across society. Given long-term public investment, free online learning materials and tools can provide a sustainable resource capable of transforming access to higher education.

6. *Increasing Erosion of Institutional Self Sufficiency*. The fundamental dilemma for UK, and especially English, higher education is how to respect university autonomy but avoid the increasing inefficiencies of independence, whether in shortage subjects or technological exchange. Given sufficient funding the OU/ HEFCE experiment to exploit the OU's unique scale and geographical coverage will create a national resource which the rest of the system can draw upon.

7. Greater Engagement with the Developing World. The OU feels strongly that UK higher education could play a much larger part in capacity-enhancement in Africa and other parts of the developing world, moving from the emphasis on the inward recruitment of the most able to a focus on enabling the delivery of local anti-poverty strategies through the scaleable, technically appropriate and cost-efficient provision of teacher training, health education, and other basic higher education services. The unique combination of UK expertise and materials will enable us to deliver this—with appropriate donor support.

February 2007

Witnesses: **Professor David Latchman**, Master of Birkbeck College, University of London, **Professor David Vincent**, Pro-Vice-Chancellor (Strategy, Planning and External Affairs), The Open University, and **Professor Claire Callender**, Professor of Social Policy, London South Bank University, gave evidence.

Q231 Chairman: It is a pleasure to have Professor Claire Callender, Professor David Vincent and Professor David Latchman here today on an area that is very interesting to us. As part of our review of university education we are very interested to know how part-time education fits in with the overall structure and system and that is what we are going to be asking you about today. I am going to ask David Latchman to start us off because, David, you came to see me privately expressing your concerns about the treatment of part-time students, and so you get two minutes to start and say why it is a concern. Is it a concern?

Professor Latchman: Yes, it is a concern.

Q232 Chairman: Are you special pleading?

Professor Latchman: No. it is not special pleading. First of all, thanks to the Committee for inviting us to talk about this issue. We face a very serious issue in this area and the issue, I think, arises from the dichotomy between the expectations of this sector of part-time education and, if you like, the resources that are provided for it. We have enormous expectations of this sector. Forty per cent of students are currently defined as studying part-time and that is something which has an enormous importance in an era of lifelong learning where we all talk about people developing their skills, changing their skills as they go through life and we have a government aspiration now for 40% of the workforce to have Level 4, university level, qualifications by 2020. That is only going to be achieved by individuals who are above the 18-21 age range, individuals who are in work, seeking work or seeking to change their work, studying at university. It is a given that this is an area where we really need to focus attention and where we really need to try and move forward. The dichotomy arises from the resourcing issues in that area and it arises in two ways, first of all in terms of the support that is provided to students, and secondly in terms of the support that is provided to the institutions that teach them, both the specialist institutions like the Open University and Birkbeck and the other institutions that have a mixed economy. Just to deal with those two points very briefly, in terms of resources part-time students continue to be less well off in terms of the support they receive. They have had improved support but it is still considerably less than is provided for full-time students. We know very well that there is a market limit on what fees we can charge for part-time and most institutions are at that limit already. Professor Callender's research has confirmed that, the UUK research has confirmed that, and that means that institutions with part-time students get on average 50% of the resource in terms of fees that they would get if they had the same level of full-time students. That is something which is damaging institutions because we have pay claims and changes in pay and conditions which are predicated on the increased fees in the full-time sector, and quite rightly predicated by the unions, and we want to pay our staff those increases. We are paying our staff those increases and we are running

a deficit because of that because we do not have the fees. On the other hand we have HEFCE support which we believe should compensate for those shortfalls. Not only does it not compensate for those shortfalls; it does not even pay the costs of our teaching those part-time students. HEFCE's own research says that it costs 20-40% more on a head count basis to teach part-time students because lots of these issues are not about full-time equivalents. Two half-time students cost more than a full-time student because they have to have registration, they have to have all the pastoral care, they have to have all those sorts of things, and yet we get a 10% premium compared to what we should get, a 20 or 40% premium. The problem is that this is vital for the future of education if we want to deliver upskilling. If we want people to be able to do the jobs that they are going to need to do we need to support this sector; it is going to be absolutely critical to provide that support.

Q233 Chairman: Professor Vincent, your Vice Chancellor has evaded coming in front of the Committee is it two or three times now? Has she got an aversion to coming in front of the Select Committee?

Professor Vincent: The Vice Chancellor is this day accepting an honorary degree in Pakistan by long arrangement and I think she has written to you to say that.

Q234 Chairman: She did miss the last time as well. *Professor Vincent:* I was here last time so I suppose that must be true, yes. She has, I think, expressed serious regret at not being here today but it was prearranged.

Q235 Chairman: As long as it is not an aversion. *Professor Vincent:* Not at all.

Q236 Chairman: Professor, you are swimming with money, are you not?

Professor Vincent: We are running a very small surplus by prudent management of our resources. We think that the loss to the OU against the full-time sector next year will be something like £15 million and £26 million the year after that. That is taking into account the award that has been made to support widening participation in part-time education and it is taking into account the practice we are now engaged in of increasing our fees at the OU by three times the rate of inflation, which is as far as we think we can go. Our case to you is very similar to that of David. The one stress I would put on it is that we would wish to tip the debate forwards away from the Higher Education Act and towards the kind of university system which the country needs five years out from now and then try to think through what kind of funding and what kinds of systems we need to get to that position five years out. We have drawn attention in our submission to the two main drivers of change, one of which is the changes in information technology which are going

to transform much of what universities do. The other is the Leitch agenda and elsewhere the continuing need to provide a scale of quality across the system, and we think that the funding arrangements that need to be put into place have got to permit complete flexibility and sustain worldclass quality in the system. We cannot do it just by counting degrees. We think it will need equality of funding. We are very concerned that we get more employer engagement into the system, that we are funded adequately to respond to the opportunities that the web is bringing to the system, that we can have a system which supports a move away from the tradition of institutional self-sufficiency which we think is hampering change in the system, and finally, and this is a point for the Open University particularly, that supports us in the work we can do in fulfilling the Commission for Africa agenda in the developing world and particularly in Africa.

Q237 Chairman: Thank you for that, Professor Vincent. Professor Callender, where are we in all this? You have done quite a lot of research for Universities UK on this. Is it a dire situation for part-time students?

Professor Callender: The current system has been put in place after some very important changes, and in that sense that is the first thing that needs to be stated, that prior to 1997 part-time students were getting no support whatsoever; now there is some support, but that support is limited and it is limited in several ways. First, it is limited because of the eligibility criteria for the two key sources of support, namely, for course costs and tuition costs. There is a very narrow definition used for what is part-time study and what is a part-time student. For these two key provisions only students who are studying over half a full-time course are eligible, and only students who do not already have a degree or a Level 4 qualification, and then both of these are means tested. What that means according to the study that we conducted for Universities UK, is that over three-quarters of all part-time students are not eligible for the two key sources of support, so there is a problem with eligibility. Our study is a bit different from other studies that the DfES has done, including by myself for the DfES, on part-time students. They are different because our study included all students irrespective of whether or not they are eligible for student support. We have the rather crazy situation that the largest studies on part-time students commissioned by the Department exclude those who are not eligible. So how can we evaluate the effectiveness of the student funding system if we exclude those who are excluded from the system? Returning to the current system, one is the problem about eligibility, that so many people are not eligible for anything, and amongst those people who are not eligible there are some groups who would be of interest in terms of both Leitch and Widening Participation, namely, those people who have no or low skills. They are one of the groups of people who are excluded by the current criteria. The second issue about the current funding mechanisms is the level and adequacy of the support available. There are

two things. For those lucky people who were eligible, we found that 58% of them had course costs that exceeded the maximum course grant, which is £250. Of the students we interviewed who were eligible, 58% of them were spending more on their course costs. What I mean by "course costs" is things like books, materials, things that are necessary in order to carry out their course. The other thing is to what extent does the tuition fee grant meet the average costs of tuition fees that the students we interviewed had to pay, and there we found that 28% of students were paying fees above the current level of fee grant. However, you have to remember that our study was conducted last year before there had been any changes in part-time fees, and colleagues here can talk about what they have done in this past year in relation to fees and whether or not they have put them up, so our figures are based on, for want of a better term, the charges for 2005 and consequently we will underestimate the proportion of students who do not get their full fees covered by the grants. I think those are the two key problems with the current main forms of student support, namely, course grants and tuition fee grants.

Chairman: Thank you for that, and thank you for your opening remarks.

Q238 Mr Wilson: Could you point the Committee to the evidence that it costs more to educate a part-time student than a full-time student? Where is the research for that?

Professor Latchman: I can answer that. That is in a report which JM Consulting produced for the Higher Education Funding Council in, I think, around 2003 which documented the increased costs for different intensities and different modes of study, whether it was part-time evening or part-time during the day.

Q239 Mr Wilson: Can I stay with you, Professor Latchman, in that Professor Vincent said that the Open University is currently in surplus? Is your college in surplus?

Professor Latchman: No. We estimate that the shortfall in terms of a fee income if we were to charge the equivalent of the full-time fee *pro rata* is around £3.7 million a year to us, and that is on a turnover which is around £60 million or £70 million so it is a rather substantial proportion. By good housekeeping and prudence and various other activities we have reduced that to a deficit which is somewhat under a million but not that much under a million.

Q240 Mr Wilson: Why do you think the Open University can produce a surplus at the moment but you cannot? What are the differences?

Professor Latchman: I would not wish to comment on the internal workings of the Open University but the Open University has an advantage of scale which certainly we do not have. I think the comparison is more with universities which have predominantly full-time students or a mixture of part-time and fulltime students. Those universities can pay the pay awards and the costs of the single transferable pay

scale, all of which were negotiated on the basis of increments that come out of their increased fee income and we clearly cannot because we are limited by the fee income.

Q241 Chairman: I am sorry to interrupt, but could you sit a little forward because you are so far from the microphone that some of us are not picking up what you are saying?

Professor Latchman: Just to summarise, the issue I think is that within universities that have predominantly full-time students or a mixture of part-time and full-time students the enhanced fee income coming from the increased fees then allows you to pay the changes in the pay structure which were negotiated by the unions on that basis and, just to follow that through, if I were in charge of a university which had a mixed part-time and full-time pattern I would be thinking very seriously about why I was doing part-time courses in the sense that the reward for full-time courses in terms of income and ability to give good facilities to the students is so much better.

Q242 Mr Wilson: You have argued, I think, that there should be a full economic costing and at the moment you get about 10% extra on top. In your opening remarks you said that it should be somewhere between 20 and 40% rather than 10%. Would that give you a surplus if you got 20-40%?

Professor Latchman: Yes. Just so the Committee has a feel for this, 10% of our teaching grant is around $\pounds 2$ million a year.

Q243 Mr Wilson: Could I move to Professor Callender? What is your evidence for, I think you said, the limited scope for part-time fees?

Professor Callender: This is based on a study we did for Universities UK covering over 2,500 students. We collected data on their fees. We then looked at whether or not they were eligible, and so this is all based on a large scale study that we conducted and that was funded by Universities UK.

Q244 Helen Jones: We constantly hear that the optimum fee for part-time students is about £600. Professor Latchman, perhaps you can tell us how that figure is arrived at. What is the research underpinning that?

Professor Latchman: I think I would prefer to pass that to Professor Callender because I believe she has done research in this area.

Q245 Chairman: Professor Latchman, can you answer whether you think that is right?

Professor Latchman: Yes, undoubtedly that is right and I do not think the market will bear more than that in terms of the students and in terms of the support available to students but I think the Committee would perhaps be better to hear the evidence that that is based on.

Q246 Helen Jones: Yes please.

Professor Callender: We did some price-sensitive modelling and we were trying to model what is the optimum price to maximise participation. What this model does is look at the interaction between the affordability and the quality of the course. This is gained from information from the survey which I mentioned of over 2,500 students. Basically what one does is plot the point at which a course becomes too expensive against the point at which a course would be so cheap that it would be believed to be of poor quality, and where those two points meet that is known as the optimum price. We found that the optimum price was about £600, that students were very price-sensitive and that indeed what we see, given the average fee in our study, and the average fee was about £820, is that higher education institutes have basically pitched their fees just above the optimum price. The real question is, if we go way above this optimum price of £600 what will happen to participation?

Q247 Helen Jones: Professor Vincent, does the Open University agree with that?

Professor Vincent: We have two lines of answering that. One is that we have been in this business for 30 and some years, of pricing our products to a market, unlike the rest of the sector. We have long experience of doing that through our own market research and we have conducted studies with 1,500 potential applicants using the van Westendorf method, which again has come up with more or less the same figure that Claire Callender's work has undertaken. The second way in which we know this is by testing the market with our prices. We have put up our prices by three times the rate of inflation this year and last year and our market has just about held up. As a consequence I think we will increase our market by about 0.6% this year and all the evidence that we are getting back from real life testing is that our price, which is just under £600 for a basic course, is about what the market will stand.

Q248 Helen Jones: Does that apply equally across all subjects or are there variations between subjects?

Professor Vincent: We have a range of prices. Some of our prices in some subjects, some quasiprofessional subjects, do go above $\pounds700$. The actual median price that we have is $\pounds700$ but the bulk of our students are on the lower price.

Q249 Helen Jones: Is that true of Birkbeck, Professor Latchman? Is it subject specific?

Professor Latchman: It is true of Birkbeck in certain areas, for example, for masters' courses in economics where there clearly are financial implications we charge a premium fee, but, interestingly there, you often have to pay market supplements to the staff in order to retain them against the competition of other institutions, so in a sense it balances very often.

Q250 Helen Jones: If I could follow on from that, you referred earlier to the "loss" that Birkbeck was bearing because they could not raise the fees *pro rata*

to the full-time fees. Do you believe there is any scope for raising fees at all and would that be then dependent on a much higher level of student support?

Professor Latchman: Like the Open University, we have raised our fees substantially in this current year from around £960 to £1,125, which is for a 75%course. That was done on the basis of the $\pounds 1.125$ which is the maximum that the poorest students can get in their fees, and that allowed us to just about maintain the student numbers with a slight dip in undergraduate numbers compensated by certificate increases, so I think there is not very much scope for increase unless we have a situation where the Government supports the poorest students in the paying of higher fees. I should say that to maintain this level of student numbers in the cases where students get partial support from the Government where their income is slightly above the threshold (it is still not very much) we actually top it up to the full government support using both donor funding and other government discretionary funding. Everything that we see says that this is very sensitive in terms of students deciding or not deciding and, of course, those who are the most sensitive are the most relevant to Widening Participation.

Q251 Helen Jones: It has been argued in some of the evidence put before this Committee that sole providers of part-time education like the OU and Birkbeck are able to make cost efficiency savings which those who provide a mix of full-time and part-time courses are not able to make. What is your response to that?

Professor Vincent: The answer is first that the kind of provision that the Open University makes is not just part-time; it is also distance and also heavily dependent on the very imaginative use of information technology and that is very expensive. Secondly, the full-time sector is better able than we are to cross-subsidise. They are able to fund much of their staff, much of their infrastructure, much of their plant through the fee income from full-time students and then run their part-time business on a marginal basis. We cannot do that.

Professor Latchman: From Birkbeck's point of view, for mixed economy universities, full-time and parttime, the logic is that it is clearly much easier and much cheaper. Much of that part-time is students attending on day release studying alongside full-time students and simply taking certain days a year and certain courses. That is clearly much cheaper than offering dedicated part-time evening. It also rules out very substantial numbers of people, particularly in SMTs, for example, people who cannot take day release from work. We have people who come from Birmingham, people who come from Brighton, to study three evenings a week. Those cities are full of courses that are being done part-time by mixed economy universities. Those people cannot do that because they cannot take days off work.

Q252 Helen Jones: The Government obviously wants to encourage into higher education students from non-traditional backgrounds. I wonder if you

could give us some idea of what the current level of distribution across the various social classes is in your institutions and perhaps between various courses.

Professor Vincent: Across the piste the DfES study that was done two years ago indicated that a lot of our students were earning less than £19,000 a year. To take it another way, we have got a fee support system now which gives support to students earning up to £25,000 a year on their family income and about half our students are eligible for that, so that gives you a broad brush indication of the kind of access that we are promoting.

Q253 Helen Jones: Professor Callender?

Professor Callender: One thing that may be useful is a figure from HESA data that shows that about half of all part-time undergraduates had no exposure to HE prior to starting their course. That proportion was much higher for those students doing a sub-degree. For example, 85% of part-time students taking an HND had not had any exposure to higher education before starting their course and three-quarters of those doing a foundation degree part-time had no exposure. What that suggests to me is that across the board there is phenomenal scope to attract a widening participation population.

Q254 Helen Jones: When you say "no exposure" could you clarify for the Committee what that means? Does that mean they had not been in higher education before or that no-one in their family had been in higher education?

Professor Callender: What it means is that they did not have an HE qualification.

Q255 Helen Jones: It is a different thing, is it not? *Professor Callender:* Yes, it is. This is derived from the HESA data and all that can tell us is what their entry qualification was prior to starting their course and so what those data are telling us is that half had no higher education prior to entry.

Q256 Helen Jones: That is interesting but not really what I am trying to get at because, of course, the data would show you similar things for full-time students, would it not? I am really interested in whether your institutions, by virtue of providing only part-time education or, in the OU's case, distance learning, actually attract students who it is difficult to get into other institutions. Do you have any data on that?

Professor Latchman: Certainly the figures that have been quoted before in terms of those in financial support, those who have never had university experience, are very similar in Birkbeck. What is also interesting, which is slightly related to your question, is those who have actually tried out part-time study elsewhere as mature students and have dropped out. We have considerable numbers who come to us and say, "I was a misfit; I was the odd one out amongst a lot of 18-year-olds in a conventional university because I was studying part-time".

Coming to a specialist part-time provider provides them with a situation where effectively everybody has the same problem, so I think that is important.

Q257 Helen Jones: Finally, I wondered if you could give the Committee some idea of the type of funding model you would like to see from HEFCE which might solve some of these problems. We have heard about HEFCE not changing the key assumption and so on, and your institutions are very different from some of the other institutions that provide a mix of full-time and part-time courses. What are your suggestions for resolving these issues?

Professor Latchman: In the future what we need is a funding system which is based on full economic costings, which is based on what it costs to teach the students, and we certainly in the part-time sector have nothing to fear from the introduction of that system. I think it needs also to take into account the total resources that are available to the institutions so that a full-time institution will receive more fees, and so I think a combination of the real costs and the HEFCE grant actually provided the resource that is not being provided by the fees. I do also think that while we move towards this system, while we gather information, we need interim support to allow the part-time sector, and particularly the part-time specialist institutions, to flourish, and I have argued for a long time that the specialist premium, which gives a premium to specialist institutions by subject and which cannot cross-subsidise between chemistry and French because they only have French, should be extended to the specialist part-time institutions which cannot cross-subsidise between full-time and part-time until we have a fair cost-based funding system.

Professor Vincent: There are advanced systems, and Australia is one, where there is no distinction whatsoever between full and part-time, where the category of part-time has no meaning. They are just all proportions of a student. In an ideal world we would have that system here. Given where we now are and given what is practical, the Open University would endorse much of what Professor Latchman has just said, that we do need to level up the playing field in the short-term by the use of the device of the premium for a specialist institution and in the medium term by attention to the part-time premium which has already been referred to. In the case of the OU, we also want or advise recognition of the challenges which lie ahead in terms of responding to information technology and the need to invest specifically in those institutions which can give a lead to the rest of the system.

Q258 Fiona Mactaggart: I am struck by the fact that half of the students you looked at, Professor Callender, had had some exposure to higher education beforehand and clearly some of them, as Professor Latchman said, are unhappy in institutions where they feel like wrinklies, but I wonder whether this is actually a reflection of a kind of serial consumer of education phenomenon and what that tells us about what part-time education is like in higher education.

Professor Callender: Can I just say that everything I have been talking about has been in relation to undergraduate students, not in relation to postgraduate students, but it does show in that sense how far down the Leitch road we already are because the flip side is that the other half actually have had some exposure to higher education, as you so rightly say.

Q259 Fiona Mactaggart: Yes, exactly.

Professor Callender: We have also got to think through who these people are on undergraduate qualifications and the majority of them, over twothirds, are students who are taking either vocational qualifications or some sort of professional qualification. They are not doing a first degree. The bulk of undergraduate students studying part-time are not like full-time undergraduates; they are not doing a first degree, and that is quite important. They are doing post-qualifying. There are a lot of people within the medical sector doing qualifications. If you look at the subjects, nursing has very important post-qualifying courses. I think it would be a mistake to try and identify part-time students as serial lifelong learners. They are certainly lifelong learners: that there is no question about, but when looking at our study we asked students why they were studying and their motivations are fairly similar to full-time students. They are concerned about upskilling, they are concerned about gaining new qualifications as well as having an interest in the subject and wanting to broaden their knowledge, but they are motivated just as much by instrumental factors in terms of their career or job change as they are by anything else.

Q260 Fiona Mactaggart: The President of Birkbeck, wrote recently, "Part-time higher education will become increasingly central in national life as the sheer amount of knowledge which all but the simplest working modern economies require keeps growing", and this seems to be reflected by what your research shows.

Professor Callender: That is right.

Q261 Fiona Mactaggart: It just strikes me that this group of people, half of whom have had experience of higher education before, arguably ought to be easier and cheaper to teach in some ways because they kind of know how to do that thing, they have got some practice at that thing. They might not know the content of this bit of that thing but I am kind of feeling a bit sceptical about your claim that there is a kind of chronic under-funding because I think there is an equivalent argument that one of the reasons why students cost money is that you have to put some money into teaching them how to learn at university, which is different from the other kinds of learning they have done elsewhere.

Professor Callender: I would like to make one point and then I think my colleagues should take over because they are involved in the face-to-face teaching of part-timers. What we do know is that they are resource intensive in terms of wanting a lot

of attention. They are very demanding students, part-timers. They are probably more demanding than full-time students are.

Q262 Fiona Mactaggart: But full-time students will change because they are starting to fund themselves. *Professor Callender:* That is another debate as to whether we can say that just because so many full-time students do some part-time work that makes them part-time students. I would question that very seriously for a whole variety of reasons, but that is another track.

Professor Vincent: They are a varied group. A third of our students do not have a basic A level capacity as measured in formal terms and they need training up before we can teach them properly to the level we have. I would echo Claire's point that mature students who have had experience in other universities have always had and still have very high standards and make very high demands of us. I would say that three-quarters of OU students are in work and almost all of our students in one way or another are engaged in some kind of dialogue with their employment. Your notion of serial in that it implies purely recreational does not fit the student body that we have. The final point I would want to make is that serial engagement in higher education is exactly what this country needs and if we find a structure that permits that then that is what should be supported.

Professor Latchman: Can I echo that but also say on the issue of students being demanding that I taught full-time students in UCL where I was before and I teach part-time students in Birkbeck. It is the difference between fighting to keep control of an 18year-old audience, half of which does not really want to be there, and fighting to stop the mature students ripping the knowledge out of you, and that is undoubtedly true. It certainly costs us more in terms of the resource. It is very much more rewarding as well in terms of doing it and it also costs us in simple arithmetic terms. Two 0.5 students cost more than a 1.0 student because they have to be registered, because they have to go through the whole process of university education, many of which factors go on a head count basis. They have to be given advice about financial support. We should not forget the point in the UUK report that government support is not available to students who already have a degree even though they may have taken completely the wrong degree at the naïve age of 18 and now want to do a degree that is relevant to their work and which allows them to deliver better to the economy. There is no financial support available on a statutory basis. We spend a lot of our time advising those limited income students in ways in which they can benefit from other grants that are available and so on, so it is very intensive, very demanding and also very fulfilling.

Q263 Mr Chaytor: Why should that not be the case? The question surely is, what is the argument for a higher level of public support to a student who already has a degree? By virtue of having their

degree their capacity to gain useful, better paid employment will be higher than the person who has not got a degree.

Professor Latchman: Yes.

Q264 Mr Chaytor: So this does seem to me the central weakness of the case that you are trying to make.

Professor Latchman: The first point to make is that that is only a proportion of the students and we certainly should not get into the fact that part-time is not worthy of further support.

Q265 Mr Chaytor: Your argument, and I think Professor Callender's argument earlier, is that one of the two criteria for eligibility for support was household income.

Professor Latchman: Yes, but we should not forget that those who are eligible for support get considerably less support than full-time students, so whatever your opinion about—

Q266 Mr Chaytor: Amongst the body of part-time students what is the case for providing equality of access to higher support for those who have already got a degree?

Professor Latchman: Because we have a system in which people are driven to university at the age of 18 because that is the way you do it. If you come from a certain background you will go to university at the age of 18, you will be encouraged by your school to do so. Very many of those students take the wrong course at the age of 18. When I lecture in molecular biology occasionally I say, "Those of you who go on to research will study this, this and this. Those of you who obviously have already decided to be accounts will do whatever". I always get a great laugh from that and people looking round saying, "How does he know that already, into two years of my degree, I have decided to be an accountant?". I do not think we should condemn those people because they study English language rather than computer science or because they study computer science rather than English language if it turns out that now at the age of 40 it is necessary for them to do that in order to contribute to the economy.

Q267 Mr Chaytor: The system is not condemning them. The system is just recognising that their starting point is actually stronger than those who have not got a degree. They have the wrong degree but their starting point and their earning potential is stronger than for those who have not got a degree. *Professor Latchman:* Nobody is arguing that this system should not be earnings tested. I am perfectly comfortable with a system in which those people are eligible on the same income-related basis as students who do not have a degree already. That is all I would argue for, but I do emphasise that this is an issue but it is not the major issue.

Q268 Mr Marsden: If I may, Chairman, I would like to continue the questioning to Professor Latchman. It is the case, is it not, Professor Latchman, if you look at this funding system, that certainly over a 10

or 15-year period part-time students are a good deal better off than they were, shall we say, if I take figure out of the ether, in 1997, but the question is surely, has the Government gone far enough? The latest announcements in October 2005 said that the means tested fee would rise by more than a quarter, but are you arguing that the basic progress has not been sufficient or the basic progress needs to be speeded up because of the new fees settlement?

Professor Latchman: I am arguing that the Government has done a considerable amount and, as has been said, after the fee settlement it did improve the fee support available to part-time students. I do not particularly think that that is enough in terms of the thresholds of income and in terms of some of the other issues about the amount of the course, the timing of the course and about degrees. If you ask me which is more important I would say to you that what is much more important is that the Higher Education Funding Council recognises the need to support part-time properly in the aftermath of the fees.

Q269 Mr Marsden: It is interesting that you have made that last remark because I was going to make that my link question to Professor Vincent. Of course, the Government proposes but HEFCE, in this particular area, disposes. What would you say has been the change in attitude in HEFCE over the last two to three years towards the priority of part-time and, for that matter, adult students, and has that change in priority gone far enough?

Professor Vincent: We have to recognise, as Professor Latchman has just done, that HEFCE with the DfES jointly found the £40 million that was put into the part-time sector under the heading of Widening Participation in response to the case that we made in the context of top-up fees, so they have made some movement. The issue for the Funding Council is the level of specific attention they can pay to this sector given the competing pressures which they are faced with. They will find it very hard to redistribute money away from the full-time sector and have done so in the past, but we are waiting to see if there is going to be any significant further movement.

Q270 Mr Marsden: But is there not another issue here and that is a slightly subtler and more intangible one, and that is the historic culture within HEFCE? When we had Professor Eastwood before us relatively recently we had to push him quite hard and we certainly had to push some other senior academics from, if you like, the traditional academic sector, to recognise the breadth and the width of the contribution that is currently made by part-time and by adult students. Are they getting the message that this revolution in the balance of student learning is taking place?

Professor Vincent: If you were to ask me whether 41% of the time and effort of the Funding Council is put to part-time education the answer, of course, would be no, that they are still moving away from a view which was dominated by the figure of the 18-year-old full-time student. We do think that the

Leitch report, if it is taken seriously, will have a very significant impact because it has shifted the target away from the 18–30-year-old group going into universities and towards the whole of the working population and the proportion of that population with Level 4 awards. If the Funding Council reads that and believes it they will have to start addressing students across the life course in the way that in the past they have not done.

Q271 Chairman: What gives you the figure of 41%? *Professor Vincent:* That is the proportion of the student population who are part-time.

Q272 Chairman: Is that full-time equivalents? *Professor Vincent:* That is bodies, not FTEs.

Q273 Chairman: Explain that to me.

Professor Vincent: An FTE is a composite of a fulltime equivalent, a whole time student. Most universities will have more bodies on their campus than FTEs.

Q274 Chairman: Yes. They might only be doing half a day or a day.

Professor Vincent: That is right.

Q275 Chairman: So you are inflating the figures a bit, are you not, in saying 41% of all students are part-time?

Professor Vincent: It is a literal statement of fact. There is another way of measuring it, through FTEs.

Q276 Chairman: Yes, but it looks different if you do it with full-time equivalents? *Professor Vincent:* Yes, it is smaller.

Q277 Chairman: What, do you think?

Professor Vincent: I do not want to put a figure on the record. I think 27% but I am not sure. We can give you that figure.

O278 Mr Marsden: I would like, if I may, to move on to you, Professor Callender, and ask a couple of questions about this issue of the variability of statistics in this area. It is not an academic point because, of course, it is on that basis that Ministers and officials from time-to- time issue rather sweeping comments about the support that is given to part-time level students. One of the things that we are told in the DfES survey that was conducted by Alan Woodley in December 2004 is that something in the region of 41% of part-time students may receive some level of fee support from their employer, but we also know, and this is included in the evidence that Universities UK have given to us in written form, that actually, when you take all these various surveys, there is an enormous variation. I think Universities UK say that when you have surveys in conventional universities the proportion varies from under 5% to 35%. I have two questions for you. First of all, is there any light as opposed to heat that you yourself can further shed on this variability debate and, secondly, is it not rather dangerous that we get these broad sweeping

statements from Ministers and officials about many, if not a majority of, employers being able to support part-time students if these statistics are so variable? **Professor Callender:** We can begin to understand some of the variability. Number one, Alan Woodley's study was based on a different sample from my sample, the Universities UK sample. In my sample I have 35% of part-time students getting some help from their employers, but we have also to recognise who they are. We must not forget that because it is very much a situation that "to him who hath shall have more" and my emphasis is on "him" as well, namely, those who are most likely to get some support are likely to be working full-time, mostly men, they are higher paid and they tend to be taking a vocational qualification. The sorts of employees getting help are very particular. Going back to the issue about why do we have this variation in the proportion being helped, as I have mentioned, Alan Woodley's study was based on a different sample from my study. He only looked at people who were potentially eligible for student support. My study looked at all students irrespective of the number of hours that they were studying, and then, in terms of what is a reference within Universities UK, if it is the paragraph I think you are referring to, that is a reflection of some work done with different institutions. The important thing about institutions is that they tend to report a much lower level of support from employers, and that is probably some ridiculously pragmatic thing that not everybody who gets help from their employer tells the university, ie, if my employer helps me I just claim it back as part of my expenses. Therefore, as far as the institution is concerned-

Q279 Mr Marsden: So it is a question of definition? *Professor Callender:* Yes.

Q280 Mr Marsden: So we should be cautious, should we, about being complacent that on the basis of these figures we have not really got anything to worry about for a significant number of adult or part-time students getting support?

Professor Callender: No. All the studies are showing that there is only a minority who are getting any help. I do not think any of these studies are saying that a majority of part-time students get help from their employers. In our study, for example, it was a third roughly. The majority do not get help.

Q281 Mr Marsden: In other words we should recognise that and reflect that in our public statements and announcements?

Professor Callender: Absolutely, and indeed I would have thought that the issue of employer help is one of the key challenges for any future changes to the student support system because one does not want a situation of dead weight.

Q282 Mr Marsden: Okay. Can I finally come back to you, Professor Vincent? We have already heard some thoughts, and you have quoted a situation in Australia, about how it is like the old Irish saying, that if we were starting again we would not start

from here if we were taking this road. Is it realistic to anticipate that a major new initiative in the system of funding of the sort that you have described with Australia is likely to take place over the next three to five years in this country?

Professor Vincent: We do not expect it. That is why the argument that we are putting forward has to do with improving the conditions under which fee supports are given along the lines that Claire has been outlining and by making available to part-time institutions a higher part-time premium.

Q283 Mr Marsden: Is short-term gains to keep the ship afloat what you are talking about?

Professor Vincent: Yes, it is. If there is an appetite for completely refounding the funding of higher education we would certainly support that, but we fear that the Government and the Funding Council have locked themselves now into so expensive a model of supporting full-time students that extending it to part-time students will cause the Treasury serious problems.

Q284 Mr Marsden: Can I come very briefly to a final blue sky point that you make yourself in your own written evidence where you talk about the major ground collaboration that could be done with mainstream universities in terms of economies of scale, in terms of production of courses, course material, et cetera? If that particular vision were to come to pass, and obviously there are lots of big "ifs" in there, would that not produce a case for some form of limited top-slicing or level on mainstream universities which would benefit from that and that that would thereby then release additional funding for the sorts of issues which you have described? Professor Vincent: Yes, it would, and we have a joint post with the Funding Council exploring precisely those possibilities at the moment, so that engagement is beginning.

Q285 Mr Carswell: Is it just the cost that stops the Government from giving part-time students equivalent student support to full-time students, and have such proposals been costed, Professor Latchman?

Professor Latchman: I would not wish to secondguess the Government in this. What is absolutely clear is that in terms of the Higher Education Act that was predicated on the image of the 18-year-old student and how you supported the 18-year-old student and the part-time sector was completely forgotten. When there was eventually a wake-up to the needs of the part-time sector we got improved support from DfES that has already been mentioned, but clearly there was not the possibility of extending the same support right across for costs grounds. It has not easily been costed because parttime students are so diverse and I think the curse of our part of the sector is that nothing is done because it is all too complicated to do anything. I should also suggest that some of the work that Professor Callender has done does suggest that the optimum means of supporting part-time students may not have been the same as supporting full-time students in the sense that they may not want loans. What they may want is better up-front support.

Q286 Mr Carswell: Professor Callender, I would be interested in your thoughts: is it just the cost that is stopping the Government?

Professor Callender: I think the costs are a major impediment. If the cost of the current reforms for full-timers was £1.2 million then extending that to part-timers would be considerable. There are other issues we have to take on board. We have to take on board the fact that there is a much higher proportion of part-timers getting help already from employers and we do not want to have a system that is going, in any way, to undermine that support. There are other things. Part-time students and full-time students are very different sorts of people. They have very different sorts of characteristics and, as I have already suggested, they are doing different sorts of courses. That does not mean that there cannot be similar sorts of support but I think we have to take on board that they are different sorts of people, their choices are much more limited, they are far more likely to have a partner and children than full-time students, which means that they are restricted in terms of what sort of educational institution they can go to. They are far less mobile. That influences and constrains their choices, unlike full-time students. Just to give you an idea, 80% of part-timers are over the age of 25 as against 14% of full-time students, so they are different sorts of people, they are doing different sorts of things. The majority of them are working and they are working full time, not part time.

Q287 Mr Carswell: Do you think that increasing part-time fees could help empower part-time students because they would be able to expect more power for what they are paying for?

Professor Callender: I think they are already probably fairly demanding. I do not think that is particularly an issue. I am much more concerned about, if we raise fees, whom we exclude by that. We have to acknowledge that every study that we are talking about, certainly the commissioned studies that we are talking about, of course only cover those students who have overcome any financial barriers that there may be in terms of entering into higher education, so while we talk very happily about part-timers we are talking about those already in the system who have chosen to study.

Professor Vincent: What empowers students is getting an education. That is brought out by all the studies that are undertaken. It is not whether they pay for it but what they get out of it that gives them a sense of confidence and capacity in this world and that is why the drive that we have to widen access to higher education through part-time education is the most forceful means of doing that.

Q288 Mr Carswell: If something is totally free you do not have any consumer power surely, do you?

Professor Vincent: Yes, you do. We have all sorts of obligations to treat our students well however they pay for their degrees. What is interesting for us that those who come in paying no fees at all because we can subsidise their fees through bursaries behave exactly the same as those who are paying for their degrees, are as demanding and are now, seemingly, as likely to complete.

Q289 Stephen Williams: I have just a quick supplementary on this line of questioning, perhaps to Professor Callender. Is it the level of the fee that might exclude people or is it the fact that the paying arrangement is different? If the fee were deferred, as it is for a full-time student, would that completely change the terms that we are discussing at the moment?

Professor Callender: We really have no idea. We asked students specifically what their attitudes to loans were and their attitudes were very mixed. Basically, similar proportions were supportive and not supportive of the student loan, but low income students were much more supportive, which suggests to me that it is a combination, that it is both the up-front price and the ongoing costs.

Q290 Chairman: Professor Latchman?

Professor Latchman: I used to be convinced that simply extending the system to part-time in terms of loans for everybody would be the optimum solution. I am not convinced of that now. In fact, I am totally convinced that that is not going to happen because of costs and I am not absolutely convinced that that is the optimum situation. I think what is the optimum situation is that we make the availability of fee grants much broader in terms of those taking shorter courses which can build up to longer term qualifications which can get people into university to test the water. Those short courses do not qualify now. We extend it also to people who have previously had degrees where there is a clear requirement to do so and we raise the thresholds significantly. You have to be very badly off indeed to qualify for full support nowadays. We are continually intervening with small grants for individuals whose financial circumstances change. Small amounts of money make very big differences too these students.

Q291 Chairman: Of these part-time students do you think, Professor, that there should be an equivalence between someone who decides to go back and do a course in your college, in Birkbeck? Do you think the arrangements that would find him or her, say, doing a degree in philosophy part-time should be the same as for someone who decides that they want to be an electrician and go to the FE college round the corner?

Professor Latchman: That is a very difficult question but I think people ought to be supported in the learning that they want to do. Even employers ought to realise that things that are not necessarily directly relevant to work may provide considerable generic skills to individuals which allow them to fulfil their positions and their jobs much better and that may be

lots of subjects which we would not consider as in any way vocational, so even if you want to take the vocational utility argument I think that argument could be pushed a lot further.

Q292 Chairman: But you are rather up-market, are you not? You are rather posh compared to somebody who wants to go to the local FE.

Professor Latchman: Absolutely not. Birkbeck has just received a grant from the Higher Education Funding Council to begin teaching in Stratford, east London, which we will do from October 2007 in partnership with the University of East London and it is our ambition to build a Birkbeck building in Stratford near to the Theatre Royal to show that we are serious. If the students are not coming to us we will go to them.

Chairman: You do not do plumbers too, do you? **Helen Jones:** Nor does the LSE.

Q293 Chairman: No, Professor Latchman, this is a serious point. Are we going to deal with part-time FE students in the same way?

Professor Latchman: Can I say two things, first of all that we have courses in law, management, information technology, directly relevant vocational courses, courses about access to higher education which are directed at people who are outside the system, and we have a lifelong learning network, which we lead, of 15 FE colleges and 15 higher education institutions.

Q294 Chairman: So in principle you would agree that an FE student and an HE student, if they are mature students, post-18, should get the same financial support?

Professor Latchman: I think students should get the support that is necessary, given their level of resource, to do the courses that they want to do to improve their education. It is at all levels.

O295 Jeff Ennis: My first question is aimed at Professor Vincent from the Open University. In your memorandum, Professor Vincent, you seem to be agreeing with Sir Howard Newby in terms of wanting a system that has to be more accessible and flexible, which I think we could all agree with, but one of the points that is made in your paper is that there is a need for a new system of institutional funding of student support that is appropriate to lifelong learning and it is the linkage with lifelong learning which I am focusing on. In that particular paragraph on the first page you comment, "We urgently need to find a stop-gap solution that restores parity of funding between the full-time and part-time study". Have you any idea of what that stop-gap solution might be in terms of achieving that objective?

Professor Vincent: Yes, it has already been referred to. It is special institutional funding or it is an increase in the part-time premium. Those are the two ways of improving the support given to part-time education without destabilising the current system of funding across the piste.

Q296 Jeff Ennis: Have we done any sort of costing in terms of achieving that goal? Which system could be instigated on a quicker timescale?

Professor Vincent: The specialist institutional funding could be done almost immediately. The part-time premium will probably come in 2009 if we succeed in obtaining it. Can I also say that that section also refers to the need for credit based funding of students which operates now in Wales perfectly well but which the English system has found so far too difficult to implement and they are going to return to the issue in 2009. It is for us of crucial importance that they do make this move to credit-based funding for students, not funding them on the basis of a whole year, because only by that means will we begin to create a truly flexible higher education system which allows students to move around according to their needs and aspirations.

Q297 Jeff Ennis: We have already focused on the fact that Australia has a system that combines the same student support mechanism for both full and part-time students. You obviously support moving to that particular system, both Professor Davids, as it were. Have we done any costings in terms of moving to that totally integrated system between full-time and part-time students?

Professor Vincent: There will be two parts to that costing. One would be the support given to the institutions and the other would be the support given to students. Our rough back-of-envelope calculation is that it would cost, for the support of institutions, about £120 million for the part-time sector as a whole, of which, let us say, £40 million has already been put out through the Widening Participation money that was given to us last year. The bill for supporting students we cannot calculate. It is a fraction of the bill for full-time students and what exactly that bill is you will have to apply to the DfES and the Treasury for information about.

Q298 Jeff Ennis: Have you got any thoughts on it, Professor Latchman?

Professor Latchman: Yes, we would certainly support the move to an entirely equitable system. The point I would make is that that is going to take a considerable amount of time and the curse of this whole sector is that everything is always jam tomorrow and, "When we have done a detailed study we will know enough to give you jam in X years", or whatever. There is a promise of a reform of the teaching system based on full economic costings and I think that is certainly a reasonable mid-term measure which will happen in three or four years' time. We urgently need interim support now. The specialist part-time premium that would, if you wanted to, follow a model of applying it to institutions with 90% plus part-time students, would cost you around £2 million a year for Birkbeck and I would not wish to give the OU figure but I am sure it would be something around 10 times that to reflect their greater size.

Q299 Jeff Ennis: So it is relative peanuts then? *Professor Latchman:* There are no other significantly sized institutions that would qualify for that.

Q300 Stephen Williams: The Leitch report, which we have alluded to several times, says that in 13 years' time we want to get to a state where round about 40% of the workforce are educated to degree level as compared to 29% now, but also in the Leitch report it says that 70% of that 2020 workforce are currently out of full-time education. They have left school, they are beyond 16 or 18. Does that not imply that in order to square the target with the demographics we are going to have to get a lot of people currently in work into higher education and they are much more likely to study part-time? Is that an assertion you would all accept?

Professor Latchman: You have made our argument very eloquently for us.

Q301 Stephen Williams: My second question, building on that, was that the Leitch report has been welcomed by the Chancellor, it has been welcomed by the Secretary of State for Education and Skills, yet they do not seem to want to put the funding behind it to achieve that higher participation by part-time students. Do you think they are just paying lip service to the targets they are welcoming? **Professor Latchman:** The problem clearly revolves again around costs but it has a new nuance. The problem is that we are now going to rely on the employers to deliver all this funding and I do not believe that this very challenging target, and it is a very challenging target, is going to be met through improved employer support. We have already heard about how less than half of part-time students are supported by their employers. We have anecdotal evidence of considerable numbers of students who will not tell us who their employer is because it will be obvious that they are going to leave their employment as soon as they gain the additional qualification, so we have a situation, and that is not to demonise employers, where a lot of people are upskilling themselves with no support from their employers. I spend a lot of time signing off people who cannot come to particular evenings, cannot take particular things because their employer is not allowing them to come at that time. The problem is that we are going to say, "We have not got the money for this so let us rely on co-funding with employers". That is going to be extremely difficult to deliver.

Q302 Stephen Williams: So you think this target of 40% is a pipe dream?

Professor Latchman: I think this target is extremely challenging and it requires better support for the part-time sector to deliver it.

Professor Vincent: It is a target where very largely the budgeters have already reached so it had better not be a pipe dream, and I have no doubt that Leitch is serious about it and the system is going to have to shake itself up quite radically if it is to meet it. Leitch does say, for instance, that he does not believe that the conventional three-year degree will be a vehicle

for the journey to 40%. He thinks that the kinds of parts of degrees and diplomas and more imaginative products that the Open University has will be the currency of that growth. The second point I make is that we will need to find as a system many more imaginative ways of reaching this new market. The Open University has a strong partnership with Union Learn which has lately been launched. We recently offered 100 free places to Union Learn to advertise to their members. We got 4,000 applications for those places almost overnight. There are ways of reaching into groups of the population who are capable of benefiting from Level 4 study who at the moment do not consider that it is for them but it will mean that we have to find new avenues of reaching them.

Q303 Stephen Williams: In further education we have seen that there has been quite a dramatic fall in adult learners over the last 12 months where the policy and the financial focus has been on 14–19 year olds and adult learning has fallen. Do you see any parallel risk in higher education?

Professor Vincent: What has happened at the moment is that the growth, which has been very striking over the last 10 years, has levelled off; it is now pretty flat. I do not think at the moment that we foresee an imminent collapse of that market but if it is to grow in the way that it needs to grow to respond to Leitch then it will need an injection of funding.

Q304 Stephen Williams: So you think we have reached a plateau but there is no imminent cliff face to fall off?

Professor Vincent: No.

Q305 Stephen Williams: What about if the cap comes off fees in the future and therefore full-time students will be seen to be paying a much higher fee than part-time students?

Professor Vincent: That is a complex scenario. It depends in part on whether, if the cap comes off, the support for full-time students and their institutions goes up with that increasing level of fee. If it does then it would indeed put the part-time sector at a yet greater disadvantage.

Q306 Chairman: Professor Latchman?

Professor Latchman: Just to endorse that, I think that if the cap comes off full-time institutions gain greater support from their full-time students, greater pay demands, greater resources are required, people in a mixed economy university switch from parttime to full-time and the specialist part-time providers have great difficulties. In the absence of that happening and with proper resourcing for the part-time sector I think we can continue the growth in the part-time sector which I entirely agree with Professor Vincent has levelled off. It will grow if it is properly resourced. All the demography, as I am sure the Committee knows, suggests that there will be fewer 18-year-olds and there will be more mature students. The HEPI survey suggests that there will be growth in students over the age of 35 which will

compensate for the lack of the decreased numbers of students at 18, but not if we do not resource it properly.

Q307 Mr Chaytor: Could I ask Professor Vincent, is not the root cause of much of the part-time problem this arbitrary distinction between what is part-time and what is full-time? Within full-time students there is huge variation between the hours taught on degrees that are notionally defined as full-time, is this not the key to resolving the whole problem?

Professor Vincent: One of the reasons why the Open University has come top of both the National Students' Surveys and Birkbeck very close behind, despite our more demanding students, is that we are giving them support in many cases at least as great as many students are now getting in their so-called full-time programmes. There is at least a suspicion from where we sit that there are many more part-time students in the system than the statistics would indicate and that those students are currently classified as full-time.

Q308 Mr Chaytor: So your point about the linkage of funding to the development of credit structures is crucial to this? *Professor Vincent:* Yes.

Q309 Mr Chaytor: Is that realistic? You talked earlier about there being practical problems in eliminating the full-time/part-time divide.

Professor Vincent: The Welsh do it, the Scots have set up a system which could do it as-soon-as they implement, and so have the Northern Irish, so there are no fundamental technical reasons why it cannot be done but it is a question which has been on the desk of every chief executive of the Funding Council over the last four chief executives. At the moment all we have is a promise that they will re-examine it in 2009, not necessarily that they will change it in 2009.

Q310 Mr Chaytor: So where are the vested interests resisting it?

Professor Vincent: There is no doubt that for many universities, and especially the bigger and older ones, it will impose upon them a level of costs as they change their systems to identify what each of their students is doing at any point in their programme. You must ask those universities how they feel about it but I think their argument would probably be that change will impose costs on them which they would rather not endure and they do not see the gain to them of going through that expense.

Q311 Mr Chaytor: Would your preferred model be funding dependent on recruitment to individual units of credit or dependent on the achievement of individual units of credit?

Professor Vincent: We are happy with achievement of individual units of credit. What causes a great deal of difficulty—this is rather a technical question—is whether that achievement is based on the completion of a whole year's study, which is the current formulation which makes absolutely no sense to the kind of market we are engaged in.

Q312 Mr Chaytor: In terms of the current part-time/ full-time distinction, there is a distinction between achievement and completion? *Professor Vincent:* Yes.

Q313 Mr Chaytor: If things are counted on a whole year basis but not on an individual unit modular basis.

Professor Vincent: We have to massage our figures so they add up to a whole year's study. It is an artificial exercise which loses us money.

Q314 Chairman: Is it not the case that in a sense you are punching below your weight in the part-time sector? We always hear from two institutions before us but those universities that have a mixed intake of part-time and full-time are not exactly seeing this as you say. HEFCE does not seem to be that galvanised to action on this point. Do you think they are not feeling pressured enough first of all or, on the other hand, perhaps they are worried if you start this change you might upset a lot of people that you do not want to upset or some nice balances that work at the moment but might not work in the future?

Professor Vincent: I would tend to agree with your analysis. We are here today because we have been asked as the heads of two institutions. We do have a part-time lobby which is meeting tomorrow to bring together the interests of all the universities with major groups of part-time students in them and we will be working through that group to try to influence government policy.

Q315 Chairman: Yes, but when I meet the variety of organisations that represent universities these days it does not seem to appear at the top of their agenda, does it?

Professor Vincent: I think that is a true statement.

Q316 Chairman: You are hoping it will change?

Professor Vincent: Well, of course, but at the moment we do not feel ourselves fully represented by any one of the four groups that do take part as groups in this debate.

Q317 Chairman: Professor Latchman?

Professor Latchman: Just to say that we are also part of this overall part-time group. There are a lot of universities with interest in part-time and with proportions of part-time students, it is not their major interest and it is not the major interest of any of the group. I have tried in vain to interest the 1994 Group in this matter, which we are a part of, and it is not a main concern for them. Those institutions have the opportunity to cross-subsidise between part-time and full-time to make decisions about the balance between part-time and full-time courses. We do not have that luxury and we do not want to have that luxury because we think that this form of education is very well delivered in the two specialist part-time institutions and we want to maintain that specialism.

Chairman: Thank you very much for your evidence. We are very interested and it is a high priority for us

to look at this whole question of part-time students. If there is anything you want to say to us when you leave this meeting or if there are other witnesses you

think should communicate with us, we would be very grateful. Thank you Professor Callender, Professor Vincent and Professor Latchman.

Supplementary memorandum submitted by Professor David Vincent, Pro-Vice-Chancellor (Strategy Planning and External Affairs), The Open University

Thank you for the opportunity to give oral evidence on behalf of the Open University to your Committee's inquiry into the future sustainability of the higher education sector.

Thank you, too, for taking up the outstanding issues around part-time higher education. We are delighted that your Committee is taking the public debate on the purposes and financing of higher education beyond recent preoccupations with full-time undergraduates at conventional universities to a more expansive view of lifelong learning. The Leitch Report takes a similarly broad view in its recommendations for raising the skills level of the workforce.

The Open University is, of course, making a significant contribution already to lifelong learning and workforce development and we plan to do much more to strengthen and broaden our provision in this area. However, we fear that our capacity to invest in change and development may be constrained if some of the prevailing inequalities in funding and finance remain unaddressed.

I outline below three key points from our evidence that I hope the Committee will highlight in its published report.

THE PROBLEM

Currently, full-time provision is resourced more generously than part-time study because full-time providers, supported by government-financed fee grants and loans, are able to charge twice or three times more than part-time providers who receive few of these benefits. We are increasing fees to the limit of market tolerance; as Nigel Brown told the Parliamentary Universities Group last month, demand for part-time education is "on a knife-edge". We calculate that the OU will be losing £26 million a year by 2008–09 in comparison to a full-time institution of similar size, notwithstanding the packet of measures conceded in 2005. Full-time institutions are therefore in a better position to invest in staff and infrastructure and in student services. This discriminatory approach has no rational basis or purpose. Given that the great majority of our students are in work and paying taxes, a full-time student costs the Exchequer £4,700 a year net whilst a part-time student contributes £6,400. The present approach works against the Government's ambitions to promote lifelong learning and create and sustain a highly skilled workforce. The ambitions of the Leitch report are unattainable without a significant expansion in the part-time sector. In terms of the current policy drivers for higher education, the current funding regime is not sustainable.

THE SOLUTION

If lifelong learning is to become a reality it is essential that we construct a framework that supports structured learning in all its forms. From the perspective of potential learners, the distinctions between initial and continuing education, between full and part-time study, and between campus, home and work based learning are fast disappearing. It is important that student and institutional funding arrangements recognise and embrace these changes so that students are able to move more easily around the system and so that institutions can better match resources to needs and assure quality of provision in all modes. The Committee may wish to look at the Australian system of funding and student support as a model of integration between full and part-time learning.

FIRST STEPS

The Government and HEFCE are committed to reviewing fee and funding arrangements in 2009. We trust this will lead to a system of financing more in tune with the needs of society and changing study patterns, although we note with some concern the reluctance to increase the part-time premium to the level recommended by JM Consulting, and to address credit-based funding, a system already established in Wales. We hope that your Committee will endorse a programme of reform which abolishes the distinction in funding and student support between the full and part-time sectors. In the meantime, we require a stop-gap solution for the funding of part-time study.

The HEFCE could provide such a measure under the current funding method by introducing an institution-specific allocation to direct additional funding to those institutions, such as The Open University and Birkbeck College, with more than 90% of their undergraduate students in part-time mode. This is not

an ideal or long term solution but it restores equity in the short term and it enables us to invest for the medium term. And it honours commitments made to the OU that there would be an improved package of support for part-time study by 2007–08.

We believe the OU has much to contribute to national priorities around lifelong learning and widening participation, skills development and employer-led learning but it needs to be funded appropriately to do it.

April 2007

Witness: **Professor Robert Burgess**, Vice-Chancellor of Leicester University and Chair of the Burgess Group on Measuring and Recording Student Achievement, gave evidence.

Q318 Chairman: Can I welcome Professor Burgess to our proceedings. Professor Burgess, I think this is your first performance in front of the Committee. *Professor Burgess:* It is indeed.

Q319 Chairman: It is very nice to have the Vice Chancellor of Leicester University with us. *Professor Burgess:* Thank you very much indeed.

Q320 Chairman: You will know that we are particularly interested in two things that might interest you. One is that we have been looking at Bologna and part of looking at Bologna has led us on to the credit frameworks and the European-wide agreements that are current, and then we came own committee across vour and your recommendations. Today we want not only to see that in the framework of Bologna but we also want to talk to you about credit frameworks generally. You have spent some valuable time as Vice Chancellor on this. Has it been worthwhile so far? **Professor Burgess:** I think it has been worthwhile. It is very important that we look at the whole question of measuring and recording student achievement and look at it from the student point of view, especially at a time when we are moving from an elite to a mass higher education system, when we need to look at such areas as credit in the context of lifelong learning, of widening participation, of employer engagement, because that does inevitably lead us into different modes of delivery. It cuts across the whole question that you were discussing earlier, namely full-time and part-time students. It also raises questions with regard to what key principles should be introduced with regard to the recording of student achievement and, indeed, moves us away from some of the abstract theological debates about credit in particular, which I have to say I think is somewhat arid and does not actually get to the delivery of key issues which are of importance to the student.

Q321 Chairman: What are the key challenges to be faced here?

Professor Burgess: I think that we need to look at the appropriate credit system. We need definitely to have a credit framework in England. It does not make good sense to see a credit framework effectively operating in Scotland, another in Wales and also a system operating in Northern Ireland. The whole question of ECTS and articulation with ECTS becomes very important for us and we need to explore ways in which we can move forward. Certainly the deliberations of my committee and the

consultations that we have conducted do indicate that what we are proposing will find a way forward which I sincerely hope will be of great advantage to students and, indeed, to the delivery of higher education in a new era.

Q322 Chairman: When people gave evidence to a previous session of this Committee they were saying that they were surprised that the Burgess committee was stopped from looking at ECTS and the link between what was happening with credit frameworks here and ECTS. Is that right? Was it beyond your remit?

Professor Burgess: On the basis of what we examined with regard to ECTS, one of the things that became apparent was that it is not a matter of simple translation nor is it a matter of imposition. The other thing is as soon as you start to explore ECTS you are looking at questions relating to the number of hours that students work rather than looking at how much they have learned and the level at which they are learning, and that is the important element. The other serious issue with regard to ECTS is that if you start to try and import ECTS into an English system or, indeed, more broadly into the UK context then you endanger the whole question of the Masters degree and, given the credit weighting of an English Masters degree under the ECTS system, it could be argued that it looks somewhat lightweight. We know that the English Masters degree is highly regarded, it is highly regarded by continental European students who want to study in England, it is also highly regarded by the large numbers of international students who come here and who are really critical not only to the development of UK higher education and its financial support but also important in terms of broadening the base of the curriculum offering that we engage.

Q323 Chairman: You are saying that there is a danger to the one year Masters. We have many one year Masters, as has been put to this Committee, and, indeed, I am a governor of the London School of Economics where I think we would be rather concerned if our one year Masters programme was not available to us. Are you saying that a one year degree that is intensive, is outcome based, is stringent and challenging, stretching and all the rest, would be in danger if we linked into the ECTS system?

Professor Burgess: It would because the number of credits that are available under the ECTS system is one whereby we are talking about 75 credits being

suggested. That certainly falls far short of the kind of translation that is discussed with regard to two credits in the English system equals one ECTS credit, so if you take 180 credits being what the English system would recommend as credit rating for a Masters degree, the ECTS credit rating falls short of that and that would be detrimental, it underplays the level of work that students achieve and it underestimates the quality that is associated with the Masters degree that is available across all UK universities.

Q324 Chairman: So this whole Bologna Process is a bit more worrying than the people who came to this Committee led us to believe when they said, "It is all right, it is moving to the British system so we do not have to worry about Bologna". It is more worrying than that, is it not?

Professor Burgess: I think we have to argue a case with regard to the kinds of principles that we want to see associated with any European-wide system of credit. I think that it is very important for us to argue the principles associated with learning outcomes rather than looking at just the number of hours in which students engage.

Chairman: That seems to me to be a great deal of commonsense.

Q325 Mr Marsden: Professor Burgess, presumably you would agree and would argue that one of the reasons why we need a credit framework is in the sort of changing environment we are talking about with more people doing lifelong learning coming in and out, more adult students, more flexibility, it is obviously a very useful tool as part of that process. Professor Burgess: I would certainly argue that because we need to ensure coherence and clarification for the student. Also we need to ensure that students who, say, move from London to Liverpool can in fact carry the credit with them and do not have to repeat units of work. To me, that is what the whole basis of lifelong learning is about and we should not just pay lip service to it and talk about it in abstract, we should engage with it and embrace it in UK universities.

Q326 Mr Marsden: That is very well understood and I think there is a lot of sympathy for that position on this Committee. When you did your inquiry and produced the report, did you look at the question of whether there is a level at which credit is, if I can put it this way, too minimal to transfer? There has been a lot of controversy in A levels, for example, about the units in A levels. I rather rudely referred to them as the Yo Sushi theory of education where by the time you have eaten one bite you forget what the second one is that is coming round. Is there a danger of that with credits where the bite size is actually too small and too difficult administratively and practically to transfer and, if so, what is it?

Professor Burgess: We did not specifically address that very practical question and I can see the argument that one needs to look at the administrative system which will allow for the generation of the transcript recording the credit, but

if we can introduce and utilise technology in a way which allows for the production of the transcript which records the amount of credit that a student has earned then it should be possible for us to disseminate that material. Students work through a system of modules in most universities and, from that point of view, being able to give them the amount of credit that they have earned in relation to an individual module does seem to me very important, especially in an era where, as you rightly say, in my terms, students are likely to be stepping on and off the escalator with regard to educational provision and from that point of view they need to be able to carry the credit with them in order that they feel they get some benefit from the engagement in higher education. We heard earlier about the way in which there are groups of students that are traditionally hard to reach. Some of those students will not want to take courses that are in three year blocks and from that point of view a credit framework and the delivery of credit does assist their achievement.

Q327 Mr Marsden: You have talked about credit arrangements to be in place by 2008-09. *Professor Burgess:* Yes.

Q328 Mr Marsden: Do you think that is feasible? *Professor Burgess:* I do think that is feasible. When we were working on the inquiry we engaged in a series of consultation conferences on two occasions and we did this in a variety of different locations and talked about the implementation plan and certainly we did not get feedback which suggested that this was an impossible timetable.

Q329 Mr Marsden: Moving towards a final question. We probably have not got time to talk about the actual specific levels of the individuals you talked about but one of the things that will surely be an issue is whereas this agreement may have been tick-boxed or signed off to by vice chancellors, lower down the food chain, if I can put it that way, there may be a few concerns and criticisms which might impact on that. I recall it was famously said of the Holy Roman Empire that it was neither Holy nor Roman nor an Empire. Is there not a danger that your Credit Transfer System might come into the same category?

Professor Burgess: I think you probably give too much credit to vice chancellors in terms of making the submission in relation to our inquiry. One is familiar with the situation where our consultation documents were disseminated to various parts of universities and from that point of view a number of staff have commented on the way in which this was done. We also saw that in the consultation conferences. You are quite right in saying that it is going to be very important for my counterparts and myself to make sure that this is fully disseminated within our institutions.

Q330 Mr Marsden: To be absolutely clear about this, you are confident that for the people who have to make this work, the professors, heads of

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departments, the senor lecturers who have to sign off on all of this, this will be something that they can sign up to but it will not be something that is so vague that anyone can sign up to it but in practical terms it will not work?

Professor Burgess: I think one of the things we need to recall is that clearly in the English system at the present time it is not a situation where institutions are not using credit, it is that there is no national framework for the use of credit. If you talk to staff in many institutions they would be able to talk about the credit ratings for individual courses and, indeed, some higher education institutions have transcripts that already carry details on the credit rating. What we are doing is to recommend putting in place a structure that will deliver a national framework and will allow greater coherence across the sector.

Q331 Jeff Ennis: The HEPI report, which was produced a few years ago now, Professor Burgess, seemed to indicate that we should be modest in our aspirations towards a Credit Transfer System. What do you think was meant by that and do you agree with that point of view?

Professor Burgess: I certainly think we need to focus on basic principles rather than, as I put it earlier, detailed theological points about credit. One of the problems that we have had in England is actually a dialogue that takes place between those people who are highly expert about the technology of credit and those who want to think about the principles that will have an advantage for students. I would argue that one of the things that my committee needed to do and which I needed to take cognisance of was to arrive at a situation whereby you got those groups of people coming from different perspectives to listen to each other and engage with one another, and to engage with fundamental principles. As soon as we engage in a credit system and a language that not only can the learner not understand but nor can groups of higher education staff, up to and including vice chancellors, it will fail. It was from that point of view that my committee commissioned a guide to academic credit in England which we started by calling A Simple Guide to Credit just spelling out the terminology involved and explaining to the learner what all this meant. From that point of view the publication that has been produced through the Quality Assurance Agency seemed to me to be a very important piece of work. To produce the final report on credit was a very important component but personally I think it is very important to have produced the guide because I hope that will mean it will disseminate information about the essential features of credit which are workable and will achieve many of the objectives that we all share.

Q332 Jeff Ennis: I guess this particular conundrum is the usual one of achieving a balance between the independence of the academic institutions and the need for an international framework and getting that balance right.

Professor Burgess: Yes.

O333 Jeff Ennis: One of the targets that you would possibly need to set would be to try and make sure that you have the least number of higher education institutions not opting out of the system or whatever. Would you agree that would be one of the targets that we ought to be trying to achieve, that everybody takes part in the Credit Transfer System? **Professor Burgess:** I certainly hope, given the work that we have been doing, that people will be wishing to sign up. There is a large proportion of institutions already using credit systems locally and regionally but this gives them the opportunity to put this in a much broader perspective and from that point of view it is probable that not all institutions will immediately sign up to this. I think it is important to get a framework in place for England in order to ensure that we have the majority of institutions actually determining this and that others will then come on board in due season.

Q334 Jeff Ennis: Do you think that there will be any difference in attitude between the Russell Group of universities and the newer universities in terms of this particular issue?

Professor Burgess: Certainly when we have looked at our responses we have looked carefully at the pre-1992 and post-1992 sectors and have noted the different patterns. One of the things that one would say is it is not always predictable in terms of the way people will react. It may be the case that some universities might wish to adopt a wait and see policy with regard to this but I would certainly hope that given the reactions we got to our consultations the majority of institutions will wish to sign up and develop a national credit framework.

Q335 Chairman: Does it fill you with much confidence when you look at our evidence of last week when you find universities in the Russell Group that try not to be part of the student survey experience, let alone open themselves to a credit framework which they happily embrace?

Professor Burgess: I am not from an institution that is a member of that group. I am a member of the 1994 Group, so from that point of view I am not privy to the discussions that occur in that context. **Chairman:** That was meant to tease you.

Q336 Paul Holmes: At the start of this session with you, Professor Burgess, the Chairman pointed out the difference between ECTS being an input measure and what we would prefer in the UK as being an output measure. The Chairman asked is it worrying that Bologna is leaning towards the ECTS input model rather than towards an output model and your answer was very diplomatic but did not quite answer the question because you said "We have to argue our case with regard to the principles we want, which is outcome rather than input". Is it alarming that Europe under the Bologna Process, and the other countries that have signed up to it, are galloping off in one direction and we are the only ones saying "No, let's go in a different direction"?

Professor Burgess: I think I am right in saying that if you look at the outcome of Bologna in terms of what we signed up to in 1999 it was, in fact, that we would develop national credit systems and from that point of view this gives us an opportunity to do just that and to put that in place and to advance what we are doing in the English higher education sector. I do think there are certain things about the ECTS system that are of great concern and the remarks I made earlier about the context in which one looks at credit are very important. It is all too easy to look at credit just in terms of the mechanics of the system. I think one needs to look at it in relation to the overall objectives that we have for higher education and from that point of view to ask ourselves is ECTS an appropriate system given the objectives that we have within higher education generally within the UK. I think that is where you start to say there are certain things that do not sit easily, for example, with lifelong learning, there are certain features that do not sit easily with accumulation and transfer, and from that point of view, given the review that will be taking place in relation to ECTS, it is very important that all stakeholders associated with higher education argue vigorously not only with regard to the credit framework and the credit system in place but also argue vigorously about the principles that we wish to see delivered. This is what takes me back talking about lifelong learning, widening to participation, all the things that we have argued very vigorously for in this country in order to ensure that higher education is much more inclusive than it has been hitherto.

Q337 Paul Holmes: Do you see a system then where most of the Bologna countries follow their national systems which are based on input and we follow our system based on output so you have parallel systems operating under the overall name?

Professor Burgess: I think it is important for us to argue the case with regard to the outcomes and the outcomes for the learner. It is from that point of view that my committee has been very clear in our deliberations, not only on credit but also on the second piece of work that we are currently developing which relates to the Honours degree classification system. We have looked at credit and the Honours degree classification system with reference to the student and asked how does this assist or impede the student in terms of their progress given the wide range of student experience that now occurs within the sector. What we need to do is to persuade others of the problems associated with ECTS, particularly in the context of other European countries also having similar objectives to ourselves with regard to lifelong learning, and yet I am not convinced that ECTS can deliver on that element.

Q338 Paul Holmes: In the review that is going to take place this year, how can we go and argue the case and persuade most of the rest of Europe to go our way when we have not even got our universities signed up to our way of having a credit system?

Professor Burgess: We should not imagine that we are in a situation where our universities are not utilising credit at all, there are local and regional examples where people are utilising credit at the present time but what we do not have in England is a national system. What we have learned and the kinds of circumstances which we wish to put in place are very important in terms of being able to argue the case because we can point to ways in which we have delivered on many of the policy objectives and we need to follow that through in giving a credit system and a credit framework which will deliver for the students who have come into the higher education sector.

Q339 Paul Holmes: I still do not see how it gives us a very strong negotiating hand to say to all of the other European systems, "You ought to switch to ours" but then they turn around and say, "But you have not got a system. Most of your universities do not use it and your elite universities are not going to take part in it even when you have got one and you want us to switch to your system".

Professor Burgess: I am not so sure that if one looked at the evidence it would be quite as open and shut a case as that with regard to the problems associated with persuading others. After all, I think it is very important to go back to the principles that we would associate with any credit framework and the way in which we want that to deliver advantages for the student. While I can see the logic to your argument with regard to the weakness of our position with regard to not having a national framework in place, nevertheless I think that the discussions we have had within the sector in order to think about the kinds of principles that we would associate with a credit framework that is appropriate for a mass higher education system is something that we could also argue within a continental European context.

Q340 Paul Holmes: The Minister in one of the earlier sessions said that arguably we should develop an alternative to the ECTS system, an alternative European system that we could put forward as a model, and that is what you are talking about. Again, is the Minister being a little optimistic or disingenuous suggesting that all of these other countries are going to switch to a system of ours, which we have not even got and most of our universities do not sign up to when they have already got their own versions running?

Professor Burgess: What we need to do is to get back to the key principles that we would want to see in a pan-European system. What the sector is not persuaded of is a system that looks at hours worked rather than learning outcomes and is certainly not persuaded of a system which would suggest by the credit rating that is awarded that there are weaknesses in our Masters degree programmes because we know that not to be the case given the kinds of external judgments that are made and the kinds of ways in which British degrees are seen as of very high standing. It is very important that we argue that case because if we do not argue that case

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not only are we neglecting what I think is very important for the learner, but on the other side of the equation one needs to look at the advantage for higher education in terms of this being a very important area in terms of the financial stability of institutions given the earnings that come from higher degree work in this country and which is seen as very important. I do not think we should allow that to be undermined. The other aspect is it does not seem to me appropriate when one looks at an ECTS system where vocational education and training is looked at in a slightly different way from more academic training when we have spent many years in English higher education, and I would argue, given my research background, the work we have done on the educational system in this country, to make sure it is not divisive in that way. All of those issues are very important in terms of our engaging in discussion and debate on a pan-European basis with regard to credit frameworks and credit systems.

Q341 Paul Holmes: I accept and agree with all that you say but we are expecting the tail to wag the dog. Are there any straws in the wind? Are there any of the 40-odd countries which have signed up to the process saying, "Oh, yes, we will abandon what we are doing and switch to the system the UK are talking about developing but do not actually have yet"?

Professor Burgess: I am not necessarily arguing that we should get people to switch to the system that is recommended in our report. It is coming down to arguing the principles associated with credit and talking about it at the level of principles with regard to the objectives that countries are wishing to deliver. If we tackle it in that way and with respect to what we all want to see as the outcomes with regard to delivering on major aspects of public policy, then I hope that will move the debate forward.

Q342 Mr Chaytor: Could I pursue this distinction between outcomes and time spent on the individual module. Is it absolutely hard and fast, because surely in the European system the determination of the number of hours that trigger a certain number of credits is based on a judgment about the body of knowledge to be covered during that module, is it not? How is that different from the system that you are proposing? The ECTS system does not pluck a number of hours out of the air, does it, it is related to a body of knowledge or a set of skills?

Professor Burgess: The ECTS system does focus on hours and workloads and the number of hours to engage in workload rather than the learning outcome. The English system as recommended focuses on how much has been learned by the student and the level at which that learning has been delivered. I think that to get hung up on the number of hours is to actually move oneself into a cul-de-sac because we all know that people learn at different rates and whatever rate we might arbitrarily set in terms of the number of hours with regard to a particular unit of credit, some students will learn at a faster rate and some students will learn at a slower rate. The important thing is the achievement and the level of achievement rather than the number of hours.

Q343 Mr Chaytor: I appreciate that. I understand the distinction you are making but what I am trying to say is, is this actually a genuine distinction because where does assessment come into this? You are saying that the English system you want to see is based on outcomes but how do we know if the student has achieved those outcomes unless there is a formal assessment? It will not be the case that every module that is described in the English system has assessment at the end of it, so we do not know if the student has achieved those outcomes surely.

Professor Burgess: I would have thought it very unusual if students are working on modules and there is no formal assessment associated with the module.

Q344 Mr Chaytor: So my question is are you saying that in the English system every module should be formally assessed to prove that the learning outcomes have been achieved?

Professor Burgess: I think there should be some formal assessment and assessment may take many different forms. Just from a commonsense point of view I think most of us would feel that when engaged in learning a particular activity, acquiring new knowledge, developing a new skill, we do like to be tested in some kind of way in order to know what our level of achievement is in respect of the knowledge, skills and attributes that we are trying to develop.

Q345 Mr Chaytor: But that is not the case at the moment, is it, and not the case in Wales, Scotland and Northern Ireland, not every module in their credit systems leads to a formal assessment, so there is no way of knowing whether those students have achieved those learning outcomes.

Professor Burgess: I am not sufficiently acquainted with every module in every institution, clearly so, as to be able to sit here and say there is or is not formal assessment with regard to particular aspects of learning. All I would pass as an observation is the view that I would find it somewhat surprising that students engage in learning and, indeed, there is no opportunity to test out that learning in some kind of assessment context.

Q346 Mr Chaytor: Conversely, looking at it from the other side in defining the learning outcomes that will attract a certain number of credits, a judgment is made by every university surely about the amount of time that is taken to do that because that is an essential part of the course planning process. You cannot construct a degree course where there is an infinite number of hours that are required to achieve certain learning outcomes.

Professor Burgess: You are absolutely right and, indeed, in the system we are proposing 10 notional hours is equated with one unit of credit, but of course it is notional hours and it does not mean that every student approaching a unit of work that will

attract a particular credit will have engaged in 10 hours of work, some will have taken longer, some will have taken less time, it depends on the pace of the learner, but achieving a learning outcome will give you and deliver you one credit.

Q347 Mr Chaytor: So your typical student would require 10 hours to achieve a certain number of outcomes that are rewarded by one credit?

Professor Burgess: I am not sure about the word "typical" being used because students learn at different levels and different paces and from that point of view the design principles that are associated with the work of the curriculum developer are such that they have to take into account what would be a reasonable amount of work that is required and could be delivered in 10 hours. The 10 hours might not only include the delivery of reading materials or essay writing, it might involve elements of project work, it might include oral work in classes and so on.

Q348 Mr Chaytor: Finally, can any credit framework ever reflect the huge differences between individual universities or even departments within universities? Is this not a central problem to the construction of a true Credit Transfer Framework?

Professor Burgess: I think that where higher education institutions specify carefully what the learning outcomes are it is possible to talk about levels of learning that a student has achieved. One of the things with regard to the portability of credit is that no-one ever says if you have given a student 15 units of credit and you wish to transfer that credit into universities X and Y, university X may say, "Yes, that's perfectly okay, we accept that", but university Y may say they do not accept it or only accept a proportion of the credit. That is where the autonomy of English higher education institutions becomes important and where the academic judgments are made by people who are specialists in assessing students and the appropriateness of given levels of work.

Q349 Chairman: Professor Burgess, can I say on behalf of the Committee we have enjoyed your evidence, we have learnt a lot. We like it when witnesses say they do not know and have not got the evidence rather than giving us an answer for the sake of giving us an answer. We very much appreciate your thoughtful comments. I hope with both your background and present position as Vice Chancellor of Leicester you will keep in touch with the Committee.

Professor Burgess: Thank you very much indeed. **Chairman:** Thank you.

Wednesday 7 March 2007

Members present

Mr Barry Sheerman, in the Chair

Mr David Chaytor Paul Holmes Helen Jones Fiona Mactaggart Mr Andrew Pelling Stephen Williams

Memorandum submitted by the Centre for Higher Education Studies (CHES) of the Institute of Education, University of London

INTRODUCTION

1. The Institute of Education welcomes the intention of the Committee to undertake a wide-ranging investigation into this important matter. In particular, the focus on "first principles" is timely.

2. This submission is from the Institute's Centre for Higher Education Studies (CHES), which has contributed to research and development in the field since 1985. The Co-Directors of the Centre are Professor Ronald Barnett and Professor Sir David Watson.

3. CHES is making a separate submission to the Committee's parallel inquiry into The Bologna Process.

KEY ISSUES FOR CONSIDERATION AND RELATED RESOURCES

4. There are several areas in which CHES believes it can assist the Committee by drawing on research conducted by members and others in order either to confirm or challenge received wisdom. These are outlined below, together with a highly selective range of references to current or recently completed work. Attention is also drawn to the important series of reports from Universities UK (UUK) on *Patterns of UK Higher Education Institutions*.

5. *The student market*. We encourage the Committee to note the extent to which the UK higher education system has been moulded by patterns of student choice, and to query the popular assumption that such choices have been less than rational (UUK, 2006; Watson, 2006a). The issue of so-called strategic subjects is also relevant here (Temple, 2006).

6. *Fees and funding*. It is not clear here that the Government's recent reforms will achieve their objectives, on a number of levels: securing the economic future of the sector; encouraging a wider range of participation; or establishing a more competitive market (Watson, 2006c). CHES has contributed an initial bench-marking study to the Department's own study of this area (Temple *et al*, 2006).

7. *Public funding of research*. In our view, too much attention is paid to the mechanism of the Research Assessment Exercise (RAE) and not enough to the funding decisions that are made as a consequence. In particular, the evidence is growing that the resulting concentration of funding has become dysfunctional. Not only does it condemn the system to only funding the best of what it has produced historically, but it has also apparently reduced the capacity of the winners to gear public into private funding (Watson, 2003a; UUK, 2006).

8. Individual and social benefits. The Institute has contributed to the wider understanding of both of these impacts through the related work of the Centre for the Economics of Education (CEE) and the Wider Benefits of Learning Group (WBL). Despite the considerable expansion of the UK graduate population, significant benefits have been sustained in the "domains of health, the labour market, citizenship and parenthood" (Bynner *et al:* 2003: 4). However, it is important also to acknowledge some downsides. Students from poorer backgrounds who start on full-time HE and then drop out fall behind their contemporaries with lower qualifications in almost all of these respects (Ibid: 25; HEFCE, 2002: 37).

9. *Widening participation* is an area where the search for simple, and quick solutions has been perhaps most frustrating. The gap between those with access to education and resulting skills, to information, and to influence and those without is widening, not narrowing. For an account of what we do and don't know about the issue see Watson, 2006b.

10. *Employment and employability* represents the next most fraught area of public discourse. Much of the resulting confusion arises from two sources. One is the lack of real information about the skills market, nationally and locally. The other is the tendency of employers to use qualifications for different purposes: either directly making use of the "human capital" inherent in higher qualifications, or simply regarding a qualification at a certain level as a screening device or "signal" not necessarily related to employment needs (Slowey and Watson, 2003: 106–121, 152–166).

11. *Higher education and regional development, including the impact of devolution.* It is in this context that the prevailing "market" philosophy is under most strain. Regional policy in England is being used as a redistributive device against the direction of most market signals, while it is increasingly apparent that the other "territories" wish to pursue different policy priorities (UUK, 2004).

12. The global race. Naïve views of the global context for higher education as a simple market for UKbased goods and services may well be undermining our longer term interests, including the challenge of managing highly internationalised campuses (UUK, 2005). An uncritical notion of "world-classness" may turn out to be especially damaging. The internationalisation of higher education is as much about the creation of socially-responsible knowledge bases relevant to contexts world-wide as it is about the positioning of UK institutions within global higher education markets. See also the CHES memorandum on Bologna.

13. Learning and teaching. Universities also have to respond to the effect of revised preparation and expectations of students, not least as a result of the younger generation's experience of ICT. Jason Frand's seminal essay on "the information-age mindset" presents an expression of this dilemma (Frand, 2000; see also Barnett and Coate, 2005).

14. The development of the higher education work force. Cultural and other changes in the student body are matched by shifts in the demography and organisation of the academic profession itself. As it has grown it has become younger and more likely to have experience outside as well as inside the academy: the average age of teaching staff in UK HEIs is now 42.7 (HESA, 2004–05). The main message is about the combined effects of generational change and of expansion. As a cohort of academics brought into the profession by an earlier spurt of expansion retires at the same time as the system anticipates a new spurt, turn-over will be rapid. In these circumstances "internal" socialisation is likely to weaken and new perspectives to gain greater purchase. One effect is a wider and more generous understanding of "professional" contributions to learning support. In short, there is a potentially "new" definition of the academic role at work here; and new professionals will also require new models of leadership and management.

15. Entrepreneurship and the 3rd stream. Members of the Committee will be aware of the conclusion of the Lambert Report that, in relation to industry-HE interactions, there are more problems on the demand than on the supply side (Lambert, 2003). Care needs to be taken that competitive third stream funding supports impact and not merely activity (Slowey and Watson, 2003: 135–151).

16. *The civic and community role of universities.* Pursuing the "social agenda" means two types of activity on the part of universities, which are themselves sometimes in tension. The first is about developments "inside", notably action on admissions and student support, but also about choice of teaching, research and service priorities. The second is significantly outside, where the university recognises that it has an obligation to help to change matters (for example on schooling, or on community capability). For discussion of these issues see Watson, 2007a.

17. The question of values. In such circumstances, universities can choose to behave well or badly. As powerful institutions they can undermine and intimidate their members, their partners and their clients. They can perpetuate self-serving myths. They can hide behind specious arguments (narrow constructions of "academic freedom", *force majeure*, and the like). They can displace responsibilities (and blame others). They can fail the "stewardship test" (for example by not assessing and responding to risk, or by cutting corners, or by "letting go"). They can be bad neighbours. Above all, they can fail to tell the truth to themselves as least as easily as failing to tell truth to power (Watson, 2007b). See also Barnett, 2000, 2003.

18. *Leadership and management*. The inexorable tendency is for university leaders to overestimate the extrinsic influences and underestimate the intrinsic influences on the development of the University in the knowledge society (Slowey and Watson, 2003: 159).

19. Governance. In these circumstances, it is not apparent that a simple adoption of commercial approaches to corporate governance is effective or appropriate (Lambert, 2003; Shattock, 2006).

20. *Policy formulation*. Finally, we urge the Committee to look carefully at the process and effect of policy formation for higher education, not least in respect of a number of lurches in policy which have left institutions in the sector understandably risk-averse. A particular problem is the lack of any secure "policy memory" in respect of higher education (Watson and Bowden, 2005).

OVERARCHING ISSUES

21. Putting these items together, we suggest that there are three overarching issues which the Committee will need to address if it is to meet its objectives.

22. The first is the question of establishing the public interest in higher education development.

23. The second is understanding the nature and extent of *public confidence* in what it is that higher education delivers.

24. The third is establishing how far the interests of the nation are bound up in maintaining the reputation of a relatively unified *sector of higher education*, as opposed to supporting the ambitions (and the pre-emptive claims) of a small number of institutions for "world-class" status. There is a danger at present in British higher education of decline of civility, of over-hyped inter-institutional competition, and of loss of commitment to the controlled reputational range implied by mutual assurance of quality (Watson, 2006d).

PROPOSED KEY QUESTIONS

25. In summary, CHES respectfully suggests that as part of its work the Committee attempts to answer the following twenty hard questions:

- Should we trust the student market more? (5)
- Has the English fee structure for undergraduates from 2006 onwards serious prospects of meeting its objectives? (6)
- Has concentration of public funding for research gone too far? What have been the effects, for example, on quality of teaching and learning? (7)
- Have we established a proper balance between understanding the social and the economic benefits of higher education? (8)
- How much of the widening participation agenda needs to be tackled outside of the higher education sector? (9)
- Is graduate "under-employment" a serious long-term problem? (10)
- How do national ambitions for higher education reinforce or undermine its regional role? (11)
- Have the ambitions of and for a small number of so-called "world-class" British universities prevented us from developing a world-class sector? (12)
- What should higher education as a whole do about its ICT strategy? (13)
- What happens when the "screen-age" generation gets to teach? (14)
- How can we improve the capacity for business and industry to be an "intelligent customer" of higher education services? (15)
- What is the civic role of the modern university? (16)
- Are higher education values under threat? (17)
- Are universities well managed? (18)
- Is the balance between corporate and academic governance correctly understood? (19)
- How can the DfES improve its policy memory? (20)
- What exactly is the "public interest" in higher education? (22)
- What can the Committee, and politicians in general, do to improve public confidence in higher education? (23)
- Does the "controlled reputational range" of UK higher education still matter? (24)

26. In our view, informed responses to these questions should enable the Committee to achieve its goal of a sustainable sector, populated with autonomous but responsible institutions, less distracted and deflected by short-term and fickle policy interventions, and capable simultaneously of contributing to economic growth, social cohesion and international development.

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All items can be supplied to the Committee secretariat on request.

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November 2006

Witness: **Professor Sir David Watson** former Vice-Chancellor (VC) of Brighton University, now Professor of Education and Management, Institute of Education, gave evidence.

Q350 Chairman: Can I welcome Professor Sir David Watson to our deliberations this morning. This inquiry into higher education is a very important one for us. We have looked at specific parts of the higher education agenda in recent times but not a thoroughgoing inquiry so we are quite excited. We are keen to explore some of the really important background material. We know of your expertise and interest in this; most of us have spent the weekend reading what you have produced and very illuminating it has been. We usually give a witness couple of minutes to say anything if they want to, if they do not we go straight into questions.

Professor Watson: I would be happy for you to go straight into questions.

Q351 Chairman: Is it possible to seriously widen participation? Reading all the material that has been before the Committee rather depressed me in some sense. Widening participation seems very difficult to

get a grasp of and to do anything about. Should I be downhearted or are there any signs that things are changing?

Professor Watson: I think I can cheer you up in one respect. It is very clear that if you want to have a fairer system of higher education you have to allow it to expand. The expansion that the UK system has been through in the last couple of decades has made it fairer in some respects. I am aware of the data about the different social groups and the proportion of the higher education places that each takes up and the fact that does appear to have been locked for some time, but as the system expands the number of students from different social groups who take part in higher education does increase. The fact that those proportions remain the same do point us to some of the problems being further upstream in respect of the people we get qualified for the starting gate for higher education. There is some optimism bound up in the fact that a larger system is, at the end of the day, fairer.

Q352 Chairman: Is it the case, and I picked a bit of this out from your articles, that we are getting less and less people into the research rich universities, some people call them the top or lead universities? I saw a report over the weekend that over the last five years Eton alone have increased the number of people getting into Oxford from 38 to 70 at a time when we all thought that Oxford, Cambridge, the London School of Economics and other elite institutions were actually managing to broaden their intake.

Professor Watson: There are two responses to that. It is very important to look at all of this statistical data in the long term and one year very rarely makes a trend. There has been some interesting material from UCAS about the changing proportion of applications for next year as there is a blip upwards in the volume of applications overall. It is important we look at these over 10-15 year periods. The second thing I would say is that actually we have here a big problem and a little problem. The big problem is the issue of educational life chances being set very early in life by prior educational experience. Our big problem is the one about getting more people from a wider variety of backgrounds to the starting gate. The little problem is the problem about the choices made by well qualified students from nontraditional backgrounds. We may have got trapped into thinking that if a well qualified student from a non-traditional background chooses not to go to one of variably our "top", "elite" universities, the "Sutton 13" or whatever you want to call them, that is necessarily an irrational choice. In many cases, in terms of the family background, the interests, the subject interests, those students are making rational choices by deciding to study locally or perhaps by studying something which is not a part of the mainstream curriculum at one of these universities. We need to right-size these two problems. One of the difficulties about discourse in this area is that it tends to flip-flop from the big problem into the little problem and vice versa.

Q353 Chairman: When you talk about the way this is all shaping up over a period of time, you do tend. in my reading of the articles, to constantly put it back to what is happening in the school system and the responsibilities lower down, what happens to young people at 16 and then 18, staying on rates and all of that. Can universities really be excused any responsibility? There has been a benchmarking process over a number of years. There has been pressure on institutions to pay particular attention to widening participation. A lot of taxpayers' money has been spent on it. Are you letting the higher education system itself off the hook a bit? Could they not do a lot more than they are doing in widening participation? I go to universities where they say "We have summer schools, do we not?" At the back of my mind I think that if it had not been for the Sutton Trust introducing them with you, you would not have those either.

Professor Watson: I am very much in sympathy with you on this. I do not think it is somebody else's problem; it is about life chances earlier in life and

universities are intimately involved in getting those things right. Who trains the teachers? Who advises on the policies about community development and health, social care and so on. Universities ought to be engaged in getting these wider aspects of public and social policy right. It is not enough for universities to say this is somebody else's problem. I think, however, one of the traps is assuming that individual universities act most effectively by themselves on this. This is a sector-wide issue. If we look at interventions like Outreach and summer schools, and so on, very often the positive effects will not be felt immediately by the university that is sponsoring them. This is a partnership issue regionally and nationally. If, for example, the University of Brighton, where I was for many years, is successful in an Outreach programme in Hastings and the students who participate go to other universities in the United Kingdom that is a success.

Q354 Chairman: When this Committee, in a former incarnation, went to the elite Ivy League universities in the United States, Princeton and Stanford, they had a map of the United States and knew precisely if they were not getting talented people from a broader social background. They knew which state, which city, which ward, and then they used their staff or alumni to find out why they were not getting talented people. I do not see that energy, focus, direction or organisation in UK universities.

Professor Watson: There are activities of that kind going on. The comparison with the United States is very interesting and some of the lessons are exactly the ones you have outlined. I think it is not often recognised that there is more than one system of higher education in the United States. Very crudely, I think there are two systems of higher education in the United States. There is a system that is structured around four-year private colleges and some elite public institutions which have very high retention rates, which have mostly young participation; and that system is almost entirely independent of the rest of the system in the United States which is a much more fluid and flexible one. The latest statistics are that for Bachelor's graduates in the United States over 50% of them achieve their degrees in institutions other than the ones in which they started, either through the Community College framework or through credit transfer. It is quite important that when we try to make comparisons with other systems like the United States, from which we could potentially learn, we look at which bit of the system we are studying and how that lesson could be transferred across. The other twist is that those elite private institutions are very definitely constructing a class in each year that will be the class of 2008. They will have as a goal constructing a class that will retain its loyalty for their institution throughout the rest of its members' careers. They will be looking, for example, for community leaders from other parts of the United States to take part. They will be very much looking at potential. That is somewhat in contrast to the league table mentality in the United Kingdom where qualifications upon entry have become a kind of gold standard of their own. I worry a bit about all the incentives in the system in the UK which are about upping your A level points on entry at all times rather than actually looking at the qualities and the potential of the students who could be admitted.

Q355 Helen Jones: You said earlier that students from what are now called non-traditional backgrounds might be making rational choices if they did not chose to go to the elite universities. It may be rational within the system we have, within the system which they find themselves, but does that not also point to a failure of those universities to attract those students and to make it possible for them to have that choice?

Professor Watson: I hope I did not come across as presenting as a stark proposition that those choices were always rational. What I was trying to do was correct the view that they are never rational. Particularly students from ethnic minority communities are more comfortable studying close to home or, interestingly, in London. There are a higher proportion of ethnic minority students in London institutions than would be predicted by the population in London. They are making choices about where they will be comfortable studying. I agree entirely that does not take away the pressure or the obligation on the more elite institutions to make their institutions more comfortable for students from non-traditional backgrounds. I wanted to scotch the idea that a student who studies in a local university, and may study something that is very important for their own career aspirations, has in some way failed.

Q356 Helen Jones: I am not for one minute suggesting they have. What I am trying to suggest to you, as I think the Chairman suggested, is you cannot let universities off the hook. If some of our elite institutions are failing to attract and welcome young people from different backgrounds who have a great deal of potential, is that not a failure amongst those institutions? What do you think they ought to be doing to remedy that?

Professor Watson: There are many interventions they can undertake. To return to a point I made earlier, it is quite important that they, in particular, work in partnership with other institutions to ensure access to the sector as a whole, and a regional approach and a local approach is often the most effective.

Q357 Helen Jones: You said earlier that the system would become fairer with expansion but that is contestable, is it not, because expansion has overwhelmingly benefited people from better-off families. While you can look at those from working class backgrounds and see a rise in the proportion going to university that is nothing like the proportion of those from better-off backgrounds. In fact, the last figures I looked up from those coming from social classes 4 and 5 the figures have remained static for a number of years. In what way then is expansion making the system fairer? If it is not, where is it failing?

Professor Watson: I was taking the long historical view when I said it is making it fairer. The evidence is that whenever the system has been constricted it is students from those backgrounds who have fallen out. There was an interesting episode in the early 1990s when the last Government tried to slow down the expansion which had been initiated in the mid-1980s. There was a policy in the early 1990s which you might remember called consolidation, a euphemism for slowing down or stopping expansion. It was actually at that point where the biggest constriction on admissions from the Registrar General's groups 4 and 5 took place. That was really the kind of data that I was relying on. It is absolutely true that expansion overall has benefited the different groups in roughly the same proportions over time but, to return to the point I made to the Chairman, I think much of the correction to that does actually lie not only in schools but also in the experience post-16 for those who go into work or college or who need to receive education and training alongside employment between 16 and 18. Those are the kinds of areas where, if we are going to solve this issue in the long term, we have to get things right. It is partly an issue about admissions decisions by a few institutions but putting that right is not going to solve this big problem which I tried to articulate earlier.

Q358 Helen Jones: I understand what you are saying but is it not also true that some universities are at fault in not seeking out talent, in not making a real effort to attract students from poorer backgrounds and in their reliance solely on A level grades to decide on admissions? Is that a failing in the system? We heard earlier that a lot of the American institutions look for potential and there is plenty of evidence that students who may have slightly lower A level grades from poorer backgrounds actually do better at university, in many circumstances, than those who may have slightly higher grades and come from wealthier backgrounds. Why is that not taken into account in admissions?

Professor Watson: You are quite correct. There are very few iron laws about UK higher education that can be maintained statistically but one that was established by the Higher Education Funding Council for England is that students who earn their A level grades from State schools convert those into roughly one class of degree higher than those who earn them from independent schools. There are issues that are macro-issues across the system and some universities have tried hard to look at that. You might remember the episode a few years ago when the University of Bristol tried very hard with its admissions policies to take account of the differential experiences of students on the way in. Institutions need constantly to be progressively engaged with those kinds of dialogues and that kind of data. Of course there is room for improvement but what I am trying to argue against is a suggestion that simply concentrating on that issue is going to solve the problem of widening participation overall. I do agree with you that the focus on A level grades and, in fact, the arrival of the A-star grade is further

going to give the impression that a system of public examinations can do the admissions job for universities. Many universities are waking up to the fact that that is not, in fact, the case; they are going to have make judgments about the background and potential of the students who come forward rather than drawing a line on a rank order that has been delivered either by the tariff or by A level points. We need to keep pressure on that kind of opportunity.

Q359 Helen Jones: Do you think many universities are really now copping out of making those decisions by not interviewing? Would that make the system better or worse? There is an argument that interviews best serve articulate people with a knowledge of the system. There might well be another argument that says done properly it would enable you to identify potential. What is your view? Professor Watson: I am more strongly in favour of your second proposition than your first. Interviews are an important technique. There is some evidence that not all interviewing techniques have been progressive in the past but I do see a greater sensitivity about this issue across the system. Certainly if you accept my proposition that A levels will not solely do the job, then other evidence such as that gleaned from interviews is very important.

Q360 Helen Jones: If that was the case, is there not a need for much better training of those who do the interviewing process? I was joking before you came in that I was asked at a university interview many years ago did I row. I have seen films of interviews where there is clearly a gap in understanding between the person asking the question and the person on the receiving end. I remember one about poetry where it was very clear to an outsider that the interviewee was talking about Welsh poetry and his interviewer had no idea of that at all. Is the training adequate for admissions tutors?

Professor Watson: My view is that it is improving all the time. I am certainly aware of a dialogue within institutions that have to interview a lot about how to improve it. Certainly I would evidence entrance to Medical School across a range of different institutions as being an example of a field where there were some problems a number of years ago which have been eliminated, or at least reduced, by very serious attention to interview procedures, and in many cases of course not relying on a single interviewer but relying on triangulating the experience of students or applicants from more than one interview.

Chairman: The president of Stanford told me five years ago that if we wanted more people like us we would interview.

Q361 Mr Pelling: MPs are always anecdotal so I am sorry for the introduction to my question. *Professor Watson:* I hope it is a recent anecdote.

Q362 Mr Pelling: MPs like talking about their mothers. My mother always felt that education was an opportunity for liberation for people from a particular social class. Her parents came from a

fairly underprivileged community. My grandfather was in the mining business, an NUM official, and she felt that education for him had liberated him and liberated her as well. We are making assumptions in this debate that widening participation is important. What do you think are the principal reasons for widening participation in education?

Professor Watson: For me the principal reasons have more to do with social capital than with human capital and economic performance. I think there is now strong longitudinal evidence, including that created by my colleagues at the Institute of Education from The Wider Benefits of Learning Group, that participation in higher education does significantly improve the life chances of all people who do take part and significantly of their children. There is data about health, about happiness, about democratic tolerance, about the propensity of parents to read to their children and a whole range of things which are not rocket science that indicate a general benefit of higher education. It goes far beyond the human capital advantages of credentialism and qualification for employment. If we believe seriously in social justice, then we need to have a widening participation policy which ensures that those kinds of benefits are not restricted.

Q363 Mr Pelling: Do you think that the depth of proof of a widening gulf between what you have said as being a successful minority and a disengaged majority is there and that this is happening?

Professor Watson: This is a much more wicked issue than some of the very important issues about interviewing and admission to elite institutions. It is a classic wicked issue in social policy. The more people who do participate the more the kind of benefits I have been talking about can be spread, but at the same time the gulf grows between people who do have those benefits and those who are disengaged and who fall off the ladder. This comes back to issues of schooling and issues of education and training in work. The real difficulty for us is establishing a process of life-long learning through which people who have fallen out can get re-engaged. Some of the more depressing social statistics over the last decade do relate to the growth in the number of young people who are not in education, training or employment and the number of young people in employment post-16 who are receiving no education and training. It is a very strong hypothesis that there is a relationship between that problem and the issues raised by Lord Moser and his Commission on adult basic skills. We have to try and tackle these issues together. Restricting access to higher education clearly is not the answer but other aspects of the education and training policy that have to do with continued engagement and re-engagement of those who have fallen off is very important.

Q364 Mr Pelling: This comes back to the point made earlier about the way in which we tend to give different values to different types of education which, in some ways, is quite corrosive.

Professor Watson: We do tend to stereotype different types of education and different types of educational experience. I am very much in favour not of a strict academic vocational divide but of very serious hybrid provision, for example putting many more vocational and work-orientated options within academic programmes for young people to experience.

Q365 Mr Pelling: You said that if higher education is just a sorting device and fails to have transformative possibilities then, as you have hinted in your answer, its social effects will be regressive. Do you want to explain what you meant by that?

Professor Watson: My answer to the previous question was an attempt to explain how that actually occurs. The really tricky question is who is responsible for putting it right. In my first response to the Chairman I tried to indicate this is not something that universities can remain aloof from. It is also quite a significant issue for employers because if employers use the university system as a simple sorting device then they can knock on this regressive effect into the first experience of employment. It would be tragic if over the long term a more democratic system of higher education with a wider pattern of participation actually remained connected with an initial employment system where significant employers were going simply to certain universities and looking back through university experience to pre-university qualifications such as A levels or GCSEs for their selection procedure. The simple answer is we are all in this together. Universities and colleges will have a very important part to play but we need to find some clever ways of connecting.

Q366 Mr Pelling: I went to awards at my local college, Croydon College, this past week and I was most impressed by the way in which a lady who had come into the college with no English at all but very quickly had moved on to a very prestigious course at Goldsmiths subsequently upon the training she had at Croydon College. What impact do you think FE and HE is having on social mobility at present?

Professor Watson: Again partnerships are enormously important. The more successful of the life-long learning partnerships, which the chief executive of the Funding Council was talking about in his very first session with you, will rely very much on integrated planning and progression. Running FE, and running an FE institution, is an extraordinarily difficult proposition as you know doubt know from your experience of Croydon College. One of the difficulties that comes up most strongly in that field is of sustainability of policy. We have had a lot of lurches in priorities that have been set for colleges, and the difficulty that arises from that is that some of the more progressive developments, such as access courses-and I suspect that the case you are talking about is somebody who took part in an access course-have a very high hit rate in terms of access to higher education and success in higher education subsequently. They have somewhat fallen down the list of funding priorities

for FE colleges, particularly for young adults, in favour of the equally important issue about qualifications at Level 2 and basic skills. One of the difficulties that both FE and the HE system share is of fluctuations in priorities associated with funding decisions. One of the other parts of my sermon which, from the Chairman's remarks, you probably have read is that this is a long-haul issue where we need a degree of policy steadiness that will enable institutions and the people who fund them and invest in them to get the best out of the system.

Q367 Mr Pelling: My final question relates to the issue of the equity of the entry process into HE which Helen was referring to earlier. Is it rather more difficult, if we ended up with circumstances where HE was not expanding, out of a desire to increase participation you do discriminate against those students who come from the private sector? Perhaps their parents have made a great deal of sacrifice and then you find yourself accidentally discriminating against those who have tried, by saving and scrimping, to use the private sector to be able to try and give out what many people would perceive, quite rightly, as indirect discrimination against people who might be using the State system.

Professor Watson: All I can do on that is repeat my earlier point. If the system is constricted then institutions will be tempted to take the easier route. There is a problem in admissions, which I do refer to in that paper, which I call the header tank, which is you take the students who are easiest to recruit first and then go looking for the rest. The only way out of that particular bind is for us to recognise that there are obligations here on the sector as a whole. We are all in this together and there are social justice implications in admissions decisions at large across the whole sector.

Q368 Fiona Mactaggart: You said that one of the things we needed is policy steadiness. Let us look at an area where we have had unsteadiness recently, a big change which has had an impact in this area, which is fees. We have just seen the figures about the fact that there has been an increase in applications this year, indeed the applications increase in England is 7% and much less in other countries of the UK including a slight decrease in Wales. What does that mean?

Professor Watson: I am very reluctant to draw conclusions from a single year's data. If we go back 1998–99, there were some interesting to perturbations there when the new fee regime came in. What we now have in relation to the fee regime is not necessarily where the Government started out when it tried to design a new regime. We have, in effect, got a revised standard fee. We might have a revised standard fee for some time because those who think that the cap will come off in 2009-10 are deluding themselves not least in terms of the commitments that the Treasury might make to support a higher graduate contribution. There are several hypotheses we could test here. One is that the message has got through about the advantage to students of the graduate contribution; the fact that

fees will be paid up front and it is no longer a question of you having to find the fees in three tranches during the course of each year. That could explain a higher propensity for students to apply. A second hypothesis, which we can only test over time, is that the bursary system is proving effective in demonstrating to students that they can be supported while on a course without running up debts at the kinds of levels that many of the students in the system currently have. I am sorry to appear evasive but I believe it is too early to tell what is the precise effect of the new regime on the willingness or otherwise of people to participate in higher education.

Q369 Fiona Mactaggart: If it is too early to tell, who is doing the work which can tell us and when?

Professor Watson: There are a number of projects going on. The DfES did commission a kind of benchmarking study, which has been published. undertaken by my colleague, Michael Shaddock at the Institute, to set the base line in terms of what institutions thought they were trying to achieve by setting their fee levels and also by establishing their bursary schemes. It will be very interesting, and I think we can already begin to collect the data, to see how fair are the predictions made by institutions when they set fees, including some of the outliers, for example the institutions that set lower fees like Greenwich and Leeds Metropolitan who seem to have done very well in terms of attracting students. The other issue will be whether the bursary provisions made by institutions and signed off through the office for fair access are delivered in the ways and in the places that the institutions anticipated. There is a danger, and this comes back to the issue about admissions to some of the top universities, that some of the top universities will have been more optimistic about the number of wellqualified students from poor backgrounds that they can attract than has turned out to be the case. We could end up with a strange regression where it is the poor institutions who are already undertaking more widening participation who have to spend more of the fee income supporting bursaries because of the cohort which presents itself than the institutions who have maybe theoretically made more generous provision but are unable to find the students to spend it on. All of these kinds of issues we will not really be able to understand until we can look at two or three years of accounts of institutions.

Q370 Fiona Mactaggart: If what you are saying about bursaries becomes true, you are saying you cannot tell quite yet, do you envisage a kind of market developing in bursaries so that those institutions which do not have an excellent tradition of access for poorer students suddenly start offering king-sized bursaries in order to try and change their tradition.

Professor Watson: My impression is it is happening already. Rather than PQA as "post-qualifications admissions", we have a post-qualifications "auction" where students are now interrogating institutions as to the bursary package they could

expect if they were to come to their institution rather than another. There is a market there in relation to student support. That is perhaps one of the slightly unintended consequences of the reforms that came in with the 2004 Act.

Q371 Fiona Mactaggart: Is it a good one?

Professor Watson: To be frank, I do not know. Again, I am sorry to appear evasive. We will have to look at how this does pan out over time. Issues about student debt and aversion to debt are quite complex. We tend to only look at approaches to debt in respect of higher education in relation to students already in the system and what they tell us. As I have said in the paper you read, we need to look at attitudes towards debt and deferred payment on a wider scale. There is a generational thing. For example, the younger generation now overall is much more tolerant of long-term debt obligations than predecessor generations. There are some very interesting questions of social policy that go beyond education and higher education.

O372 Stephen Williams: A lot of the questions in this section have been done by Helen and Fiona so perhaps I will ask some other things. You said earlier in response to Helen Jones that the question of fair access to elite institutions was a little problem compared to the whole agenda in widening participation. If we do expand the numbers of people going into higher education but we do that in some ways because some people do it via their local FE college, or they come from a poor working class part of South Wales, such as I did, and go to Glamorgan University or they go 15 miles down the road to Cardiff but live at home rather than go to Bristol or Oxford, are we not missing something out there? We have widened the participation but have not widened the experience.

Professor Watson: To share with you what is not an anecdote but another iron law of UK higher education-and the data can be provided on this by the Funding Council-it is at the moment the case that there is a linear relationship between the number of A level points that candidates score and the distance they travel to undertake higher education. We do have a culture of higher education in this country where studying first degrees living away from home is very much part of the presumption that this is what you do. As the system gets bigger, and we have raced through what Martin Trow would call mass higher education and now arrived at what he calls universal higher education with 40% plus participating, that culture may change and there will be a greater willingness, often also for positive reasons, for students to stay at home or stay closer to home. There is sociological evidence that peer groups are tremendously important for young people. These are peer groups that are established before they go to higher education and there is some evidence that some students are making their higher education decisions on that basis. It is very interesting that the Open University is now experiencing quite high levels of applications from under 25s. The fastest growing group of applications

to the Open University is from students who are under 25. This is a transformation of the mission of the Open University over the time that it has been operating. In conditions of mass higher education, that time-honoured image of higher education, which is what Michael Oakeshott called "the gift of an interval" where you are taken out of your immediate setting and placed in another setting, usually with quite a lot of ivy and quadrangle, and then returned to the world, is not the way that the majority of students are now experiencing higher education. On international comparisons, and the Chairman pressed me a little about comparisons with the United States, it is quite interesting to take this set of characteristics and compare them with the rest of the EU and continental Europe where we have already a much more diverse system in this respect. We have a higher average age of participation, which is another difference from the model you have presented, and we have, compared to the rest of Europe, a higher proportion of students lower socio-economic backgrounds from participating, which is not often recognised in the political discourse. There are some things going on which are quite widely transformative of the system as a whole.

Q373 Fiona Mactaggart: I did not quite get that. You are saying in the UK we have a higher participation rate of lower socio-economic class students than the rest of the EU?

Professor Watson: This is based on data from a survey called EuroStudent 2000, which was undertaken in the year 2000. We are actually beaten by Finland in this respect but we have one of the highest.

Fiona Mactaggart: We are beaten by Finland in most things.

Q374 Chairman: Finland does not count. I have visited on a number occasions.

Professor Watson: I am not saying that it is good enough or as good as we would like it to be but our system is actually more diverse and more open than many of the continental European comparators.

Q375 Chairman: You are quoting one piece of research, as I understand from the papers the Committee received, in which the UK Government did not participate.

Professor Watson: The UK Government did not participate in that but what a colleague of mine and I did was to commission Brian Ramsden to take our HESA data and look at the same characteristics in relation to participation.

Q376 Stephen Williams: In your pithily written paper, which I enjoyed reading, you refer to moral panic about certain issues in higher education and you alluded to one earlier about the university looking at the A level grades of its entrants. Have you done any assessment, or are aware of any other assessments, looking at the volume of top score A levels that children from the State schools achieve and then see whether between them they could fill up all the places in the Russell Group universities for certain courses?

Professor Watson: I think you are alluding to a study which the Sutton Trust did publish some years ago where a proposition very similar to that was made. I am not in a position to comment effectively on that today. I could examine it and let you have a note if that would be helpful.

Q377 Paul Holmes: You were saying that we are already now seeing an increase in the number of students going close to home. I think I read last week that was an increase from 12 to 20% of the total.

Professor Watson: It is moving up gradually year by year.

Q378 Paul Holmes: And there is an increase in under-25s taking up Open University courses. Is there any analysis of the social class background of those who are staying close to home in increasing numbers or going to the Open University in increasing numbers?

Professor Watson: I am not aware of any statistically significant correlations that we can make on that. I am alluding also to data which will be available to the Committee from the "Patterns" series which Universities UK Long-term Strategy Group puts out each year which does give you some secular trend analysis.

Q379 Paul Holmes: Logically you would expect the ones from higher socio-economic classes whose parents were graduates are more likely still to be going long distances and the ones from poorer backgrounds facing debt and all the rest of it staying at home.

Professor Watson: That is a testable hypothesis.

Q380 Chairman: We are coming to the end of this session but when would you think you would be satisfied we had cracked it in terms of widening participation? What is the goal? What is the standard? I know there seemed to be some indication we are better than continental Europe but when do we say we have done the job?

Professor Watson: We would have cracked it when we have staying-on rates at 17 and 18 in structured education and training which are comparable with the rest of the OECD top group. That is where we fall behind at present. My hypothesis would be that if we can actually create that kind of effect over the next 10 or 15 years then issues that relate to higher education will solve themselves. We did have, a number of years ago, a very important improvement in staying on following the GCSE reforms. The effect of that has now, more or less, wound through the system. I think we need a further positive effect that relates to remaining in education and training, or a combination of both, between 16 and 18.

Q381 Chairman: Most of us in this room share that aspiration in reaching that destination. In some of the excellent work you sent us, and some of the things you said earlier in this session, there is an implication if you do not go to university you have failed, you have dropped out of civilised society. All of us in this room rely on a whole range of professions that do not need a HE grade. There are a large number of people in my constituency who would think that if their son or daughter went on to be an electrician, a plumber, a plasterer or a whole range of non-graduate professions that they done rather well and would not have dropped out of society, would not be anti-social, would not have a greater tendency to criminality, all the things that seem implied by you. You do not mean to do this.

Professor Watson: I would not want to give that impression. I come at your challenge from another point of view. One of the very interesting things about the UK higher education system is that a majority of the students who are engaged with it are not on full-time first degrees. They are engaged with higher education in a whole range of other ways. including many people who are mid-career, who are coming back for professional updating or maybe coming back for adult education or coming back because they wish to change their careers. I think the UK system is emphatically not a "one chance and if you miss it you have had it" system. That is a very important social contribution in a broader sense. The fact that well over half of the students who are engaged on first degrees in the UK have some experience after they have left compulsory education before they come into higher education indicates that we have grown a kind of life-long learning system underneath us without necessarily recognising it.

Q382 Chairman: Again, I welcome and share that view, but you have slightly ducked the facts. You have talked about social capital—that you were more concerned about social capital. A lot of people choosing not to go to university do add very much to the social capital in this country. Still implied in what you have said is that no HE experience, in some ways, is not as good as having HE experience.

Professor Sir David Watson: I think you have played back to me, Chairman, a wicked issue of the kind I was trying to explore with you on expansion and non participation. Clearly there are people who have no engagement with higher education, who are upstanding citizens, who have very productive and happy lives—

Q383 Chairman: And economically?

Professor Sir David Watson:—and are economically successful. What I think we are responsible for is creating an opportunity framework so that those people who might wish to participate in the ways that we have talked about are, in fact, not constrained from doing so. For example, in the 1960s, when I was an undergraduate, there was a view that if you did not get in when your time came, you had missed it forever, and I think that culture has now changed. I think there is a view that higher

education is there as a service that can be accessed in many different ways and at many different times during the life course. I think I am trying to play back to you, Chairman, the notion that none of these decisions are ever, once and for all, irrevocable decisions either to go or not to go; and for the students who decide not to go it is very important, I think, that the opportunity does remain there throughout the rest of their careers and their lives.

Q384 Chairman: One last question. I am a little bit worried about your enthusiasm for interviewing. As I said, it was not a question we had picked up in the United States. Most of the Ivy Leagues do not interview. They do have five different kinds of ways of assessing the student, including SATS, that do not need interviews, but they do have a much broader range of criteria. If I remember, there were five different aspects of a student's experience and background that they weighed in assessing (coming back to something Helen said) the potential of the student, not just one test, an A level test. Is not that the way we should be going rather than interviews? Professor Sir David Watson: The difficulty is creating systems that will generate the information, that can fill out that wider profile. Again, I think we have got to think about the differential social capital of families in terms of being able to support the data in those other categories that you might wish to pick up, such as, for example, community service. It is very interesting in relation to admissions to elite American universities to watch the way that kids in high schools start constructing their CVs from their early teens onwards through internships and volunteering and so on.

Q385 Chairman: A lot of people apply to do work with Members of Parliament, and we can tell you a lot about how British students do that as well, but do not SATS cut through that? There is an argument from Peter Lampl of the Sutton Trust that the SAT test cuts through all that social capital that people have, the social networks. They can get you jobs to make you look impressive on your CV. SATS cuts through that, does it?

Professor Sir David Watson: It claims to cut through it. I think that is a fairly robust proposition, but there are some critics that actually suggest that even the SAT tests are culturally constructed and can be discriminatory.

Q386 Chairman: They were part of five-

Professor Sir David Watson: Indeed, yes. It is that breadth of view. When I was responding on interviews earlier I was not just responding in relation to interviews to read "greats" or to read history of art, I am very impressed by the way that interviewing techniques for admission to professional courses in the UK have improved. I am thinking here about medicine, which I evidenced, but also teaching, other health professions, social

work, and so on, where we have professional formation at the undergraduate level, and I think interviewing there does help test potential as well as achievement today. **Q387 Chairman:** Sir David, it has been a very good session. This is an important inquiry for us. I hope you will remain in touch with the Committee. *Professor Sir David Watson:* Indeed. Thank you

Q388 Chairman: Lorraine Dearden from the Institute for Fiscal Studies, John Storan, Director, Action on Access, and Andy Wilson, Principal of Westminster Kingsway College. Can I apologise to Andy Wilson and John Storan. I usually make a point of welcoming you formally before the start, but we missed you at the beginning. I have seen that you have been in here for most of the session. As I said earlier to Sir David, this is a very important inquiry for us, so your presence and your assistance is going to be very valuable to this Committee. Can I give you really two minutes to rip through why you think we wanted to see you? What have you got that we need? Let us start with Lorraine, and you have been here before.

Professor Dearden: Yes, I have been here before. I guess it is questions about how we widen access to HE and whether we think it is worthwhile and of value.

Q389 Chairman: And your expertise is in what direction?

Professor Dearden: I have looked at two issues. I have been involved in looking at what determines whether people go on to higher education and I have been also looking at the returns from going to higher education and what it means for graduates who have gone through higher education.

Q390 Chairman: John?

Professor Storan: Chairman, I think my particular contribution is around some of the operational issues that Sir David touched upon, in part, particularly the kind of interventions and initiatives which have been taking place to try and support widening participation work both within the sector and, indeed, in partnership with schools and colleges and so on. I think my focus of evidence will be around the operational issues that are involved in trying to open up and make accessible opportunities in higher education for more, and different, people.

Q391 Chairman: Andy?

Mr Wilson: Just to pick up again on the things that have already come through this morning, you will know that FE colleges have themselves around 14% of the learners on higher education programmes, but we also provide around 44% of the entrants, so it would be interesting to look at both the provision that we provide and the routes through our other courses.

Q392 Chairman: Shall we get started on the questions? Can I ask you, to get you warmed up, if you like, all this money we have been spending on widening access, is it good value for money for the tax payer? I am looking at John particularly to start with. You seem to have decreasing returns on the investment. We have now got a larger commitment with another tranche of cash. Have the programmes been worthwhile, successful? Can the members of this Committee defend it to the tax payers who have to provide the cash?

Professor Storan: There are a number of sources of funding for widening participation initiatives and they fall into a number of categories. Let me mark those out. I think there is money that comes to HEIs, institutions, in the form of WP premium or allowance, and that is essentially focusing on work of two kinds: one is work pre-entry, trying to involve institutions in outreach work and activities; the second part of that money is really aimed at trying to improve retention within institutions-so it is post entry-so it is money to actually help students succeed once they enter higher education. One of the things we know about some of the students that we work hard to attract into higher education is that they are often the ones that are most at risk through falling out of higher education once they actually enter. I think the monies that are coming into institutions are making a very valuable contribution both to pre-entry work encouraging institutions to be involved in outreach type activities, but also the second part of that funding, as I say, is aimed and directed to supporting those students who are most at risk and supporting their success once they enter higher education. There is another block of money which principally, but not only, is funded through the Aimhigher programme, which, as you know, is a national outreach programme delivered, supported and funded through regional partnership working, and that is really to support institutions to work with schools and colleges, LDAs and other partners, to think and work in a progressive way, to offer a range of interventions which can support and provide stepping stones, if you will, from where learners are—and they are in different points because there are different age ranges involved in Aimhigherthrough eventually to higher education. So, they are the two blocks of funding which are around for widening participation. Of course, there is also the additional money, which we mentioned earlier, which is the money coming in through the top-up fees, through bursaries, and so on, and there are some monies within that which institutions have earmarked for outreach activities as well some of

Witnesses: **Professor Lorraine Dearden**, Director, Centre for Early Years and Education Research, The Institute for Fiscal Studies¹, **Professor John Storan**, Director, Action on Access, and **Mr Andy Wilson**, Principal, Westminster Kingsway College, gave evidence.

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7 March 2007 Professor Lorraine Dearden, Professor John Storan and Mr Andy Wilson

which will be seeking to widen participation but, as a previous witness said, it is still too early to know how much of that money is actually effective in being used for widening participation. We will not know that until OFFA has its return from institutions, which will be after the summer, and we will know how much money has been expended by institutions on outreach work as part of the money that they receive from the top-up fees. So, Chairman, there are three principal sources of funding.

Q393 Chairman: Is it working? Is it worth it?

Professor Storan: Let us take Aimhigher as a case in point. Aimhigher, I think, is having an extraordinary effect. I think it has been a most successful initiative. There have been four blocks of research which have been looking at Aimhigher. Aimhigher has actually only been in existence for a very short period of time, the integrated form of Aimhigher only for the last two years or so-prior to that we had a number of different streams. We had Action Challenge funding, we had Partnerships for Progression, which HE did, but if we look at the two or three years of operation work of integrated Aimhigher, I think the evidence is beginning to suggest very strongly that it is having a big impact both in terms of what we call aspiration raising work and activities but also, I think, in terms of contributing towards improved attainment as well. That is not just coming from the four studies, the ECOS study, the study that NFER has produced and work that HES has commissioned, but I think it is also coming through from the feedback and the evaluation work that partnerships themselves conduct in very rigorous ways through the regional partnerships boards which they are accountable to. So I think the evidence is beginning to grow that Aimhigher type activities are having an effect, but, again, as Sir David mentioned earlier on, this is a slow burn—these things will take time—and I think that over time we will see a compounding effect of programmes such as Aimhigher. I think it is also a way of helping us to think afresh about the kind of barriers there may be around sectoral divides in partners involved in widening participation as well. My own view, and I think the evidence is building, is that Aimhigher type activities are beginning to have an effect and are working.

Q394 Chairman: Slow burn is a bit of a worry, though, is it not, for economists like you, because Keynes said, "In the long term, we are all dead"? How long is it before this makes a difference to people from social classes four and five that Helen was asking questions about?

Professor Dearden: I do not know. There is a new survey which the DfES has just carried out called the *Longitudinal Survey of Young People in England*, which has interviewed people born in 1990, so they were 13 and 14-year-olds in 2003–04. The first wave of this data has now been released and colleagues of mine have just done some initial descriptive analysis. The survey has questions on attitudes and expectations about whether they will expect to apply to a higher institution, and it was interesting that

around 70% of kids in the survey said they had intended to apply for higher education. If you look at it by socio-economic background, there is still a gradient, but even a significant proportion of kids from the lower socio-economic backgrounds said that they intended to apply for higher education. I thought that was interesting. When I looked at the figures I thought that is an incredibly high number. We will be able to follow these children and see whether they actually do decide to go on. As I think Sir David said, even in this survey the first outcomes you have got are at age 11. There are huge social gradients in the outcome at Key Stage 2 and you also see this for kids at Key Stage 3; I think this strengthens the idea that you have to make interventions very early and change attitudes and expectations very early. I think there are currently a lot of Early Years initiatives, but whether they work in helping to change this we are going to have to wait a long time to see. I guess the other area where government has increased funding is in the reforms to HE in 2006. With the 2006 changes there is a lot more money for kids from poorer socio-economic backgrounds, both in terms of loan subsidies for support, for fee loans and grants. Kids from poor socio-economic backgrounds are much, much better off as students under this new system. Whether that has impacted on applications² we do not know yet, but it will be interesting to see. It is all very well the support being more generous, but what we do not know as yet is whether these changes have affected the likelihood of those applying; all we see is people who actually apply.

Q395 Chairman: Andy, do you have a view on that? Mr Wilson: I think Aimhigher has been extremely successful with the particular group of students, with those 18-21-year-olds, perhaps those who are thinking about higher education but questioning its value, questioning what the experience will be like, questioning the student finance issues. I think there remain two things with it. It is always difficult to target the most needy students. You tend to look at a group of students and say, "We will put on an Aimhigher programme for them", and if you are in London it can take in some of the most already advantaged students along with those who are the most needy, and you cannot discriminate in the same way; and I would question whether we are being completely successful in targeting the students who do not want to go into HE, who are doing education for a different reason and who have not really thought about HE. It is really those who are on the borderline of questioning whether it is for them or not that it is most successful.

Q396 Mr Chaytor: Could I ask John, what is the total budget of Action on Access and Aimhigher? *Professor Storan:* The Action on Access budget is £800,000, or thereabouts, for the year. Our role, incidentally, just to add to that, is to support the Aimhigher work and also institutions to develop various strategies and approaches to widening

² Note by witness: From lower socio-economic groups

participation, and, thirdly, to have a focus on disability. We have not mentioned disabled learners, and they are clearly numerically one of the groups which is unrepresented in higher education. So, our budget is about £800,000 per year. The budget for Aimhigher, I think, is something like £83, £84 million. It has been reduced for this coming year by 12%. We have seen a reduction in the Aimhigher budget. Aimhigher funding is distributed through nine regional partnerships and 45 area groups. So what we have got is a nationally funded programme planned and delivered regionally and through areas. I think that is one of the strengths of Aimhigher.

Q397 Mr Chaytor: Why was the structure changed two years ago? Aimhigher was established five years ago but there was re-organisation two years ago. What was the background to that?

Professor Storan: The background to that was really the White Paper which proposed the previous programmes. There was a programme which was focused principally on higher education, which is called Partnerships for Progression, and then there was the kind of schools-based work which was Excellence in Cities and Excellence Challenge work, and the White Paper proposed that these things be brought together into one integrated Aimhigher programme. Part of the problem with the evidence base, which, as I say, my own view, going round the country and working very closely with Aimhigher partnerships (as do the rest of the Action on Access team) is that it is having an effect, and I think the issue Andy makes is an important one about targeting. I really do think that the integration of Aimhigher through the Excellence Challenge and Partnerships for Progression brought together partners in a way that was not happening before; and I think we are beginning to see that happening. As I suggested in my opening comments, one of the issues for universities has been to know where they draw their boundaries in this area, what their role is and how they can have most effect, and I think Aimhigher has introduced them to partnerships and working in ways that perhaps many institutions have not been used to working before, and that is beginning to have an impact, I think, within universities.

Q398 Mr Chaytor: In terms of the evidence, you have referred to an NFER study. *Professor Storan:* And the ECOS study.

Q399 Mr Chaytor: And the ECOS study, but surely the evidence that counts is the annual statistics on participation by social class, which is produced by HEFCE or ESOL. What do they say over the last five years? What is the pattern in social class participation over the last five years?

Professor Storan: The statistics I am aware of actually suggest that there has not been a huge change in the social class distribution within higher education. I think there has been some fluctuation over time. If we look, for example, at the performance indicators that higher education institutions use, we saw the result in the summer

which showed a dip in the three main indicators which actually apply to widening participation in that sense. I think, therefore, what we are seeing is Aimhigher contributing to cultural changes and changes in the ways that universities see their role here, and I think that will begin to have an effect over time. I think it is beginning to happen. Certainly we are seeing applications.

Q400 Mr Chaytor: I suppose my point is a bit nebulous. If we are spending £85 million a year— *Professor Storan:* Out of a budget of £7.3 billion, I think.

Q401 Mr Chaytor: Yes, if we are spending £85 million on Action on Access and Aimhigher and about a third of a billion on the widening participation premium to universities and there is no change over five years, then some questions must be asked, surely?

Professor Storan: No, I think the statistics are going up but the differentials between the classes are not changing perhaps as quickly as we would want them to change. I think there is evidence that that is happening. I think the other thing to say is the whole proposition around learning and continuing to learn is actually feeding through, through the Aimhigher work, as well. I think the issue about Aimhigher actually trying to encourage aspirations and a different attitude to learning is having an effect as well. You will see that in FE and schools as well as feeding through into HE.

Q402 Mr Chaytor: If Sir David Watson's argument is that the way we will judge success of widening participation is through the extension of post-16 participation rates to the OECD average, or to the top end of the OECD, would not the logic of that mean that the focus of spend on widening participation programmes should be entirely within schools and really involving the university admissions procedure is too long? If there is this third of a billion to spend, why not give a million pounds to each of the 300 schools that have got the biggest problem?

Professor Storan: I think we are beginning to understand that we need to address this issue on a number of fronts. I think the role that universities can play in partnerships with schools and FE and others is actually changing the way that universities see themselves in relation to some of these issues, and I think that is beginning to have an effect. I agree with you that we need to do more, and, clearly, there are points within the trajectories and lifecycles of many students from lower socio-economic backgrounds where they drop out of the system, including the one that you have described, and there are number of other points in education careers where that happens. I think the engagement, involvement in universities with schools, and so on, is actually having a pull-through effect on some of these things. I understand the proposition you are putting, I understand the argument for where we need to invest most to get the best effect; my view is that we need to address a number of points, including higher education, but also schools and driving up attainment, and I think universities have a key contribution to make in that process.

Q403 Mr Chaytor: Is the biggest problem the question of raising the achievement of those young people who have potential but tend to tail off after Key Stage 2, or is it raising the aspiration of those young people who do stay on beyond 16 or do achieve five good GCSEs but do not decide to continue to university? In terms of the Government's long-term goals, which should be the priority of those two objectives?

Professor Storan: Again, I do not want to be evasive, but I think we need to attend to both attainment and aspiration, like you said, and I think the one feeds through to the other. One of the things, again, that Aimhigher and the programme that it represents have done is to help us to understand the relationship a bit better between aspiration raising work and attainment and the fact that actually those two things are part of one process. If we are serious about providing long-term opportunities for people to come in and out of learning from school right the way through into careers and employment and beyond, then I think we need to understand that each of the key stakeholders or players in that process have a contribution to make, not only to driving up attainment, but also to offering those opportunities in ways which are accessible and enable individuals to benefit to the maximum from those opportunities.

Q404 Chairman: I think you are working John very hard, but what about Lorraine and Andy?

Professor Dearden: I do not think it is an either/or. It seems to that me if you have got a group of people now who have finished Key Stage 2, we should be spending money on making sure that their aspirations and expectations of going on to HE are high. I think that is a really important point. But, for those who are already 16, we cannot just say, "Sorry", and abandon them. I think it is much better value for cohorts who are young to spend the money earlier rather than later. I think there is very good evidence for suggesting that this is a much better use of money, but you cannot abandon those who have been failed by the system earlier. So I think it is a bit of both.

Q405 Mr Chaytor: Can I ask Lorraine to what extent is the source of the problems we have in low achievement amongst certain young people, and low aspiration amongst others who have achieved reasonably well, to do with the structure of secondary education and the intense stratification of our secondary school system?

Professor Dearden: I do not know. I have not looked at the question.

Q406 Mr Chaytor: Does Andy have a view on that? *Mr Wilson:* Not an authoritative one.

Q407 Mr Chaytor: The debate about widening participation frameworks has been framed entirely as a problem for universities. I am suggesting: is there another way of looking at it? If the problem of fair access to secondary schools was resolved and there was a more egalitarian secondary school system, the university problem would sort itself out? Mr Wilson: I do not think any of it is as simple as that. I think the link between aspiration and attainment is very important, and that is why the dual focus is essential within Aimhigher. What we try to use Aimhigher for is to increase aspirations, and contact with the universities is absolutely crucial in doing that, but we often are working from a deficit situation where a student then decides, "Actually HE is for me, and now I have got to move very quickly in getting the qualifications that I need in order to get that university place and then to succeed once I am at university." So having raised the aspirations because of everything else that that young person has been through in their previous career, we do need the support for increasing attainment in a very quick fashion before that interest is lost.

Q408 Mr Chaytor: Could I frame the question another way? Do you think it is possible to achieve the Government's goals in widening participation whilst maintaining a secondary school system that remains intensely hierarchical?

Mr Wilson: I think we are really in danger of concentrating too much on that 18–21-year-old group. I think it is with adults that the biggest effect of widening participation initiatives is going to come through. Certainly for general further education colleges it is with adults that we are going to be able to make the biggest contribution. In looking at the pre-18 geography at the moment, it does feel that there are so many different ways of education being organised at Key Stage 3 and Key Stage 4 in particular that actually everything has been tried, and it is far too early to know which of those is going to be the most successful and whether it is a fundamental problem within the school system.

Q409 Stephen Williams: Can I ask Mr Storan, how much of Aimhigher's budget is spent on advertising? *Professor Storan:* I do not know the exact figure.

Q410 Stephen Williams: Roughly?

Professor Storan: I do not know the exact figure. What I do know is that Aimhigher works in a number of levels. There is, for example, the Aimhigher Road Show, which you may know of, which goes around the country nationally, supporting and raising issues around higher education and participation. I cannot give you a precise figure on advertising.

Q411 Stephen Williams: The Government was very reluctant to release information about the effectiveness of its advertising campaign in

Aimhigher, so I did a Freedom of Information request to get it out of them and that revealed the reason why they did not want to publish it. The advertising had been most successful amongst the top two social class groups, the very high penetration rates, and least successful, surprise, surprise, amongst the lower socio-economic groups and, therefore, the advertising campaign which the Government said was a great success had not achieved its objective. Has any assessment been done since then as to how you can reach the people who are missing out on higher education, are not accessing the bursaries or are not applying to institutions they are qualified to go to, and so on?

Professor Storan: I cannot comment on the advertising. I am not trying to be evasive, but I do not know the answer to that question. What I can comment on is the range and programme of activities that is delivered through these Aimhigher partnerships round the country. I am sure in each and every one of your constituencies you will find whole suites of activities, ranging from summer school work, mentoring schemes, visits to universities, materials, information advice and guidance on student finances, and so on, suites of activities and information which will be delivered, tailored and targeted at students who are most likely not to be thinking about higher education but could benefit from it. There are two cohorts within the Aimhigher cohort: one is the gifted and talented group and the other group is the group that could benefit from higher education and working with schools and attainment. I think a broad range of activities is being addressed. I think targeting can always be improved. You can always look at targeting. I think there is a discussion to be had about targeting and how effective we are with targeting, but my own view is that this suite of activities through the regional work and through the area work is beginning to have an impact and we are addressing some of those constituencies. As I say, I cannot comment on the point you made about the advertising.

Q412 Stephen Williams: We are talking generalities essentially. Can you give us one specific example of where a university has had success perhaps with a particular school in raising the number of children at 16, 17, who have decided to apply to university and have successfully entered university? Is there one good example you can point to?

Professor Storan: Action on Access produce a whole suite of case study materials which indicate examples. The Policy that Works series, which we can provide to the Committee, actually it provides a whole catalogue of examples of initiatives which are feeding through and working through to change aspirations and having a really positive effect. There are lots of examples. We are not short of examples of where this is happening. I think the trick is to ensure that we continue to support that activity and have a continuing policy to support that activity. Aimhigher is only funded, as we know, until 2008, so there are issues about its longevity after then.

Q413 Stephen Williams: You cannot name off the top of your head one shining example of where it has been a great success?

Professor Storan: There are lots of examples. There is the Creative Steps programme, for example, in the South West, which brings together a number of HE institutions with schools throughout the South West. There are lots of examples. There are lots of mentoring schemes. At my own university we have got five or six mentoring schemes that work with colleges and schools. There are lots of examples, and I am happy to provide all those details. I think the point I am making is that those examples around the country are working in different ways with different partnerships, and I think that is one of the strengths of the Aimhigher programme, that it is providing a national framework within which partnerships at regional and area level who know the patch, know the issues, can begin to deliver a whole suite of programmes that can feed into raising aspirations and engaging with young people who are the least likely, but have the potential, to benefit from higher education.

Q414 Chairman: Surely what we are after is good practice. We are after finding out if some of these partnerships, whatever level we are at, will be more successful than others. When you identify a really good performance, what do you do about sharing that across the piece? Surely it cannot all be the same. There must be a startlingly better performance from some sectors and some innovations that you then want to share.

Professor Storan: There are a number of things that both the partnerships themselves do that we support for our work. We provide a whole series of publications on the work that partnerships are doing. I have mentioned Policy that Works, which is the latest one, which is a set of case studies which shows what kind of activities are taking place, the impact they are having and some of the issues that they raise as well. We provide and produce a whole series of seminars and conferences throughout the year which bring partners together with universities and other colleagues to share that practice across the piece. I think there is a lot of sharing and dissemination of that practice, but, you are right, practice varies and the circumstances within partnerships vary as well. The idea that a suite of activities which is delivered in Cornwall would be the same as ones that are delivered within an urban setting-there are very different issues trying to reach out and work with dispersed and rural communities and coastal communities than working in Inner London or in urban area. We produce a whole series of publications and dissemination activities which help partnerships and others to learn from each other and to pick up good practice, and practice that works, and share that with each other. That goes on throughout the year, Chairman.

Q415 Paul Holmes: Professor Dearden, you have done some recent research on looking at the labour market outcomes for graduates. What sort of relationships have you found between the

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institutions that people attend and the outcome in terms of work and the social class of graduates and the outcome in terms of work?

Professor Dearden: We are actually just doing a piece of work looking at this issue for the DfES. Getting data on which HE institution you have attended is virtually impossible. We are using data and there is no good data on which institution the person has attended, so that makes it impossible. In terms of social background, the work that I have presented here is from the Labour Force Survey, so you observe the individual but you have no idea about the social background of their parents. At the moment we are doing some work using the British Household Panel Survey, which has information on parental background, because, obviously, that is the next stage. We have estimated the entire distribution of graduate outcomes. What we have not said is, "If you come from a certain social background, what is your likely path and how much does your past determine where you end up?", and, obviously, that is the important next step. We are doing it at the moment, but we have not done it yet. The only stuff that we have done is looking by subject, the differences by the subject that you study. There is not so much in the average lifetime outcomes, but there are very big differences in the dispersion of outcomes by subject. For arts subjects there is a lower mean and much greater dispersion in outcomes than for business and finance studies where there is a higher mean but less dispersion. That is the only thing we have looked at, by subject. Obviously, the next point is to do the stuff by social background, but by institution, we cannot do it. Colleagues of mine are doing a project under the Teaching and Learning Research Programme (TLRP) on widening access where they are linking together administrative data sets, the National Pupil Database, HESA data and other post-16 data. They are following a cohort of children for whom we have results at Key Stage 2, Key Stage 3, Key Stage 4. This is then being linked to administrative data on post-16 options, including vocational options, which is then being linked to UCAS data on where they apply to and HESA data, but they are still doing the data linking. The whole idea is about going back and looking at kids from different ethnic and socio-economic backgrounds. It is very poorly measured in administrative data because you only have information on free school meal eligibility and where they live, where their results start to diverge and what that means in terms of where they apply for HE, whether they stay in university, and stuff like that. But this work is for the cohort who started HE in September 2005 ie before the changes to HE funding.

Q416 Paul Holmes: So you cannot draw any conclusions yet. At what point would you be able to? *Professor Dearden:* This work that we are doing for the Department for Education and Skills is going to be completed this year, so by the end of this year ...

Q417 Paul Holmes: When the Select Committee was in Australia a few months ago, for example, we were told that 10 years after fees were introduced there,

there was research evidence showing that working class male undergraduates were shifting their choices. Instead of doing the longer, more expensive but more lucrative courses, like law and medicine, they were doing the shorter, cheaper and perhaps less rewarding courses, in terms of pay, courses like history.

Professor Dearden: There has been a policy change in Australia. Whereas before there was a flat fee, they now have bands for different courses and so medical and law courses are much more expensive than other courses. That is slightly different.

Q418 Paul Holmes: So in another year or two we might see evidence, but not yet!

Professor Dearden: From my colleagues' work with the linked administrative data sets we should be able to see, for children from different ethnic backgrounds and kids who are on free school meals vs. non free school meals, how they did at age 11, age 14, age 16 and at A levels, really detailed information whether by ethnicity or free school meal status; it affects where they apply to and their chances of getting in. I think that will provide one really important piece of information, but, as I said, getting all this data linked at the moment is proving very difficult. Then we are going to use the BHPS to look at the impact of family social backgrounds. We have started doing the analysis, we are doing it by income, by occupation and by education, and seeing how that affects the initial earnings after you have graduated from higher education.

Q419 Paul Holmes: The Centre for the Economics of Education at the LSE—

Professor Dearden: Yes, I am part of that as well.

Q420 Paul Holmes: —has said that the UK and the USA have got the lowest intergenerational social mobility of the OECD countries and that the UK is the only one where it has actually fallen. Are they surprising findings?

Professor Dearden: It is definitely true. I was involved in the initial work with Stephen Machin when we looked at intergenerational mobility using the 1958 birth cohort. What they are doing is comparing a cohort of individuals born in 1958 and a cohort of individuals born in 1970, and they showed that intergenerational mobility actually decreased for the 1970 cohort compared to the 1958 cohort. But the 1970 cohort went to university just before the massive expansion in HE, so I think what we would want to see is what has happened post then. I do not think these findings are surprising given the increase in income inequality that we have seen over the 1990s.

Q421 Paul Holmes: But the USA, for example, prides itself on having no social class system, no barriers of that kind to mobility, and yet we are saying that, along with the UK, they are the two worst in the OECD.

Professor Dearden: What it is saying is where your parents are, measuring their permanent status, really

has a big impact on where you end up in the distribution.

Q422 Chairman: I imagine that you thought that would have been just as strong in France, for example.

Professor Dearden: I am not sure whether equivalent studies have been done in France, but you might expect, given the hierarchical nature of their education system, that you might see similar results in France. I am not up-to-date on this literature, but I think there are some studies which show that there are similar problems in France and there are others which suggest that there is not, but I am not aware of the most recent research on this.

Q423 Paul Holmes: Is it a matter of partly how glib a conclusion we reach from the statistics, without putting caveats on that? For example, it used to be that the ratio between middle and upper class to working class in the country was 30:70 and then it dropped to 40:60 and now I am told it is 50:50. On the one hand, we are told that there are fewer children from lower socio-economics groups going to university and to better jobs and so forth, but, on the other hand, that group has shrunk considerably. Are we actually comparing like with like?

Professor Dearden: It depends. There is a number of ways of defining this. If you do it by occupation, then, yes, we are not comparing like with like. But a lot of these studies are comparing things like educational mobility or measures of permanent income, so in that sense they are comparing like with like. I think there is a serious question with comparability with occupational mobility. It is very interesting, even looking at the Millennium Cohort Study, a study which is following kids born in 2000, even by the age of three years there are socio-economic gaps in outcomes. It starts very, very early and it is a real problem.

Q424 Paul Holmes: Another example on how you present the stats: in 1991 about 11% of children who came from working class manual backgrounds, non-skilled and so forth, went on to higher education, and by 2001 it was 19%—that is an increase of eight percentage points—whereas the middle and upper class group went up by 15 percentage points from 35 to 50. That is not very good, but, on the other hand—

Professor Dearden: If you took it in percent terms, you would say it is a 50% increase in one and—

Q425 Paul Holmes: Yes, the working class group has nearly doubled; whereas the middle class group from a higher base has only gone up by 47%.

Professor Dearden: Yes, it is the way you present the figures.

Q426 Paul Holmes: Our first witness in this session was talking about moral panics on these sorts of things. Are we indulging in moral panics and saying the problem is greater than it is, that we are making less programmes than we actually are because it all depends which way you present the stats?

Professor Dearden: It does, and it depends on how you define lower socio-economic groups as well because of the occupational changes that have taken place over time. It is a big problem, as I said, in this new survey that the DfES is running, the Longitudinal Survey of Young People in England, even given outcomes at age 11. So, if you hold that constant, the aspirations and expectations of children from lower socio-economic background are lower than those from higher socio-economic backgrounds. It is not just kids, it is parents as well.

Q427 Chairman: As I think you know I have a vested interest in the London School of Economics, being a Governor and having studied Michael Oakeshott there. There has been quite a lot of criticism of that piece of research. You do not seem to be entirely happy yourself in terms of the interpretation put on that research.

Professor Dearden: I have seen some of the criticism by Stephen Gorard, and I do not agree with his criticism.

Q428 Chairman: What does Stephen Gorard say about it?

Professor Dearden: Look, I do not know the argument that well. As I said, I did the original piece of research with Steven Machin looking at intergenerational mobility for the NCDS, but they are quite technical details about whether you use income, or earnings, or gross earnings, or net earnings; so I do not know the issues but I know there has been extensive correspondence and debate on this issue.

Q429 Chairman: I have got no doubt about the quality of the research you carried out. What I was trying to get out of you was do you think other people have put a spin or interpretation into the work you did that you did not anticipate?

Professor Dearden: You come out with an estimate. So what this measures is how much your parents' education or permanent status determines where you are, and you get a figure of 0.4 or 0.3. Is that a lot or not a lot?

Q430 Chairman: If it is not grounded in, say, what happened in France then we do not know much, do we, because on a different level we have the previous witness, Sir David, telling us that we are doing much better than Continental Europe.

Professor Dearden: He was talking about participation rates, was he not?

Q431 Chairman: So social mobility has slowed up in the UK and the United States?

Professor Dearden: Comparing the 1958 and 1970 cohort, it has, but we have no recent evidence.

Q432 Chairman: But Sir David was saying that we are doing all right in terms of inclusion as compared with most of the rest of Europe. How does that square? I am uneasy about those two projections.

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Professor Dearden: The intergenerational mobility work is measuring how much, in most cases, a father's economic position determines where their sons end up, whereas what David was talking about was inclusion now. As I said, the intergenerational mobility was comparing a group of kids born in 1958 with those in 1970—so just two cohorts—and they found that mobility went down for those two cohorts, but drawing general conclusions that mobility is going down permanently and comparing aggregate statistics is very difficult.

Q433 Chairman: No, I want to bring you back. Then it was drawn to our attention in the research as it came out that that is the lowest social mobility in industrialised countries. That is the crunch, is it not. Did your research compare us with all those other countries?

Professor Dearden: No, my research did not.

Q434 Chairman: Who did the research that said: this is the lowest social mobility compared to— *Professor Dearden:* I do not know.

Q435 Chairman: Does anyone know? No? Okay, that is very instructive. The previous witness cannot speak, but he will send us a note, I believe.

Professor Dearden: There are great problems with doing cross-country comparability in terms of how you measure permanent status.

Chairman: I understand the difficulty. Helen.

Q436 Helen Jones: I wanted to ask John a question going back to what we discussed earlier, if I may, because I think we are trying to get some statistics out of this. Can you name for us any university that has managed to increase the proportion of children from social classes four and five going to that university through Aimhigher and Action on Access? Is there any example of it being done?

Professor Storan: As I said, this is not to be evasive, but just to say that the Aimhigher work is still relatively new. We have had, as I say, two years worth of experience of the integrated programme of Aimhigher, including the Excellence Challenge and the previous one that I mentioned before, which is Partnerships for Progression. What I think we are seeing within universities is universities themselves beginning to look at their own plans and the way they operate as a result of the Aimhigher work both through their links into Aimhigher but also through the strategic and corporate planning that they have in thinking about their own widening participation work. I think we are beginning to see that.

Q437 Helen Jones: With respect, I understand what you are saying, but that is not what I asked you. I was not asking about their corporate plans. I was asking has anyone actually managed to increase the numbers?

Professor Storan: The numbers going into?

Q438 Helen Jones: Going into higher education from social classes four and five, which are the ones we were talking about earlier where participation has remained fairly static.

Professor Storan: If we look at the distribution of those classes across the sector, if you look at the universities that are doing most in those areas, then there are a number of young people that go into their universities that would have had experience of, and have come from, Aimhigher programmes. I think the answer is that there is evidence that Aimhigher is a contributor to that.

Q439 Helen Jones: We are trying to find a link. Perhaps you can let us have a note afterwards on whether there is a link between the two. It is actual statistics that we are trying to get to rather than a general idea of what is going on.

Professor Storan: If I may say so, I think the argument that says there is a cause and an effect happening here needs to be thought about very carefully. I think we are looking at a very complex set of processes which are actually feeding through, eventually, to young people going into higher education. In regard to the argument that there is a cause and an effect and we can statistically prove those things, I think we need to take a much more rounded approach. That is not to avoid the point that I understand you are making.

Q440 Helen Jones: That is my point. If you cannot prove cause and effect, why are we funding it?

Professor Storan: I think what we can demonstrate is that things like Aimhigher contribute to raising aspirations and attitudes which will lead to participation in all kinds of learning opportunities, including higher education, but I would be happy to provide some further information on those statistics for you after the session.³

Chairman: I am conscious that some members of the Committee have not had a full chance in this session. Fiona, is there anything you would like to ask?

Fiona Mactaggart: No.

Chairman: I feel that we are neglecting Andy Wilson. We are now turning to you. David.

Q441 Mr Chaytor: Andy, earlier you said that you felt the bulk of the future expansion of HE would come from the FE sector, particularly from adults. Is HEFCE policy at the moment encouraging that or restricting it?

Mr Wilson: I said that I thought the increase in learner numbers would come from adults, whether that is in FE or HE. I think the adult market is absolutely crucial to widening participation. In terms of HEFCE policy, I think HEFCE are doing a lot to widen the availability of HE courses within

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further education. There has been another recent release of numbers into foundation degrees, with the implication that they will be delivered in further education. Most further education colleges who were involved in HE provision are being able to move from simple franchise arrangements to increase the number of directly funded students within the colleges themselves. Certainly that is the strategy that my own college is taking.

Q442 Mr Chaytor: Is there a policy to squeeze out HE from those FE colleges that have very small numbers and consolidate in larger units?

Mr Wilson: I think it depends where the very small numbers are. The colleges with smaller numbers tend to have those in franchise arrangements with universities so that the funding is coming into the college through a partner university. I think we would be taken as smallish in terms of the numbers that we have. We have 320, 330 HE learners in a year. We are not big enough to be one of those mixed economy groups, but certainly we are getting support from HEFCE and increasing our directly funded numbers there. Of course, we are still reliant on university partners to award the foundation degree. As all of our HE qualifications are foundation degrees now, we have not got any HNDs or HNCs left, so we are still reliant on HE partners in order to deliver those, and even if the FE bill proposal goes through, we would still be reliant on an HE partner because we are not big enough to hit that threshold that has been talked about to award our own foundation degree.

Q443 Mr Chaytor: Coming back to the issue of total numbers, you are saying that in respect of widening participation and increasing total numbers in FE, as we move towards the 50% participation guideline, FE colleges will contribute through the extension of foundation degrees by recruiting 18-year-olds but FE colleges will also contribute by their work with adults?

Mr Wilson: I did not quite catch all of that last point. FE colleges will expand to some extent the number of 18-year-olds, and I think there are some interesting issues in the introduction of diplomas which will have students thinking very clearly. If the student has been through a diploma route, either fully at the college or in partnership with the college, whether they actually are more suited to continuing on to a foundation degree programme essentially full-time within the college environment. I think that is something that will happen, but I think the absolutely crucial market for colleges with foundation degrees and the expansion is working with employers, and I think that is an aspect of widening participation that we probably missed this morning.

Q444 Mr Chaytor: This is what I wanted to focus on. Where do you think the balance lies? In terms of increasing numbers in HE, where does the balance lie between the contribution from adults as against the contribution from 18-year-olds coming out of school who have previously not aspired to HE? You seem to be saying that the focus should be on FE in the adult market rather than squeezing out more potential from the schools.

Mr Wilson: I cannot comment on what the strategy for universities ought to be. I can only talk about the strategy for colleges like mine, the sort of colleges who are trying to expand their HE provision and expand their work with employers. It is the absolutely crucial imperative for general FE colleges at the moment, that skills agenda. We need to have a portfolio of product qualifications at different levels that we can take to work with employers, and foundation degrees are a crucial part of that. To answer the question directly, I think 75 or 80% of the expansion of foundation degrees within many general FE colleges will be in that adult market with employers rather than through 18–21-year-olds.

Q445 Mr Chaytor: Is the use of the current funding regime both from HEFCE and through the LSC supporting that expansion sufficiently?

Mr Wilson: My experience is that the HEFCE funding is not particularly a problem as things stand at the moment. I think that if the foundation degree market was to take off in perhaps the way that Leitch and similar research would say that it ought to, HEFCE funding could become a problem, because you are very limited by those targets that are set. The variation from it, by relatively small numbers, can have a very big financial effect on a college in terms of the money that they are able to pull down. So, I can see a limitation in the future, and I think perhaps the colleges who are the larger providers of HE are already experiencing some of that. Within the proposed Learning and Skills Council, the proposed LSC funding methodology, the idea of demand-led, you can see how that fits with working within an employer market, and that is not replicated, as you will appreciate, within the HE system. I do not think I would be arguing for a demand-led system amongst HE qualifications, not least because of the expense of delivering them.

Q446 Mr Chaytor: The expansion of adults is partly the recruitment of adults directly onto foundation degree courses but also the participation of adults in pre-degree programmes with a view to continuing to HE?

Mr Wilson: Yes.

Q447 Mr Chaytor: Do you think the LSC funding streams for the pre-degree work is contributing to that objective? Surely there has been a big switch away from LSC funding for adults towards younger learners?

Mr Wilson: Yes; there are a lot of current issues about LSC funding for adult skills. I think you probably have to talk to a sectoral organisation to get the national picture on it. Certainly in London at the moment we are looking next year for six to 8 per cent cuts in adult funding, and we are being expected

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to chase very rapidly increasing Level 2 targets. With a relatively small amount of provision that does not fit into priority categories, we have to cut the programmes in order to fund those Level 2 targets. The programmes that tend to be cut at the moment are actually the basic skills, in particular ESOL programmes, and my college will be looking at a 10 or 12% cut in ESOL next year in order to move provision into Level 2. There is a small increase in Level 3, we are generally seen as hitting Level 3 targets, and so there is a lot less priority being put there. Professor Watson talked this morning about the importance of access courses. It does mean that access courses are being squeezed, and they are an important provision in terms of widening participation for adults on full-time HE, the more traditional HE programmes, full degree programmes, but an extremely successful programme that is leading to people who would not previously have got into HE getting into prestigious London universities. I can provide you with figures there that really do demonstrate people getting into Kings, to Imperial, to Westminster, to SOAS, and that is being squeezed at the moment.⁴

Q448 Mr Chaytor: So there is a bit of a contradiction in terms of LSC funding?

Mr Wilson: There is a huge contradiction in terms of LSC funding, and it is not supporting widening participation in HE at the moment, it is supporting a massive increase in Level 2 targets whether or not they are realisable, because I think most FE colleges would think that the Level 2 targets that they are being set are not realistic, are not going to be realised and that other provision, both below and above that, is being squeezed in pursuance of those targets.

Q449 Mr Chaytor: Finally, could I ask about degree awarding powers? Your college will want to award its own foundation degrees presumably?

Mr Wilson: We would consider it. I think we are not likely, as things stand at the moment, to come above the threshold that would be needed. The other thing that is just worth exploring is about qualification structures and the role of qualification structures particularly for organisations that are trying to work directly with employers. We are very much the middle man, the intermediary, in those relationships between the qualification awarding powers of universities when we are talking about HE, but even when it comes down to Level 2 and Level 3, the awarding bodies, and we have to negotiate with employers and then be thinking about the qualification structure that fits, what that employer wants, that is a huge hindrance at the moment. There would be major advantages within HE about being able to construct the HE programme to actually meet the needs of particularly big employers. We do a lot of work in the catering industry. To work with an organisation like Compass, to put together a foundation degree programme there which would specifically have their needs and their quality thresholds built into it rather than having to go to a partner university who is then going to take a financial cut but also have the influence, there is a problem to us.

Q450 Mr Chaytor: But if you are agreeing with the principle of colleges awarding their own foundation degrees, even though your college may not do, is there an argument for the larger colleges with the requisite number of students then awarding other degrees as well?

Mr Wilson: I think there is an argument for that.

Q451 Mr Chaytor: Would that contribute to widening participation, increasing numbers in HE generally?

Mr Wilson: It may do, but I think when it comes to those full degrees we have to recognise the prestige that comes with a university degree. If you took my example with Compass, if Westminster Kingsway College and Compass were awarding a degree with the Compass badge on it, that is bringing the prestige and the reputation that is needed as part of that. I think it is more difficult to sell a full degree for an 18–21-year-old that has just been awarded by a smallish FE college or a medium sized FE college.

Q452 Chairman: It has been a very good session. Is there anything, Lorraine, John or Andy think we have missed in terms of the valuable resource we have before us that you should say to the Committee?

Professor Dearden: Quickly, I think there is an issue about funding for students and access to loans and stuff like that and talking about access courses, from September this year I think people doing them will have access to the Adult Learning Grant, but that comes nowhere near being able to support an adult learner. For an adult it is the equivalent to the EMA. which is given to kids who are assumed to be living at home. Yet people who could then go on to do degrees have access to loans to support to themselves, whereas adult learners cannot support themselves on a thousand pounds a year, so I think there is a mismatch in policy here. The Adult Learning Grant is similar to the EMA, which was designed for 16-19-year-olds living at home and in full-time education. I think there are issues there in terms of access. It strikes me as a very disjointed system, this student funding thing, and a huge advantage is given to those who are actually in HE.

Q453 Chairman: Andy, you remember when I was talking to Sir David Watson earlier I pushed him a little bit. Some of the answers he was giving me suggested that you had failed if you did not go to HE. Did you have that sort feeling when listening? This is not a criticism of Sir David, but what is wrong with someone coming to your college getting very good vocational training and carrying on being a vocational person for the rest of their lives? Do you think there is that kind of hierarchy where people dismiss a lot of the good stuff you do because HE is more important?

Mr Wilson: I think there is. The publicity about degrees in plumbing, fortunately, seems to have disappeared-that was actually the foundation degree market—but I think, as we have got an upskilling generally in society and a qualification inflation, there are very important new key skills that are becoming attached to some of those professional qualifications. I am thinking particularly about leadership and management skills, which are almost becoming generic key skills for somebody operating at supervisor level, the top end of Level 3 and into Level 4 and beyond, and for a plumber or, in the case of my college, chefs, who often go and set up their own business, actually being able to do an accredited programme that is going to allow them to develop those business skills actually is going to do all of the things about education that we want. It is going to increase their armoury in terms of their social skills, their economic skills, their business skills, their literacy and numeracy, apart from anything else. I think we must not just think that some of those traditional craft skills or what people want to end up with are the things that have necessarily got utility there. Actually there is a broader range of skills. which is precisely what foundation degrees are about developing, that we need to open the opportunity to, as David said.

Q454 Chairman: So we do not have to lose sleep thinking, "If only Jamie Oliver had done a degree"?

Mr Wilson: No. We trained Jamie Oliver.

Q455 Chairman: Did you? *Mr Wilson:* Absolutely.

Q456 Chairman: What sort of course did he do? *Mr Wilson:* He trained as a chef. He did a Level 2 and Level 3 Westminster Kingsway diploma with an NVQ attached to it.

O457 Chairman: I think is a fantastic note on which to end. I am sorry, John, you wanted to come in. **Professor Storan:** I just wanted to say a couple of things. I think one of the challenges for widening participation over the next two or three years will be to ensure that we continue to engage the sector as a whole in this agenda of work. With the run up to the review of fees, and so on and so forth, I think it would be a shame if we lost momentum on some of these issues, because I think what we are beginning to see is that this work is beginning to have an impact and we need to hold our nerve and concentrate on that agenda of work to get the benefit of the investment in the things we have been discussing this morning. If I have one message, it is really hold your nerve and keep the policy focused on some of the objectives that we have set for ourselves, which I think are crucial to the long-term sustainability of higher education in this country.

Chairman: Lorraine, John, Andy, thank you very much. It has been a good session.

Supplementary memorandum submitted by Action on Access

EXECUTIVE SUMMARY

1. The success and impact of widening participation, within the clear remit and objective to shift long term ingrained cultural disadvantage, is already beginning to be demonstrated, with higher percentage increases in participation in higher education from socio-economic groups 4–7 compared to those from socio-economic groups 1–3:

- Applications from socio-economic groups 4–7 have risen by 2.2% over the last five years (2002–06), whilst the corresponding figure for the higher socio-economic groups has seen a decrease of 4.8%.
- The proportion of young first degree students enrolling on higher education courses who come from socio-economic groups 4–7 has increased by 2.9 percentage points over the last five years (2002 to 2006), which is equivalent to an estimated increase of 6,000 students.
- 2. In the period 2002–03 to 2004–05:
 - There has been a 3.8% point increase in the number of English-domiciled, first degree students from all categories of neighbourhood, compared to a 10.9% increase in the number of students from the 10% most deprived neighbourhoods.
 - This increase of 10.9% compares to the much smaller increase of 2.4% in the number of students from the 20% least deprived neighbourhoods.
 - Almost one third of the increase in student numbers has come from the 20% most deprived neighbourhoods in England.

3. There is a growing body of local, regional and national evidence on the positive effect of widening participation on raising aspirations:

- Aimhigher is significantly changing perceptions of HE for the better.
- Aspirations to HE were 3.9% higher in Aimhigher: Excellence Challenge schools than in non-Aimhigher: Excellence Challenge schools.
- Reports from teachers and young people, together with quantitative assessments, show a clear association between Aimhigher and stronger GCSE performance.

- 4. Widening participation has demonstrably:
 - increased participation rates for the individuals, families and communities in the target groups;
 - influenced what is happening in the schools and colleges they attend; and
 - has had a cumulative effect by adding value to schools, colleges, communities and to collaborative and partnership working.

5. Widening participation interventions must be assessed in relation to the original overall purpose of policy—raising aspiration, contributing to raising attainment, contributing to increased participation rates particularly of identified target groups.

6. The increases in participation outlined in this report must be given further time to come through, not least because of the type of interventions employed, which have been shown to be most effective within a planned progressive, sequential and differentiated programme which reflects the needs of individual learners over a period of time. HEI programmes of interventions work alongside those of Aimhigher partnerships, leading to an approach that is new and which delivers activity coordinated between a number of partners. This approach can articulate that activity to government policy, whether it is policy on skills, vocational learning or personalised learning.

7. The early indications—the green shoots—of increased progression among target groups are clear and are encouraging. A re-focus on targeting and improved data collection and analysis will give a richer and even more positive picture over time.

1. INTRODUCTION

1.1 Action on Access is the national coordination team for widening participation, now in its eighth year and re-appointed by the HEFCE in January 2006 on a three year contract. The team work with institutions and partnerships, including Aimhigher, providing advice, information and support to their widening participation activities, strategies and plans. Subsequent to Professor John Storan appearing as a witness for widening participation at the Education Select Committee on 7 March 2007, this paper seeks to:

- Set out data to demonstrate progress in widening participation in HE and in reducing the gap between students from the highest and lowest social classes.
- Make some claims for the progress, efficacy and the effect of widening participation interventions (by Aimhigher and Higher Education Institutions (HEIs)) in contributing to the proportionally increased participation rates from those in the lowest socio-economic groups and those historically under-represented in higher education (HE).
- Demonstrate value for money.
- Set out work underway to ensure the effectiveness of widening participation.
- Provide institutional examples of the success of widening participation activities.

2. Key Progress in Widening Participation

- The HEIPR (Higher Education Initial Participation Rate) has increased by 3 percentage points between 2000–01 and 2005–06 to 43%.
- Over the last five years applications from socio-economic groups 4–7 have increased as a proportion of overall applications from 31.1% in 2002 to 32.6% in 2006, ie by 1.5%. In the same period the proportion of all applications coming from socio-economic groups 1–3 decreased by 1.5% (UCAS).
- This data suggests that applications from socio-economic groups 4–7 have risen by 2.2% over the five years while the corresponding figure for the higher socio-economic groups has seen a decrease of 4.8%.

2.1 An alternative way to view these increases is by using HESA statistics to analyse the number of students actually enrolling in HE courses over the period 02–03 and 04–05 (the latest figures available), and comparing the backgrounds of students within the Index of Multiple Deprivation, 2004, rather than data by socio-economic group.

2.2 The following tables show the number of students entering HE by the relative deprivation of their neighbourhoods. The first table uses the overall Index of Multiple Deprivation (IMD) which combines seven types of differing deprivation. The second table focuses solely upon a sub-domain of the IMD applying only to Educational deprivation as it affects children and young people.

	Deprivation of Neighbourhood		per of Stud 2003–04		Change 02/03–04/05	% change 02/03–04/05
England	10% Most Deprived Neighbourhood	16,772	17,981	18,603	1,831	10.9
	20% Most Deprived Neighbourhood	19,329	20,110	20,568	1,239	6.4
	50% Most Deprived Neighbourhood	64,437	65,320	66,831	2,394	3.7
	80% Most Deprived Neighbourhood	81,339	84,467	83,710	2,371	2.9
	20% Least Deprived Neighbourhood	69,796	69,971	71,449	1,653	2.4
	Total	251,673	257,849	261,161	9,488	3.8

Table 1: First Time First Degree Entrants by Index of Multiple Deprivation 2004

 Table 2: First Time First Degree Entrants by the Children and Young People Sub-Domain of the Index of Multiple Deprivation 2004

		Number of Students			Change	% change
	Deprivation of Neighbourhood	2002–03	2003–04	2004–05	02/03–04/05	02/03-04/05
England	10% Most Deprived Neighbourhood	11,029	12,197	12,551	1,522	13.8
0	20% Most Deprived Neighbourhood	16,700	18,542	18,166	1,466	8.8
	50% Most Deprived Neighbourhood	62,129	64,724	64,593	2,464	4.0
	80% Most Deprived Neighbourhood	82,937	84,199	85,358	2,421	2.9
	20% Least Deprived Neighbourhood	78,878	78,187	80,493	1,615	2.0
	Total	251,673	257,849	261,161	9,488	3.8

Source: HESA and Index of Multiple Deprivation 2004 (IMD).

- There has been a 3.8% point increase in the number of (English-domiciled first degree) students from all categories of neighbourhood in the period 2002–03 to 2004–05. For students from the 10% most deprived neighbourhoods there has been a 10.9% point increase (rising to 13.8% when looking at the Education Sub-Domain), ie around three times that of the overall figure.
- Almost one fifth of the overall increase in student numbers has come from learners originating from the 10% most deprived neighbourhoods.
- This percentage increase of 10.9% compares to the much smaller increase of 2.4% in the number of students from the 20% least deprived neighbourhoods.
- There has been an increase of 17.3% points for those from the lowest 20% most deprived neighbourhoods, as compared to a 9% point increase for the top 50% or least deprived neighbourhoods.
- Almost one third of the increase in student numbers has come from the 20% most deprived neighbourhoods in England.
- The proportion of young first degree students enrolling on higher education courses coming from socio-economic groups 4–7 has increased by 2.9 percentage points over the last five years (2002 to 2006), equivalent to an estimated increase of 6,000 students. (Source: HESA Performance Indicators).
- Over the last five years, 99 of the 111 HEIS that information is available for, have demonstrated an increase in the proportion of entrants coming from socio-economic groups 4, 5, 6 and 7.

3. WIDENING PARTICIPATION—THE OPERATIONAL CONTEXT

3.1 The increase in participation rates for the target group(s) is clearly a key piece of evidence, but it has to be put in context; the question of what is the effect of widening participation interventions is not simply answered by data on participation rates alone. We would have to ask what was happening to the families and communities in the target groups; what was happening in the schools and colleges they went to. We would have to be able to measure the cumulative effect and added value that this type of activity gives to schools, colleges, communities and to collaborative and partnership working.

3.2 A good example of many Aimhigher activities, which now have a wider life of their own outside of Aimhigher, is the Progression scheme in Enfield, which started in Year 6 with a programme of work through to Year 13 to allow students to make informed choices. Much of this work has now been "formalised" by the Award Scheme Development and Accreditation Network (ASDAN) as part of its Stepping Stones (KS2) and Key Steps (KS3) programmes and the Certificate of Personal Effectiveness (CoPE) qualification, Levels 1, 2 and 3, at Key Stages 4 and 5.

3.3 Widening participation interventions must be assessed in their own terms, in relation to the original overall purpose of the policy: raising aspiration, contributing to raising attainment, contributing to increased participation rates particularly of identified target groups. Some interventions will directly

influence decisions about application and entry to higher education; others will contribute to the processes that make such choices possible, and others will contribute to a change of culture in the schools, colleges and communities from which the widening participation cohort is drawn. The impact of the latter requires a different approach to assessment but these interventions are critical precisely because under representation in HE flows from prior educational (and other) inequalities.

3.4 There are issues around the gathering and compatibility of data sets and statistics that need to be addressed and resolved in order to improve the quality of trend data and to enable a deeper understanding of Aimhigher and similar outreach programmes. The increasing richness and volume of both qualitative and quantitative evidence is becoming an important mechanism for improving particular aspects of the implementation and monitoring of Aimhigher and related activities.

3.5 There is a growing body of local, regional and national evidence on the effect of widening participation on raising aspirations; some evidence on the linkage of interventions to attainment; and proportionately less on access and participation, not least because interventions with 14-year-olds in 2003 have only this year begun to feed through into entry statistics for HE. However, given the time period involved at this stage of the process this difference is to be expected. It is always difficult to recognise the many steps that link changes in awareness, aspiration and perceptions to behavioural change and actual outcomes in terms of higher education participation. It is therefore critical in evaluating any set of interventions to capture information on interim, as well as long term outcomes.

4. EVIDENCE OF SUCCESS

4.1 This report has already detailed the significant increases in the proportion of those people accessing higher education from the lower socio-economic groups or from the most deprived neighbourhoods according to the Index of Multiple Deprivation.

4.2 There is growing evidence from the evaluation of Aimhigher that it is making a significant contribution to increasing the participation of targeted and under-represented groups in higher education. One of the criteria set for Aimhigher was to improve and contribute to both aspiration-raising and attainment; the evidence base clearly indicates success for the former, and there is accumulating evidence² to indicate that Aimhigher and widening participation is contributing to improve attainment rates. There is also a developing dataset showing that Aimhigher is a cost-effective programme with both social³ and economic returns.⁴

4.3 The full impact and efforts of Aimhigher are still to be realised and reported in future years as it has only been in operation for 2 years as Aimhigher, or 5 years including its antecedents Excellence Challenge and Partnerships for Progression, and as its effects are cumulative.

4.4 Evidence from the Aimhigher Topic Paper, which summarises the Aimhigher National Evidence Strategy, suggests the evidence base for Aimhigher is growing:

- The views of partnerships, teachers and young people have been gathered and their perception is that Aimhigher is significantly changing perceptions of HE for the better.
- The conclusion of the Aimhigher Topic paper is that evidence from the four Aimhigher Evidence strands is that aspirations to HE were 3.9 percentage points higher in Aimhigher: Excellence Challenge schools than in non-Aimhigher: Excellence Challenge schools.
- Mentoring (particularly with lower performers), visits or discussions about HEIs, and Summer Schools can be statistically associated with greater attainment at GCSE.
- Reports from teachers and young people, together with quantitative assessments, show a clear association between Aimhigher and stronger GCSE performance.
- There is circumstantial evidence that Aimhigher and HEI widening participation initiatives have contributed to the national increase of 5.6% in attainment at KS4/GCSE.
- 4.5 The EKOS survey⁵ found that:
 - a third of HEIs claimed that Aimhigher had increased applications to their institutions
 - a third of Further Education Colleges also claimed that Aimhigher had increased applications to their institutions, therefore Aimhigher can be seen to be having an impact on aspirations and progression to further as well as higher education.

² Aimhigher Topic Paper.

³ EKOS Consulting, Aimhigher Area Studies: Interim Report (2006).

⁴ EKOS Consulting, Aimhigher Area Studies: Interim Report (2006) and Aimhigher Topic Paper.

⁵ EKOS Consulting, Aimhigher Area Studies: Interim Report (2006).

- 4.6 Area studies of Aimhigher find that:
 - students and their teachers found the residential visits to HEIs to have the most impact, particularly those that have taken young people out of their home region to experience the wider world.
 - where these visits were followed up by related activities within the school even greater impact was reported.
 - area studies findings reinforce the point that activities to raise attainment in schools are enhanced by direct interventions by HEIs to raise aspirations and *vice versa*.

5. CURRENT ACTIVITY FOCUSSED ON TARGETING

5.1 The Higher Education Funding Council for England (HEFCE) has established a task group to improve practice with regard to the targeting of lower socio-economic groups, to find examples of best practice and report on how best to target efforts by April 2007. This task group will produce a set of guidelines in May 2007 to support targeting in widening participation.

5.2 The proposed guidance on targeting will build on existing and current good practice. For example in the South-West Peninsular area Aimhigher works with all 101 secondary schools but intensively with 49 Widening Participation Key Target schools, where Aimhigher funding has supported over a number of years a progressive and comprehensive menu of interventions from Years 7–11, year on year, to support the widening participation cohorts in these 49 schools.

5.3 As reported above "A guide to Costing Aimhigher Activities" has been produced to support widening participation practitioners to examine and focus their activities by cost. The Aimhigher Topic paper claims, through a complex set of calculations, that early indications are that the cost per participant measured against future economic benefits and decrease of social costs will be well below the amount needed for Aimhigher to generate a positive NPV/net benefit to society.

5.4 The HEFCE is currently liaising with institutions on how best to collect and gather evidence, and to target widening participation interventions from HEIs (and Aimhigher partnerships) to:

- Decide what the key interventions are.
- Collect appropriate data from participants in widening participation activities (eg on occupation of chief wage earner).
- Gather local data: from parents, teachers and learners; from schools and their reports; and to contextualise the information with other local and regional data.
- Follow up selected activities, groups, or types of activity and connect them with wider outcomes, for example, the development of more positive learner identities including motivation and commitment on the basis of teacher evidence.
- Make connections between widening participation interventions and the next steps that learners take; both progression to learning on new programmes at new institutions and equally progress in school or college.
- Include the targeting of information on funding and bursaries more exclusively at those from the lower socio-economic groups.
- HEFCE is commissioning external researchers to deliver some small case study pilots on the coordination and direction of evaluation activity, working with HEIs, and through them, reaching into Aimhigher partnerships, to identify good practice and improve the existing evidence base.
- The Aimhigher Evidence data sub-group is working to develop the understanding of data sets available, and how they can contribute to the contextualisation and selective follow up of widening participation interventions.

6. INSTITUTIONAL EXAMPLES

6.1 A number of universities could have been chosen which would illustrate how policy objectives are being translated into workable practice.

6.2 University of Plymouth. One example would be the University of Plymouth's institutional widening participation strategy, working complementarily and closely with the Aimhigher Peninsular Partnership, and having as one of its main focuses the support and progression of pupils at the end of year 11, 12, 13 in a Compact with 18 of the 49 targeted Widening Participation Key Target schools in the area and providing an extensive menu of interventions.

6.3 The impact of this work can be illustrated by the data describing the numbers of pupils from compact schools progressing to the University of Plymouth. This has almost certainly contributed to the increase of 14% in 2002, 13% in 2003, 21% in 2004, 24% in 2005, and 27% in 2006 and the numbers progressing to all HEIs which have increased from 41.4% in 2002 to 45.38% in 2006.

6.4 Edge Hill University, as all institutions in the higher education sector, is involved with a range of interventions from Year 9 upwards to raise aspirations and achievement, often in conjunction with Aimhigher. It also funds and delivers a range of widening participation initiatives which have the direct result of enabling high numbers of learners into higher education opportunities which arguably they would not otherwise have been able to access.

6.5 Examples of Edge Hill programmes related directly to recruitment are "Fastrack" and "Fastforward" accelerated Access Programmes which provide over 120 adults with progression to higher education each year; GCSE revision programmes and equivalency tests for those seeking to enter Initial Teacher Training programmes giving a further 200 students per year a "second chance".

6.6 The growth of Edge Hill University's student body (new first year intake) over a period of years has been predominantly through students coming from the most deprived neighbourhoods and the lower social groups:

— an increase from 26.2% (577 students) of the intake in 1998–99 to 28% (739 students) in 2005–06 from the Lowest 20% Index of Multiple Deprivation.

6.7 University of Portsmouth. Another institutional example which demonstrates the depth of penetration and width of scope of interventions, but linking out beyond simple widening participation activities is the University of Portsmouth's "Up For It" scheme. This scheme, which was the winner of a HEIST Gold Award for widening participation and was nominated for a Times Educational Supplement Award, was launched in 2002 as the university's response to widening access in higher education and now has over 6,700 current and 1,300 alumni members.

6.8 "UP For It" aims to raise aspirations, change perceptions and encourage pupils to see higher education as attractive and accessible by a programme of interventions:

- giving a taste of university life;
- providing access to university facilities;
- providing free events and workshops throughout the school holidays;
- developing curriculum resources for schools;
- developing lesson plans for enterprise learning reaching 21,000 local school pupils;
- initiatives promoting oral hygiene, and Maths and Science encouraging pupils to engage positively with these subjects;
- a programme aiding the transition between Primary and Secondary schools, reaching a minimum of 6,000 children aged 9 to 11;
- a scheme of work linking Every Child Matters, curriculum resources, talks within schools, and university taster days; and
- undertaking national and local research into young people's attitudes towards a university education.

7. PARTNERSHIP EXAMPLES

7.1 Partnership activities have been and continue to be critical to success:

7.2 Enfield Aimhigher. Taking as an example one school in Edmonton where the Aimhigher partnership is working, which had baseline data for 2002–03 showing only 2 students progressing to HE:

— the progression to higher education figures increased from 2 students in 2002–03 to 5 in 2003–04 and to 14 by 2004–05, which is a good progression from a very low base in a school with a historically low progression to HE.

7.3. A neighbouring school in Edmonton, which has in the past sent relatively few students into higher education shows a similar increase in applications:

- the progression to higher education figures increased from 17 students in 2002–03 to 19 in 2003–04 and to 26 by 2004–05; and
- the Sixth Form in the school is now approaching 200 and the Head of Sixth Form is currently working on encouraging more students to follow 2 year Level 3 courses.
- 7.4 One of the three FE Colleges in the more deprived area of Enfield also shows:
 - an increase in progression to higher education from 102 out of 141 applications in 2002–03 to 145 out of 188 in 2004–05.

8. CONCLUSION

8.1 The success and impact of widening participation, within a clear remit and objective to shift long term ingrained cultural disadvantage, is already beginning to be demonstrated with higher percentage increases in participation from socio-economic groups 4–7 compared to the those from socio-economic groups 1–3.

8.2 The increases in participation outlined in this report must be given further time to come through, not least because of the type of interventions employed, which have been shown to be most effective within a planned progressive, sequential and differentiated programme which reflects the needs of individual learners over a period of time. HEI programmes of interventions work alongside those of Aimhigher partnerships giving an approach which is new, and which delivers activity coordinated between a number of partners and which can articulate that activity to government policy, whether it is policy on skills, on vocational learning or personalised learning.

8.3 The early indications—the green shoots—of increased progression among target groups are clear and are encouraging. A re-focus on targeting and improved data collection and analysis will give a richer and even more positive picture over time.

April 2007

Supplementary memorandum submitted by Andy Wilson, Westminster Kingsway College (WKC)

UNIVERSITY DESTINATIONS OF WKC ACCESS STUDENTS 2006

Goldsmiths College, University of London	3
Brunel University	8
Queen Mary, University of London	3
de Montfort University	1
SOAS, University of London	1
Kingston University	1
UCL	1
London Metropolitan University	10
Birmingham University	3
University of the South Bank	4
University of Leeds	2
Oxford Brooks University	1
University of Nottingham	1
Roehampton University	7
University of Warwick	1
Thames Valley University	3
University of East London	2
University of Essex	2
University of Greenwich	8
University of Hertfordshire	4
Middlesex University	6
Portsmouth University	1
University of Surrey	1
University of Westminster	13
Westminster Kingsway College	7

An additional 55 students gained places to train as nurses.

March 2007

Wednesday 21 March 2007

Members present

Mr Barry Sheerman, in the Chair

Mr Douglas Carswell Mr David Chaytor Jeff Ennis Paul Holmes Helen Jones Mr Gordon Marsden Stephen Williams

Memorandum submitted by the University of Hertfordshire (UH)

1. INTRODUCTION

1.1 The University of Hertfordshire (UH) welcomes the opportunity to respond to the Education Committee's inquiry into Higher Education: The future sustainability of the higher education sector: purpose, funding and structures. In response to the inquiry's terms of references, our submission will focus on the crucial link between employers and higher education.

2. Setting the Scene—The Need for a "New Model of a University"

2.1 The UK has a wide mix of higher education establishments. It hosts a leading group of research universities, and an important group of universities focused on increasing access to higher education. The missing ingredient is a group of universities focussed on the needs of business—breaking down barriers between commerce and academia.

2.2 The vision of UH is to help fill this gap by leading on the development of a new model of businessfacing universities. Forging stronger links between universities and businesses will not only provide significant benefits for both sectors but will help drive up UK productivity and competitiveness.

2.3 Whilst our primary mission is the provision of high quality learning and research opportunities for students, UH's second mission is employer engagement and employability—in one dimension, equipping students with professional skills they need for employment and in another dimension, supporting innovation in business through applied research. In the delivery of this second mission, UH is one of only five universities nationwide selected by HEFCE to deliver a unique £4 million project aimed at driving employer engagement activity. The innovations being driven by UH through this project will be replicable nationwide.

2.4 In recent years UH has developed groundbreaking links with business, giving those businesses especially SMEs—access to the university's expertise and services. In return, this has given UH access to business-owned resources, insights and internships for students. Examples of recent collaboration with business include:

- Huge growth in UH's incubator clusters:

- BioPark Hertfordshire—our new state-of-the-art biotech incubator at Welwyn Garden City; and
- The Building Hub—our sustainable construction incubator in collaboration with the Buildings Research Establishment.
- Merger with Exemplas (Hertfordshire's Business Link)—the merger has connected the University with 500,000 businesses across the East of England and London regions.
- Establishment of a Community Based Law Clinic—UH has worked with local legal firms to establish a law clinic that provides pro bono legal advice to those in need. Students have derived substantial value from the real world experience gained through working with legal professionals and clients.

Consultancy services across all subject areas— drawing upon the expertise of our staff students and graduates.

3. LISTENING TO BUSINESS: RESEARCH ON WHAT EMPLOYERS WANT FROM GRADUATES

3.1 Clearly, any policy aimed at fostering sustainable and two-way links between business and universities must be based on solid research. In line with UH's mission to maximise the employability of its students, it recently commissioned a survey by YouGov to establish what UK employers look for when hiring graduates.

3.2 A full summary of this research is included in Annex A. Key highlights include:

- A significant proportion of employers considered relevant work experience as "crucially important" when hiring graduates; 46% of employers regarded it as one of the three most important factors when hiring graduates. This was followed by having a "good work ethic" (43%) and having the "right degree subject" (41%). Only 3% of employers ranked A level results as one of the top three factors.
- In contrast, the biggest factor putting employers off a graduate's CV was poor spelling and grammar (77%). The next most significant factor scored 34%.
- In terms of building relationships with their local university, 46% of respondents considered this as important. However, the survey highlighted how in reality employers overwhelmingly failed to build such relationships. There is a gap between aspiration and reality.

3.3 Of course, engagement with employers goes well beyond the employment of graduates. The wider economic impact of Universities is a matter of significant interest. In 2005, UH published an independent research study into the University's impact on the local and regional economy.

3.4 An extract of the report is included in Annex B. Key facts include:

- 29% of local businesses with University links had experienced a positive impact on business performance;
- Businesses employed 1,300 additional staff as a result of links with the University (other than as suppliers);
- The majority of businesses considered the University to have contributed positively to local economic development; and
- For young businesses and SMEs, student placements were regarded as a valuable low cost/risk
 means of achieving flexible growth.

4. DEVELOPING A NEW MODEL OF "BUSINESS-FACING UNIVERSITIES"

4.1 UH recommends a mix of policy recommendations to encourage the development of a new model of "business-facing universities".

4.1.1 Increase work experience placements for both undergraduates and postgraduates, building a more experienced and confident graduate workforce

Our research tells us that employers value graduates who have relevant work experience. 75% of employers believe that graduates who have undertaken a work placement as part of their degree, or have relevant work experience, adjust to work life more easily than those without work experience. However the national trend in work placements offered by UK universities and businesses is on the decline. The majority of students entering universities have had little or no experience of working within the sector they are studying in. Neither have they had experience of or developed confidence in building working relationships. At UH work placements are expanding against the national trend.

Policy recommendations:

- (a) The Government should set a clear example to industry by increasing significantly the number of internships within the public sector. The central civil service, executive agencies, local government and the broader public sector should all be encouraged to offer more and varied internships—For example, two month summer placements as well as year long opportunities should be considered.
- (b) Provide incentives for students to undertake internships, perhaps by modernising inclusion bursaries. By linking the provision of bursaries to a student's willingness to complete a work place internship, students from less privileged backgrounds will be encouraged to participate in training that will greatly enhance their employment prospects.
- (c) Nationwide roll out of the employer/student employment and internship matching services. These services are currently being developed by UH (the UHTalent initiative) and enable students and companies to match the needs, skills and opportunities. UHTalent aims to go beyond the traditional matching service. It will provide ongoing skills development from graduates and internees, ensuring that employers have confidence in the skills of their employees.

UH believes that this scheme will be of particular importance to SMEs, who often do not have formal graduate training schemes, yet represent a sector of the economy which has the greatest potential for growth and wealth generation.

4.1.2 Bridging the cultural gap between universities and industry

As Richard Lambert pointed out in his 2003 report, there is a culture gap between universities and businesses. Despite a range of successful post-Lambert initiatives, many in academia continue to demonstrate distrust for business involvement in universities. Likewise many in business still misunderstand academia. The UK's priority must be to bridge this gap.

Policy recommendation:

(a) The Government should do its utmost to promote the recommendations of the Lambert Review, through highlighting best practice. For example UH leads the way, through actively engaging with business agencies such as CBI, IOD and Chambers of Commerce to build and ongoing dialogue across the sectors. The merger with Hertfordshire Business Link is also an initiative which could be replicated elsewhere, providing as it does a direct connection between Universities and local business.

4.1.3 Broadening the student experience

The Leitch Review's findings revealed how graduates often lacked a suitable mix of both vocational and cultural skills to prepare them for the life ahead of them—a point also reflected in UH's own research (please see Annex A).

Policy recommendations:

- (a) Universities should link with businesses to offer "employability workshops", providing students with advice from employers on how to prepare for working life. To support this initiative, the Civil Service could set an example by offering "working in the public sector" talks to universities.
- (b) Universities should do more to link with international universities and businesses abroad, offering UK students placements and experiences of overseas markets. This will become increasingly important as global competition intensifies.

4.1.4 Support employer-led and employer-funded learning

The traditional model of employer sponsored learning—part time course and day release activities has long been in decline as employers find it increasingly difficult to release valuable staff at fixed times and to a fixed curriculum. This diminishes opportunity for many—especially older students and those from less privileged backgrounds—restricting the supply of skills to UK plc.

In a 21st Century business environment, a new model of employee learning is clearly necessary. Blended learning—the combining of traditional teaching methods with on-line learning techniques—brings the flexibility and usability that businesses need to keep their employees at the top of the skills ladder.

The Government should actively seek to promote new ways of encouraging employers to engage with high level learning and skills development.

Policy recommendations:

- (a) The Civil Service should set an example by actively offering employees greater opportunities and support to participate in new learning opportunities.
- (b) The system of work and tax credits should be reviewed to see how they can better support employers seeking to engage with Universities to up-skill their workforce.

4.1.5 Encourage innovative business start ups by supporting university-run business incubator facilities

Business incubator facilities—low commitment accommodation with shared services and the availability of business mentoring—have proved tremendously successful throughout the country. With the skills, knowledge base and ready availability of students, universities provide excellent business incubator partners. The challenge is securing the capital to build the facilities.

Policy recommendations:

- (a) The Government should consider establishing a central or regional fund from which business orientated universities can access capital to build business incubators.
- (b) The Government should consider encouraging greater commercial provision of business incubators via the planning system.

4.1.6 Encourage greater knowledge transfer between universities and SMEs

Much progress has been made with encouraging knowledge transfer between businesses and universities, with the Knowledge Transfer Programme (KTP) leading to significant increases in engagement. However, there is a clear need to reduce the level of bureaucracy and thresholds which exist for this type of scheme to make it accessible to Sees as well as large corporate. In the Eastern region, UH has piloted the KEEP project—a mini-KTP scheme with shorter timescales, lower financial thresholds and minimal form-filling. The project has been very successful and UH believes that there is an opportunity to role it out nationally.

Policy recommendation:

(a) Review the KTP scheme to reduce bureaucracy and thresholds, in turn increasing accessibility to SMEs.

(b) Promote other collaborative research programmes both through the Technology Strategy Board and through regional funding agencies.

Whilst much progress has been made in recent years with enhancing links between academia and business, there is still much to be done. To maintain our competitive strength—sectorally and nationally, the University/business interface should be a strong theme shaping the future of higher education. We hope that this submission makes a useful contribution to the debate about what, in practical terms, needs to be done.

December 2006

Annex A

KEY YOUGOV SURVEY RESULTS

Which three of the following do you look for MOST when recruiting a new graduate?

1. Relevant work experience—46% (public sector—57%; private sector—40%).

2. Degree subject (vocational relevance, type, range of modules studied)—41% (public sector—47%; private sector—40%).

3. Good "work ethic" attitude—43% (Public sector—25%; Private sector—50%).

Which of the following best describes your reasons for recruiting new graduates?

1. They bring a fresh outlook and innovation into my workforce—34% (public sector—33%; private sector—35%).

- 2. They have a proven level of intelligence—34% (public sector—25%; private sector—39%).
- 3. They have a proven ability to learn quickly—31% (public sector—25%; private sector—37%).

Do you think graduates who have undertaken a work placement as part of their degree, or have relevant work experience, adjust to work life more or less easily than those without such experience?

1. Yes—75 % (public sector—86%; private sector—71%).

What do you think graduates without relevant work experience mainly struggle with?

- 2. Having unrealistic expectations—52%.
- 3. Professional behaviour—29.
- 4. Office politics-29%.

On average how long does it take for new graduates who have done work placements or have other relevant experience to settle down into their first jobs

Up to 3 months—41% as opposed to 12% without work experience.

Does the organisation offer work experience for undergraduate students

- 1. Yes—60% (Public Sector—78%; Private—53%).
- 2. We would consider doing it—19% (Public Sector—33%; Private—35%).
- 3. No-12%.

How important is the relationship between your organisation and the local university?

- 1. Very/Fairly important—31%.
- 2. Do not have any relationship—29%.
- 3. Not very/ not at all important—24%.

Do you expect to have a more important relationship with your university?

- 1. Yes-25%.
- 2. No-50%.

Do you think your organisation should have an important relationship with you local university?

- 1. Yes-46%.
- 2. No- 37%.

EXTRACT FROM THE UNIVERSITY OF HERTFORDSHIRE'S ECONOMIC AND SOCIAL IMPACT STUDY 2005— Relationships with Business and Other Organisations

Introduction

In line with government policy (Lambert Review), the University is emerging as an important stakeholder in the local economy with an increasing commitment to local economic development. A key way in which this happens is through the links with business and other organisations. This chapter examines these links based on interviews with University staff, other organisations closely associated with the University and a survey of local businesses.

Key issues and questions

- How does the University interact with business—what are the links?
- What is the impact of University and business interaction?
- How important or useful are these links to businesses?
- What are the links between the University and the health sector?

University activity

The University engages with local businesses in many different ways.

Interactions with industry are many and varied including:

- Some 300 full time professional placement students in industry;
- An extensive programme of short courses and training;
- Consultancy and exchange of knowledge and research through programmes such as the KTP (Knowledge Transfer Programme);
- Student projects undertaken for business; and
- University staff and students working with and for local business such as the local film industry for example making sets and models for Bond and Harry Potter films.

Links with business take place in all Faculties and subject areas, including less obvious areas. For example, the School of Art and Design works with the car industry and the School of Psychology works with a range of companies assisting with recruitment profiling and stress management.

The University's formal mechanisms for business links:

Business Partnership Office:

This acts as a gateway for businesses to approach the University, referring, business enquiries to relevant Schools. In 2004, it received 980 enquiries.

- Almost 50% were from Hertfordshire business.
- These come from all sectors but with business services (24%) and computer services (15%) being the main ones.

Innovation Centre:

Set up in 2003, as an incubation centre for fledgling knowledge based companies, this now has 12 tenants with 40 employees.

Polyfield Services:

Set up in 1984, it provides quality assurance, health/safety and environmental consultancy. In 2003–4 it had 150 clients of which 45% were in Hertfordshire. Most are small and medium sized enterprises (SMEs) and long term clients. Since its creation, it has worked for 600 businesses and run over 400 training courses.

Cimtech:

This grew out of university research and now provides electronic documentation consultancy.

Software Development Services

This is a commercial operation within the School of Computer Science.

The University has formed a number of other wholly owned subsidiaries, which are listed in Section 1.1, Figure 2.

Major strategic initiatives to enhance links and services available to SMEs

In the summer of 2005 The University of Hertfordshire became the first University to merge its business services with its local Business Link, which is operated by Exemplas Ltd. This is a major strategic initiative by the University. It is designed to enhance the links and services available to SMEs and to benefit local industry, addressing the issues raised in the McPherson and Lambert reports.

LINKS WITH INDUSTRY

Data sources

This section is based largely on the survey of 303 Hertfordshire businesses supported by interviews with 20 local firms. The survey results have been weighted to reflect the size and structure of the area's 49,300 businesses. These businesses account for 40% of the County's employment.

10,600 businesses say they have had links with the University in the last three years.

22% of businesses in Hertfordshire say they have had links with the University in the last three years.

Table 1

BUSINESSES WITH LINKS WITH THE UNIVERSITY IN THE LAST 3 YEARS

	% of businesses with Links	% of County's linked businesses
Welwyn Hatfield	24	9
Rest of Hertfordshire	21	91
Total	22	100

Source: PACEC business survey, March-June 2005.

A further 5,400 businesses have had links with other universities but not with the University of Hertfordshire.

While larger firms are more likely to have links, the majority of links (95%) are with small firms.

Table 2

FIRM SIZE AND LINKS WITH THE UNIVERSITY

Employment	% of Group with University Links	% of All Linked Businesses
Less than 50	21	95
Over 50	31	5

Source: PACEC business survey, March-June 2005.

Of those firms that had links with the University, 65% of have under 5 employees.

REASON FOR LINKS

The main objectives of businesses for developing their relationships with the University vary.

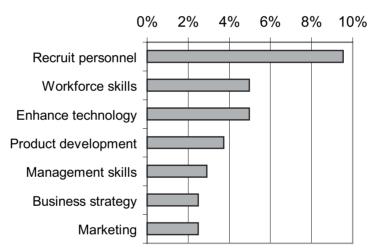
Recruitment, skills and technology are the main reasons given by firms who use the University.

Figure 1

MAJOR OBJECTIVES FOR USING THE UNIVERSITY

Recruitment, skills and technology are the main reasons given by firms who use the University

PERCENTAGE OF HERTFORDSHIRE BUSINESSES



Source: PACEC business survey, March-June 2005.

The business survey clearly indicates that firms value the University as a source of graduates and the role it plays in improving workforce skills and training. The role of the University in enhancing the technology of business, product development and business strategy/marketing was of less importance overall to businesses but found to be important to the smaller firms interviewed.

NATURE OF LINKS

Businesses were asked in the survey to define how they sought and made links with the University

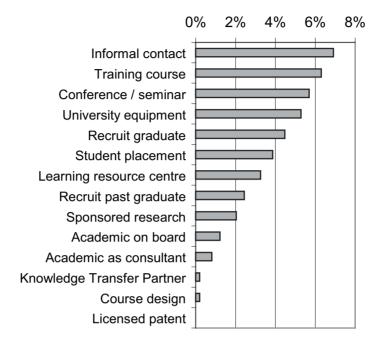
University links are many and varied

Informal contacts with staff are the most widely quoted university link. The business interviews show these can lead to more "productive" links.

Figure 2

THE NATURE OF LINKS WITH THE UNIVERSITY

PERCENTAGE OF HERTFORDSHIRE BUSINESSES



Source: PACEC business survey, March-June 2005.

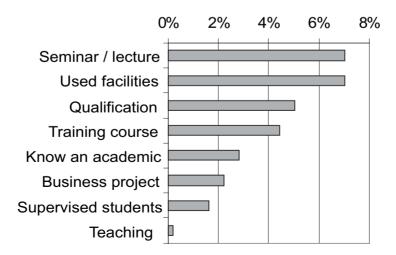
The survey also identified links are via training courses (7%), attending seminars/conferences (6%) and recruitment are also common. This shows that the facilities and other training and learning resources that the University provides are important to local business. Other than facilities and training courses, businesses have used the academic capability through sponsored research, academics or KTPs but to a lesser degree.

Figure 3

INDIVIDUALS' LINKS WITH THE UNIVERSITY

14% of Hertfordshire business people say they have had some links with the University in the last three years

PERCENTAGE OF INTERVIEWEES



Source: PACEC business survey, March-June 2005.

IMPACT OF LINKS

Businesses were asked in the survey to define how links with the University impacted their business performance.

29% of local businesses with University links have experienced a positive impact on business performance

Table 3

IMPACT OF LINKS ON BUSINESS PERFORMANCE:

	% of Hertfordshire Businesses
Increased Sales	19
Increased Employment	12
Improved Profitability	6
Other beneficial effects	7
No beneficial effects	71

Source: PACEC business survey, March-June 2005.

Of all Hertfordshire businesses, 7% describe their links with the University are either "critical" or "very important". This is particularly true for small firms. Our interviews confirmed that the University's assistance can have a significant impact on SME development.

Businesses employ 1,300 additional staff as a result of links with the University (other than as suppliers)

1,300 businesses note that their links in the last three years have helped increase employment. This is in addition to employment impacts on the 700 businesses which supply goods and services to either to the University, students or staff.

The business survey identified 2,200 businesses which state that the University had some influence on their decision to locate all or part of the business.

Most businesses without any links to the University have not considered the opportunity

Of the 38,600 Hertfordshire businesses with no links with the University in the last three years:

- 89% describe that they have never considered using a university;
- 2% have considered or used other universities, but have never considered the University of Hertfordshire; and
- A few businesses noted that they tried and failed to make contact with the University.

BUSINESSES WITHOUT LINKS

Extrapolating the data, 4,500 businesses currently do not have any links with the University but would consider using the University in the future.

4,500 businesses with no links with the University say they would consider using the University

Of these businesses 90% have fewer than 50 employees and 90% are in the part of Hertfordshire outside Welwyn Hatfield.

Their three main requirements are advice (28% of businesses), recruitment (14%) and student placements (10%).

BUSINESSES PARTNERSHIP OFFICE

All businesses were asked about the University's Business Partnership Office:

Just 13% of local firms say they know what the University has to offer

Of the companies willing to express a view, 7% said they were aware of the Business Partnership Office. Almost all (92%) of these businesses who had heard of the Business Partnership Office have links with the University.

Of businesses aware of the BPO, 18% say they understand its purpose and 6% say it has a good image.

IMPORTANCE OF THE UNIVERSITY TO BUSINESS

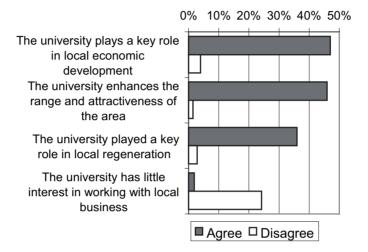
Nearly half of all businesses consider that the university plays a key role in local economic development and that it enhances the range and attractiveness of the area.

Figure 4

VIEWS OF HERTFORDSHIRE BUSINESS

Businesses generally consider that the University has contributed positively to local economic development

PERCENTAGE OF HERTFORDSHIRE BUSINESS



Source: PACEC business survey, March-June 2005.

Note that the survey indicated some bias: Businesses in Welwyn Hatfield and those with university links are more likely than those in the rest of the county and those without university links to perceive positive impacts.

FUTURE IMPACTS

The impact of the University on local businesses will increase in the future.

The University is doing much to further develop its links with local industry including the design of new foundation degrees more aligned to the needs of their employees, academic structures better integrating with industry and marketing via, for example, sector champions.

Almost all businesses interviewed realised the potential business benefits of closer links and were keen to develop them.

To establish more widespread links, companies believe ongoing change is required

Businesses noted that the University needed to:

- Better understand the financial pressures on business and see them more as a customer;
- Ensure top level commitment is translated into action throughout the University;
- More explicitly recognise the two-way nature of knowledge transfer; and
- Make it easier to access the University.

At the same time, businesses recognise they need to adapt and work harder to get the most out of links with the University.

Companies believe student placements could be more widely used

Most (90%) of our interviewees had used and appreciated year long student placements.

- They were seen as a good means of tackling longer term recruitment;
- Most use placements to undertake a specific tasks;
- For young businesses and SMEs, placements are a valuable low cost/risk means of achieving flexible growth; and

— Most SMEs see them as more useful than formal mechanism eg KTPs.

However, to increase uptake in placements businesses also believe:

- Mechanisms need to be found for making placements more accessible to SMEs;
- The University needs a more systematic means of making placements which depends less on personal contacts into specific Faculties; and
- The administrative workload imposed on businesses in order to take placements on needs to be reduced.

December 2006

Memorandum submitted by the Council for Industry and Higher Education (CIHE)

THE CIHE

The Council for Industry and Higher Education (CIHE) is a unique high-level partnership between leaders from businesses, universities and colleges. Our aim is:

To advance all kinds of learning and research through the fostering of mutual understanding, cooperation and support between higher education and business.

Hence we develop a joint agenda on the learning issues that affect us all, commission research so that policy can be better based on evidence, debate our agenda with the Governments across the UK and work with them and others to effect change. We want to ensure that the UK has a world class higher education system that in particular meets the needs of businesses for high quality graduates and internationally acclaimed research. Our members range (alphabetically) from the Managing Partner of the international IT consultancy business Accenture to the Chief Executive of the marketing and advertising multinational WPP.

BACKGROUND

The CIHE considers that in an increasingly competitive and knowledge driven world, the UK's future rests on continuous innovation especially by those organisations that compete internationally.⁶ Their success generates the wealth that powers the rest of the economy and helps develop a more prosperous, coherent and caring society. In an increasingly flat interconnected world, it will be the peaks of excellence in the landscape that will increasingly differentiate the successful nations, regions and clusters from the rest. These clusters have higher education institutions (HEIs) at their core.⁷

The OECD and other commentators have noted that there is a correlation between high skill levels and economic performance.⁸ The DTI has recently reaffirmed that businesses that invest in R&D have higher growth and premium FTSE ratings.⁹ Businesses and other organisations across the UK need to have the absorptive capacity to be able to develop and then implement high value-adding strategies. Graduates and more highly educated managers and staff are key to that capacity building. However, the great expansion of higher education only took place from the mid 1980s. This means that a considerable majority of people currently in work have had little or no experience of formal higher levels of learning. There is an urgent need to upgrade the capabilities of the existing workforce as well as develop new graduates and post-graduates. Many competitors (USA, Nordic countries, Singapore etc) have higher percentages of graduates in their workforce than we have. Other countries (notably in Asia) are investing to raise their knowledge and skills base.¹⁰ Overall UK participation levels have stalled and those in Scotland are slightly falling. The Council continues to work with the Government, funding agencies, employer groups and others to see how higher participation levels can be achieved. Our economic and social future depends on the UK achieving world-class levels of demand and supply of higher levels of learning.

THE ROLES OF HIGHER EDUCATION

Against this background we consider that higher education institutions (HEIs) have a range of roles:

 to educate students to be intellectually curious, creative, responsible and humane members of society and citizens of the world;

⁶ See in particular CIHE May 2006, International Competitiveness; businesses working with UK universities.

⁷ See in particular Florida, *The Rise of the Creative Classes;* CIHE November 2006 Oxford Entrepreneurs.

⁸ OECD 2006, Education at a glance.

⁹ DTI October 2006, Innovation Report.

¹⁰ OECD ibid.

- to prepare students of all ages to be more employable and contribute to the creation of wealth; developing learners who have international and cross-cultural awareness and an underpinning set of values will be increasingly important;
- to serve as engines for the economic and social transformation of individuals and communities notably through widening their participation policies and practices; and
- to be at the forefront in the development, dissemination and application of knowledge and scholarship working increasingly through networks that include business and other organisations and in multi-disciplinary teams.

Institutions will have a range of missions and can be excellent in different ways. Indeed the diversity of the UK's system is one of its great strengths. That diversity includes further education colleges (FECs) some of whom have substantial provision at higher education level. Although the Select Committee is focusing on HEIs it will want to recognise that high level learning takes place in a variety of locations (including the workplace) and is delivered by a wide range of players (including private for-profit providers and corporate "universities" and training centres). Businesses look for a range of high quality provision that develops and releases the distinctive potential of individuals—whether through e-blended learning, "bite size" chunks, via informal learning networks, intermediate level or vocationally oriented courses or more traditional academic honours or post-graduate degrees. Much of what they need for employees is best delivered inhouse rather than purchased from external providers, but there is a significant external spend on workforce development. Individuals require an equally wide range of flexible learning opportunities. A significant number (currently over a third of all HE students, and 47% of first degree) study part-time or at local higher or further education institutions or the Open University. So league tables that over-value research and undervalue teaching, enterprise or success in widening participation are unhelpful and distorting.

We want to stress the importance of lifelong learning. The great expansion of higher education in the UK is relatively recent. Even in 1985 only some 15% of young people went to university. This means that an overwhelming majority of managers of smaller businesses and staff in all organisations have had little or no exposure to higher levels of formal learning. Compared to our main competitors we are under-educated. Only some 52% of a sample of CEOs in the UK had a degree in 2004 against over 80% of US businesses (this updates a fuller analysis of 1999 data).¹¹ Other commentators have noted that management weaknesses and a lack of skilled staff are holding back the adoption and implementation of high value-adding strategies especially in smaller businesses.¹² Equally, as Lord Leitch has noted,¹³ some 80% of the workforce of 2020 is already in work. The Sector Skills Development Agency has shown that a majority of the new jobs in the future will be at managerial, professional and similar levels with higher levels of learning a pre-requisite.¹⁴ Our own work with multinational businesses confirms that the future competitiveness of UK-based businesses rests on continuous innovation and high value-added products and processes.¹⁵

Upgrading the capabilities of the existing workforce is one of the great educational challenges facing us. The potential for HEIs and FECs is considerable; but in a market worth some £5 billion, HEIs currently only have about a 4% market share.¹⁶

Our report *Degrees of Skill*¹⁷ summarise the capabilities that large employers look for in graduates. We categorise these as:

- cognitive skills (analytical abilities, problem solving);
- general competencies (team working, communication, interpersonal skills);
- personal capabilities (learn for oneself, initiative, flexibility);
- technical ability (where appropriate for a specific job);
- business/organisational awareness (understanding of how organisations function, financial and commercial awareness); and
- practical and professional elements (personal development and professional practice).

This report and that on *International Competitiveness* highlight the general capabilities rather than specific skills most employers seek (though businesses such as pharmaceutical and IT services companies attach importance to deep knowledge included down to specific modules). The importance placed on the flexible generalist who has analytical, communication, team-working and self-learning capabilities is a feature of the UK recruitment scene in contrast to the position in many other EU countries.¹⁸ The service sector focus

¹¹ Keep and Westwood 2002, Can the UK learn to manage, quoted in CIHE/AIM 2004, Solving the Skills Gap.

¹² See eg. work by the SSDA including May 2006, Meeting Future UK Skill Needs.

¹³ Interim report.

¹⁴ SSDA 2006, Working Futures 2004–14.

¹⁵ CIHE 2006 International Competitiveness: Businesses working with UK Universities.

¹⁶ DfES 2006 update of joint calculation set our in CIHE 2005 Connor *Work based learning*.

¹⁷ CIHE October 2006 with the HE Academy and CSU Prospects.

¹⁸ See for example work by John Brennan at the OU's CHERI which suggests that UK graduates are less likely than their continental peers to have studied vocational subjects, to consider that their higher education helped them master a specific discipline or that it was "most appropriate" for their current work.

of the UK economy may help to explain this emphasis on customer facing, presentation, networking and team skills as well as the development of the core analytical abilities ("the development of the powers of the mind") that should be the hallmark of all graduates.

Employer involvement in the roll-out of Foundation Degrees and the continued support of HNC/HNDs as well as historic involvement in engineering, medical, creative industry and a range of professional courses shows the importance they attach to applied and practice based learning.

As businesses seek to raise their added-value, they are looking to recruit an increasing number of postgraduates, including those with a range of Masters qualifications. We therefore urge the Select Committee not to over-focus on the traditional higher education market for young people and the conventional three or four year degree.

FUNDING HIGHER EDUCATION

Higher education is a public as well as a private good.¹⁹ It adds to national wealth through the development, dissemination and application of knowledge, it develops citizens who are more healthy, less prone to crime and more active in their local and national communities and who are more tolerant of the views of others.²⁰ Equally individuals gain a substantial lifetime earnings premium from their higher education.²¹ Businesses gain from the graduates and post-graduates they hire and then develop further; they pay a premium for such talent. They also benefit from research and knowledge exchange for which they are now increasingly paying a market price.

Higher education should be funded by all who benefit:

- the State (since higher education is a public as well as a private good);
- from graduates and post-graduates (since they enjoy a substantial premium from their higher level learning); and
- from organisations (who have to invest in their staff and in knowledge exchange if they are to remain competitive).

Closer working between all three is needed if market intelligence is to be improved, market imperfections reduced and the learning be appropriate to develop learners with the capabilities, awareness and experience that organisations and individuals need. Organisations have important roles in transferring awareness and knowledge, offering quality work experience opportunities and in co-funding the higher learning of their staff.

The CIHE has shown that there is a wide earnings premium depending both on the subject studied and institution attended.²² Recent work by the IFS has reinforced the wide range of financial benefits.²³ Particular earnings premia attach to the study of certain high cost subjects (notably science, engineering and technology that also have a maths basis). These different costs and benefits supported the CIHE arguments for differential market pricing. The £3,000 cap and restrictions by the higher education funding councils on institutional numbers restrict the operation of a more open market and the improvements in quality and customer choice that should result. The CIHE will form a view on the raising of the cap on the basis of evidence on the working of the current arrangements.

Equally, the funding formula used by the funding councils do not currently adequately relate the price they pay to the cost of delivering the wide range of learning experiences. Science subjects are particularly disadvantaged and institutions cannot be expected to continue to offer such subjects when some make a loss on every student they educate. We therefore welcome the additional £75 million that HEFCE has recently allocated over three years for high cost science subjects but consider this to be only an interim solution. We have also welcomed their funding of initiatives by a range of learned societies in the STEM area; we hope that these initiatives are appropriately co-ordinated. However, no-one should underestimate the challenges involved in increasing the demand of young people to study STEM subjects. Our analysis of the demand chain suggests that a major impact has yet to be made in increasing the numbers of students studying the "hard" STEM options at university and at A-level and even in some areas at GCSE level.²⁴ The study of STEM subjects is not only important for STEM employers; A very high proportion of STEM graduates work in financial and business services and power these high value knowledge intensive businesses that are also fundamental to the international competitiveness of the UK.²⁵ There is asymmetry in the market information and not all students appreciate that studying a STEM subject opens a wide range of opportunities.

- ²² CIHE 2002 Conlon & Chevalier Financial returns to undergraduates.
- ²³ IFS ibid.
- ²⁴ See Table 1 in the Annex.
- ²⁵ See Chart 1 in the Annex.

¹⁹ See eg the discussion in CIHE 2004 *Higher Education and the Public Good.*

²⁰ CIHE 2005 The Value of Higher Education quotes a range of evidence.

²¹ IFS Dearden *et al* for Nuffield Foundation and update November 2006 broadly confirms the earlier DfES calculation of an average £400K lifetime premium while stressing the wide variation around that average.

We look to the introduction of TRAC costing methodologies to enable the costs of reaching out into disadvantaged communities, attracting students from non-traditional backgrounds, helping them learn and develop the wide range of personal capabilities that employers seek to be better reflected in funding formulae. A better reflection of costs is also needed for the teaching of part-time learners. Rather than a range of funding premia and special allocations (which we are against in principle as we prefer institutional autonomy reinforced by block grants), we look to the funding councils and HEIs to develop and apply the TRAC costing methodologies so that institutions first of all know how much it costs to educate a particular set of students and secondly so that this can be better reflected in the price paid by the funding councils.

The Government will want to continue to invest in the knowledge base that resides in our universities. We have welcomed the substantial investment set out in the Science and Innovation Investment Framework 2004–14 but note that investment is still needed in research, laboratory and teaching infrastructure and that some continuation of the Science Research Investment Fund (SRIF) will be needed including to meet the shortfall between the 80% of costs that Research Councils will pay through project funding and the 100% needed to fully recover costs.

The CIHE also considers that the Government should reduce over time the economically and socially regressive blanket subsidy on all student loans. Currently all loans are on-lent at no real rate of interest irrespective of the subsequent ability of the graduate to pay. The full cost of this is not easy to assess but is probably some £1.7 billion per year across the UK.²⁶ As more enter higher education so the costs will rise. The high current cost is a major reason why support for part-time learners is so restricted—despite it often being these learners who are most in need and whose learning advancement could have high economic impact. To on-lend at the Government's cost of capital would still represent a good deal for students and graduates but could free some £700 million per year for reinvestment in raising the quality of the teaching infrastructure. This in turn would increase the attractiveness of the UK to overseas students and to employers who seek high quality in the graduates they recruit around the world.

On research funding we welcome the Government's decision to proceed on the basis of the dual support system. Businesses and other organisations need HEIs to be able to invest in exploratory research in new areas and through supporting new researchers in new fields and on multidisciplinary projects. It is increasingly at the boundaries of disciplines that new and exciting knowledge will be developed with the potential for innovation. We consider that a radical change to the current RAE process is needed and our response to the Government on the future of the research assessment exercise²⁷ emphasised (in addition to the points made above):

- the need for excellence in all forms of research including applied research to be recognised and rewarded; this implies supporting excellence in a range of institutions;
- the need for a UK wide approach; and
- our opposition to a single metric, that one size does not fit all disciplines and that each high level discipline panel or specially convened group with adequate end-user representation should decide the mix of metrics most appropriate to the discipline.

We welcome the announcement on 6 December that from the academic year 2007–08, £60 million of HEFCE's research funding will be allocated to HEIs according to how much research income they have received from business and industry. HEIs will want to ensure that research excellence is mirrored by the economic and social impact that research achieves (the Warry Report for RCUK is relevant here). UK Universities only capture some £250 million per year of business research funding (perhaps around 3%)²⁸ and need to be incentivised to capture more. It is important they work in particular to exchange knowledge with smaller companies who often need to increase their added-value. We welcome the move to full economic costing (FEC) as enabling universities better to appreciate the costs of their research and then take appropriate commercial decisions on pricing. We are pleased that (according to a recent survey initiated by the CIHE and Universities UK) a more mature relationship appears to be developing between universities and businesses based on mutual appreciation of the need for universities to cover their costs tempered by an awareness that they operate in a competitive global environment where full cost recovery may not always be possible.

We welcome the increasing formula based approach of the Higher Education Innovation Funding (HEIF3) stream from the DTI/OSI in offering greater security to institutions and staff on this important area of work.²⁹ Investment in this third stream should continue to be increased so that a more appropriate balance with RAE and Research Council funding is secured. There is merit in rewarding the interchange of people (students and staff) since it is through the flow of people that most knowledge is exchanged. Supporting more students to undertake a quality work placement in a small business for example can help increase the absorptive capacity of such businesses that we noted above was a constraint on their wealth creating capability. RDA funding might also support such placements schemes as aprt of a closer and more

²⁶ CIHE June 2006 submission Funding quality and innovation refers to work by Professor Nick Barr at the LSE.

²⁷ CIHE October 2006 submission *Reform of the RAE*.

²⁸ CIHE December 2005 HE meeting international business demand; they also only capture a similar percentage of business spend on staff development/CPD at higher learning level.

²⁹ CIHE November submission What has changed since Lambert.

informed involvement in the HE agenda. There is a need to join up the range of current initiatives from the DfES, HEFCE, DTI/OST, RDAs and others in the area of local learning initiatives. Increasingly institutions are themselves having to do this.

HEIs will want to diversify their sources of funding. This will be particularly important for some institutions given the demographic decline in the cohort of younger students from 2010. Unless there are trend changes in the numbers both staying on in education and then having the qualifications to enter higher education, this change will reduce the market for traditional undergraduates. We noted above that while the market for employer expenditure on training that HE could potentially compete for is difficult to estimate it is likely to be worth around £5 billion. Currently the HE sector probably secures no more than £300 million (around 4%) of this CPD potential.³⁰ This income is concentrated in just a few HEIs. Our 2005 report on Workforce Development and Higher Education identified key issues for HE Institutions (and employers) to address in developing this market. Employer led provision often in a very different form to the traditional undergraduate degree course will be required. This in turn will have implications for the HE workforce and the reward structures that currently give priority to research rather than employer engagement and economic impact.

HEIs will also want to develop their sources of income from alumni and we note that many now have appointed experienced fund raisers.³¹

UK HEIs are international businesses. They compete internationally for students, staff and investments by businesses, foundations and alumni. In this international market they need to be able to charge market prices that reflect the value they offer. At the same time they will want to offer bursaries so that those from low income and non-traditional backgrounds are not excluded. They will want to develop world citizens in a socially responsible way.

Currently about 11% of the student body comes from overseas.³² This is not out of line with the percentages in other nations. The UK has probably the most diverse student body of any system in the world; around 75 institutions have students from at least 100 countries.³³ Businesses value this diversity and multiculturalism because it increases the opportunities for cross-cultural awareness and better prepares graduates to take their place in international businesses where such understanding is increasingly necessary. Diverse teams are also more likely to be creative and innovative that mono-cultural ones. The CIHE considers that it is the richness of the cultural mix and the potential this offers for enriching the student learning experience that is the main benefit overseas students offer. Hence they need to be integrated into the student and local community and help inform a curriculum that is itself rich with international issues. The full funding that those from outside the EU bring is important but secondary. With support from all the funding councils and the British Council, the CIHE is working with the sector and drawing on overseas expertise to suggest how UK HEIs can best internationalise their institutions for the benefit of their students, communities and international businesses.

Some 40% of postgraduates now come from overseas.³⁴ While this signifies the strength and reputation of our higher education system, it may suggest that businesses and organisations that advise learners are not getting over a strong enough message to UK born students that as the UK moves ever further up the added-value chain so there will be an increasing need for graduates who have masters degrees. Three or four years of undergraduate learning may be adequate for many who recruit generalists but will be increasingly inadequate for those who need in-depth knowledge and experience (eg, in engineering and biosciences).

MANAGEMENT AND STRUCTURE

The sector has shown itself to have been remarkably well managed given the substantial 20 + year decline in the unit of teaching resource, the vast expansion in the size of the student body, the expansion in research volume, the sector's responsiveness to a range of government and other initiatives and its ability still to produce some of the best graduates and research in the world.

Further improvements are always possible. Greater co-operation and collaboration (an increasing feature across the sector) can improve efficiency and effectiveness; HEIs cannot be excellent at everything and a greater sharing can raise quality.³⁵ While wholesale mergers are unlikely, initiatives such as that in Scotland between chemistry departments, physics departments and built environment departments and similar initiatives in London on languages can be encouraged by funding councils oiling the wheels. Estates might be still better utilised and opened to the local communities; the example of Worcester University opening its library as a community resource centre is a recent example. Administrative functions might also be better shared; there is no compelling need for every HEI and Further Education College (FEC) to have their own payroll, pensions, IT, estates, careers services or library/resource functions. The development of purchasing

³¹ Many of these are from the USA. See also CIHE June 2004 HE Leadership & Fundraising and the parallel report for the Government from a group chaired by one of our members Professor Eric Thomas.

³⁰ DfES communication updating a joint estimate in CIHE September 2005 Helen Connor Workforce Development and HE.

³² Universities UK 2006 Patterns of Higher Education.

³³ Derived from UUK ibid.

³⁴ UUK ibid.

³⁵ See CIHE 2002 Brown Co-operation and Collaboration: some reflections on the US and UK.

consortia is an example that might be emulated elsewhere. The pooling of functions and raising of efficiency would be helped if the Government was to amend the rules on VAT so that services provided by internal consortia were not subject to VAT.

More joint curricula development might help learners of all ages better access a wider range of learning options and higher quality teachers and facilities. FECs are in an excellent position to work locally with their businesses, other organisations and a wider group of learners. They have good track records in delivering vocational learning and encouraging student progression. We generally welcome the recent HEFCE consultation document on these issues.³⁶ Private sector providers can also play a role where they are focused on specialist provision delivered flexibly and in the bite-sized pieces that small businesses in particular need. The HEFCE will want to develop a credit based approach to funding to support those institutions that want to address this market opportunity. Such an approach already operates in Wales.

The role of the Government and of the funding councils is to support the higher education sector to be internationally competitive. That involves:

- investing in our diverse system through block funding at levels that will at least maintain the unit of teaching resource;
- signalling its encouragement for and then financially supporting institutional proposals that will
 raise the quality of the learning and research offered and the overall efficiency and effectiveness of
 the sector;
- working to remove the barriers to change so that the sector can respond dynamically to the challenges and opportunities it faces (eg co-funding work based learning through credit systems);
- working with business and other organisations to improve the workings of the market through helping ensure there is more informed demand including for so-called strategically important subjects; market imperfections lead to some students being ill informed about what a modern career in STEM means and the generally higher than average salaries and lower unemployment associated with these jobs;
- implementing education policies in primary and secondary schools that do not result in learners foreclosing options and specialising too young while enabling them to be better taught by those who have relevant knowledge and experience of the subject; and
- supporting through the British Council and other agencies and through a partnership approach the marketing of UK higher education in overseas markets so that the strengths of the UK education brand is better appreciated, more overseas students and graduates choose to study and research in the UK for the benefit of HEIs and the enrichment of their own learning experience. UK based organisations will recruit this talent and benefit from their learning and research. The Government needs to have joined-up policies so that marketing efforts by one arm are not handicapped by visa and work-permit impediments placed in the way by other arms.

The CIHE does not consider that the Government should try and plan the shape of the sector, try and manage a market in learning or directly intervene even if that were legally possible given the autonomous nature of higher education institutions. HEIs stand as bulwarks of independent thought, expression, teaching and research. They have abiding values that transcend the immediate particular interests of Governments.³⁷ That is one of their great strengths and one that the Select Committee will want to uphold in its report.

END NOTE

This input reflects the views of CIHE Council members following the circulation of a draft paper. We would be pleased to elaborate our evidence through a discussion with the Select Committee.

We attach a copy of:³⁸

- International Competitiveness: Businesses working with UK Universities.
- Degrees of Skill: student employability profiles.

December 2006

³⁶ Higher education in further education colleges, November 2006–48.

³⁷ See eg the CIHE reports 2004, Higher Education & the Public Good, 2005 Higher Education: more than a degree; 2006 Balancing Enterprise and Risk; 2007 pending International Universities: a financial or moral imperative?

³⁸ Not printed.

Annex

Table 1

	Change 2001–05	Entrants 2005
Mathematics	-15%	46,034
Further Mathematics	+ 3%	5,192
Biology	$+ 2^{0/0}$	45,662
Chemistry	-2.1%	33,164
Physics	-14%	24,094
Design & Technology	+ 17%	16,077
Computer Science	-47%	5,810
All STEM	-7.5%	176,033
All Subjects	+1.4%	691,371

A-LEVEL ENTRANTS IN STEM SUBJECTS SINCE ROBERTS REVIEW

Source: Building A Globally Competitive Britain: A Review of The STEM Skills Supply Chain; CIHE forthcoming.

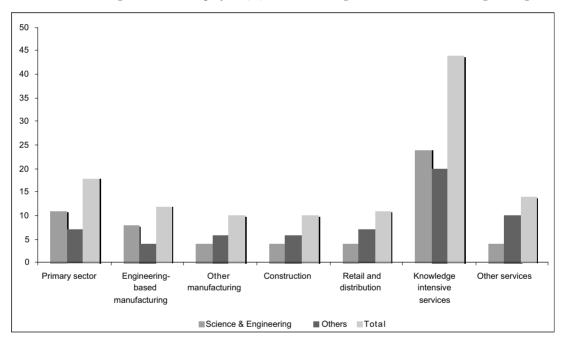


Chart 1: Average number of employees (%) educated to degree level in science and engineering

Source: DTI Occasional Paper No. 6, Innovation in the UK: Indicators and Insights, July 2006.

Witnesses: **Professor Tim Wilson**, Vice Chancellor, University of Hertfordshire, **Mr Richard Brown**, Chief Executive, Council for Industry and Higher Education (CIHE), and **Mr Richard Greenhalgh**, Chairman of CIHE and Deputy Chairman of the QCA, former Chairman of Unilever Ltd, and Fellow, Templeton College Oxford, gave evidence.

O458 Chairman: Can I welcome Professor Tim Wilson, Mr Richard Brown, and Mr Richard Greenhalgh. First of all, let me welcome you and say, as I was saying in private, that this is a very important inquiry for us looking at the sustainability of universities over the long-term, not over the short-term, and we need expert opinion and advice on this, so we are very grateful to the witnesses for coming in. We usually give our witnesses a couple of minutes, not much more, to say something about what we are doing and what you can contribute-how you see it from your point of view. You do not have to-you can plead the Fifth Amendment, say nothing and answer questions-but, if you would like to, Richard, would you like to start?

Mr Greenhalgh: Perhaps just to say why I hope I can contribute to this discussion really. As Chairman of the CIHE I am in involved either as Chairman or on the boards of three businesses, on the one hand and, on the other hand, I am Deputy Chairman of the QCA and a Fellow of Templeton College, so I feel I have got my feet, as it were, on, I will not say, both sides of the fence because I think the important thing about this discussion today is that we are all on the same side of the fence. It strikes me that the important report which produced recently on international we competitiveness of the UK in terms of higher education just illustrates the real strengths that we have in our system but also areas where there can be improvement. I think business needs are simple to define in general terms and also more difficult to define in detail, but essentially employers want a supply of competent, and a growing number of outstanding, people. Some employers, in addition, want research collaboration where the ingenious mixes with the practical and some employers also want partnerships with higher education to develop employees often now in life-long learning and sometimes in executive education. Those basic principles, I think, apply across the whole sector. There are differences between SMEs and multinational companies in degree, but those principles still apply there. We have now had in front of us, and we are going to discuss it, I am sure, the Leitch Report, which starts to put some targets and some numbers to those principles, and in the CIHE, where we have got vice chancellors and chief executives together, we will be, in the next few years, absolutely focusing on how we reach those targets, because that is the real question, "How do you execute?", not, "What is the target?"

Q459 Chairman: Richard.

Mr Brown: Just to remind you, Chairman, the Council for Industry and Higher Education is a partnership between business leaders and academic leaders, so it is appropriate that I am flanked by both, reflecting the partnership nature of the organisation.

Q460 Chairman: Professor Tim Wilson.

Professor Wilson: I am here, obviously, as Vice Chancellor of the University of Hertfordshire; the Committee will also know I am a member of the HEFCE Board. I am very happy if the Committee wants to talk of my role in the CBI and in the Regional Development Agency also. I feel there is a contribution to be made here from universities like mine, a new breed of universities, business facing universities, representing another dimension of the sector as it has evolved. The sector is becoming increasingly diverse and differentiated and universities like mine are focused on business need, meeting the needs of our economy in a very direct and relevant way, so I welcome an opportunity to talk with the Committee about this.

Q461 Chairman: Good. Let me start with you, Tim Wilson. I will revert to first names, if you do not mind; it makes it less formal and we get moving faster.

Professor Wilson: Please.

Q462 Chairman: Tim, I was once told by a vice chancellor, not many years ago, that, "If you are looking for entrepreneurs do not come on a university campus. That is not what we do." Was he right?

Professor Wilson: He might have been right at the time; I am not sure he is right in the year 2007. Business facing universities are a relatively new breed of university, a different type of university that is now evolving. I can clearly only talk about my own university, but there are others that are moving in a similar direction. We look at our university's activities through a business lens, everything we do we look at it through a business lens, business in a very broad way. That is not just the private sector but also the public sector. So, we embed innovation, employability, enterprise skills within our curriculum so our students are trained in those skills. We try and match students' skills to business needs in a proactive way, not in a responsive way. We work on knowledge exchange, improving productivity processes with companies, especially SMEs, and we build enterprise hubs, enterprise hubs which have spin-in, spin-out companies and provide a base for our staff and students to gain practical experience in business.

Q463 Chairman: But most of the research, Tim, suggests that the spin-outs from universities are quite small scale?

Professor Wilson: There are a number of spin-outs. There is a report from Cambridge which has come out very recently from Library House which looks at spin-outs by research-led universities, and I would argue they are very good, but, equally, universities like mine have spin-out activities, but not to the same extent as the research-led institutions. We are far more orientated towards the business production end rather than the research/IPR exploitation end.

We work with our staff and our students developing their own companies on campus, equally welcoming companies onto our campuses where they can gain advantages from the intellectual strength of the university. It is a different type of university from the traditional research-led university.

Q464 Chairman: What is your opinion, Richard, in terms of looking for entrepreneurs on university campuses? Are they places we now can find entrepreneurs?

Mr Greenhalgh: I think increasingly. I do agree. Certainly if you go back to rather more years than I care to remember when I was applying to companies, the selection process was largely around cognitive skills and a little bit on the general competences, whereas now employers are looking for personal capabilities and particularly, as Tim said, about business and organisational awareness, which are the sorts of things that you would expect from entrepreneurs. Of course you get some celebrated entrepreneurs who say, "I did not go to university and I think I benefited from that." I think what they really mean is that they had to work a whole lot harder because they did not have that start. Therefore, it is a question still of the motivation of people to be entrepreneurial. It is very much, of course, inside every individual, or not, as the case may be, but I think there is no reason at all now why universities cannot produce entrepreneurs in the same way as they produce other sorts of people. One other thing is that entrepreneurs are often thought of as the people who are standing alone and starting businesses, but there are also, particularly in larger companies, a lot of entrepreneurial roles within companies, the sort of creative roles that we look for in a large company in the marketing department, and, obviously, they are people coming out of today's universities.

Q465 Chairman: Do we build teams within universities? It is not just the stand-alone, self-made, single entrepreneur; is the education appropriate to building that team approach that companies need? *Mr Greenhalgh:* Yes and no. My personal view is that one of the consequences now of the fact that people often have to take part-time employment while they are at university is that the team-building exercises that used to be in place are there but people have not got the time to do them. I think that is possibly the case, and I think we need to think hard about that. Equally, I think it is very clear now that most universities are providing team-based learning.

Q466 Chairman: Tim, do you do it?

Professor Wilson: Very much so. I can give examples of students working in teams to solve real business problems, small businesses coming to the university asking teams of students to look at their marketing plans. It is a win-win situation. The students get real life experience of working with a company in a real life problem, as a team, working with employers and academics. That is one example inside my own

university. There are many examples of team working within universities on specific business type projects.

Q467 Chairman: Richard, you wanted to come in? Mr Brown: If I might, first of all, on entrepreneurship. We have just completed a report, which we can give to the Committee, with the National Council for Graduate Entrepreneurship, which looks at what is happening across UK universities. This shows, as Tim was saving, that a lot is happening, but a lot of it, I am afraid, is marginal, it is dependent upon a few key individuals, enthusiastic individuals, it is often dependent on short-term initiative funding, it is not fully embedded across the sector and within institutions. The UK is not unique in this. We have also done studies with colleagues in the United States and in Asia, and our next project is to stand above all of this and to say: "What appears to work and why? Can we develop a suggested higher education experience?", (it is more than just a curriculum experience) because the students develop their enterprise often through on-campus activities or, as has been mentioned, through working in small entrepreneurial companies. Can we develop, from the knowledge that we have, a suggested experience which we could then pilot within a major university to see what the effect of implementing that best practice has? To pick up your earlier question, "Is enterprise knocked out of individuals?", evidence from the Cambridge and Massachusetts Institute of Technology (the CMI) does indeed suggest that students arrive at universities in the UK and USAthis is not just unique to the UK-and are keen and enterprising, but at the end of the first year, when tested, they are found to be less keen and enterprising. But that can be rebuilt. Remember, since most companies are developed by people in their early thirties, it is not a question perhaps of individuals leaving universities and immediately establishing a company, it is having that depth of knowledge, that understanding, on which they can draw and maybe go back to business schools at a later stage and say, "Okay, I learnt a certain amount at university. How can you take me to the next stage now that I am thinking of establishing a company?"

Q468 Chairman: But, Richard, is there a small number that still exist, and may give evidence to this Committee at a later stage, whose view is that universities should really be ivory towers, that they should get on with the pursuit of academic excellence and have no regard to the gross world of commerce? There is always still in universities, "Please, it is nothing to do with business." They do not want you.

Mr Brown: A very small voice from the past, I would suggest, Chairman. I would hope that all academics would accept that *one* of the purposes of higher education (one of them) is to add to national wealth and produce employable graduates. If I put it the other way around, I think few vice chancellors would say it was their job to produce unemployable graduates.

Q469 Chairman: Even Tim, in the evidence he has given to this Committee, says his first priority above working with business and so on is to bring out the potential of the young people, or the older people, he gets in his university. It is not about providing good fodder for business, it is about developing individuals. Tim, you say that in your written evidence.

Professor Wilson: Developing the individual to meet business need. It is a business-led education system in the context of my type of university.

Mr Brown: There is a wider issue here, Chairman, I think, about the relative roles of business and higher education in developing employable or entrepreneurial graduates. You will hear some business organisations almost imply that it is the job of universities to produce oven-ready graduates that can be slotted straight into jobs. That is not our view. Our view is that there is a shared responsibility, that it is the role of higher education, as Tim was saying, to develop the powers of the mind, the analytical abilities, to develop some of the team-working, problem solving, interpersonal skills, but actually it is then the job of business, partly on campus, to come and help in the development of the specific business skills that are needed; to actually offer work placements and quality work experience so that students can have a better idea as to what work is all about; and then actually to inculcate the specific culture and skills that are appropriate to the particular sector or to the individual company. It has to be a shared responsibility.

Chairman: You know the Chair's role in these proceedings is the warm up act. Now you are warmed up, if not oven-ready, we can get started. Can I emphasise to my colleagues and you, we want to get the most out of this short session. Can we be rapid fire as much as possible, both colleagues and witnesses, so we drain every bit of information out of you? Gordon.

Q470 Mr Marsden: It sounds like factory farming to me, Chairman, but I will not pursue that analogy. With your leave, Chairman, I will start by talking a bit about the implications of Leitch for higher education. Perhaps if I could start by asking the two Richards a couple of questions here. Leitch talks about the absolute priority of upskilling the adult workforce with HE qualifications. You have put emphasis on that in your written evidence to us very strongly. Do you think the current structure of HE in this country is up to upskilling large numbers of older workers?

Mr Brown: Ever since we were formed 20 years ago, CIHE has said that we need more educated people in all walks of life, and that remains our position. Therefore, we support the broad Leitch analysis and the objectives that have been set. But the challenges are, in our view, understated by Leitch, and the question is whether the Government also appreciates the nature of the challenges. First of all, we do not know much about business demand for higher education; there are no adequate statistics. We have today, Chairman, put up on our website the report which we have sent to the DfES, which analyses what we do know. Secondly, businesses are interested in having their problems solved. How do I market my products in a particular market? How do I develop a business plan so that I can access further capital? Higher education, by and large, is in the business of delivering two, three, four year qualifications. and Leitch over-emphasises qualifications and assumes that it is just a marketing issue, that somehow, if you can market existing products in a better way, then the market is there and is receptive. While we do not know much about business demand we think that most small companies are interested in, let us call it, bite-sized bits of learning, 15, 20 maybe 30 credits. I am sure the Committee know what credits are, but there are about 360 credits, on average, in a three-year degree, 120 credits in a year. So 15 to 30 is a fairly small bit of learning, and I would ask Tim in a second, if he might, to explain in more detail. We do not think that the funding systems at the moment are appropriate for that, nor are the quality systems appropriate for analysing what has to be delivered into the workplace, (not people coming on campus to access learning). So there need to be fundamental shifts. Some institutions, such as Tim's, are capable of doing it, maybe only a few have really bought into this agenda; but they all need support if they are to be able to deliver on this agenda.

Q471 Mr Marsden: Before I do ask you to comment briefly on that, Tim, could I come to the other Richard and put you slightly on the spot. You heard what your colleague says, which I take is a "No", the current structures are not fit for purpose, particularly in terms of portability. Are there certain groups of universities who are doing this better than others? Are the Russell Group up to it, for example? *Mr Greenhalgh:* I am not dodging the question, I really do not know sufficiently well each of the universities to comment on that.

Q472 Mr Marsden: Are there other types of universities that do it better than others? My Russell Group comment was perhaps a bit harsh, but are newer universities better at doing it than the older ones, say?

Mr Greenhalgh: What I would say is that higher education has in the last few years become much more capable and willing to change, but it has got an awful long way to go. In the same way that businesses, and the businesses that I have been associated with, have quite often had to learn the hard way that to compete means to change, that has certainly got to happen with higher education and, therefore, the ones that will succeed, I think, will be very sensitive to the needs of the students, on the one hand, and the customers, the employers, on the other. Indeed, I think, as Richard has said, the Leitch agenda will make that change ever more necessary.

Q473 Mr Marsden: Tim, can I come to you but can I put in a very specific point of view. There you are, Vice Chancellor of the university, business focused, but you know that your students who come to you,

for family reasons and other reasons, sometimes need to dip in and out, sometimes need to do short courses and all the rest of it. They do a great short course with you that maybe gets them 30 or 40 credits, and then they have to do something else, perhaps in Central London, or travel, or move, or whatever. Are you confident that the universities will allow them to continue and pick up from where they have left off with you?

Professor Wilson: I am assuming you mean the credit transfer system, which is what Professor Burgess talked about.

Q474 Mr Marsden: Yes.

Professor Wilson: That will depend upon individual universities. One hesitates to go into the issue of universities accepting other universities' credits. I think there is a growing acceptance of a common credit framework.

Q475 Mr Marsden: But there is a big question mark about it?

Professor Wilson: With respect, that is really not the Leitch question, is it? That is the credit accumulation question. The Leitch question, which I think is an extremely good question, is how do we address the issue of bite-sized learning? How do we fund it and how do we quality assure it? Can we, as a university, deliver that sort of education? That is a large part of the Leitch agenda. Richard is guite right, we have a task as universities to create a market, because the evidence at the moment is that the business need is not perceived as being there, but actually our experience is that it is there. Once a business is exposed to the university's expertise, once that business is engaged with the university, perhaps in technology transfer, perhaps in a knowledge transfer programme, perhaps in some need for R&D, that is when that relationship is bridged, that is when you get access. I think the issues about quality assurance and funding can be resolved. I sit on the HEFCE Board and there is a will there to resolve them, but it is not straightforward.

Q476 Mr Marsden: I would like to stay briefly with you, Tim, and ask you some follow up questions to that. You wisely or rashly volunteered your membership of a development agency board earlier on.

Professor Wilson: Yes, I did.

Q477 Mr Marsden: I want to press you on that. Do you think that HE and business, and I am not saying it is a fault of one or the other, has sufficiently grasped the need for regional strategies? You sit on the East of England Development Agency, for example. Is there an East of England development strategy between business and higher education?

Professor Wilson: Yes, there is. If you look especially in the context of innovation and enterprise hubs and the development of a knowledge based economy, there is a significant investment by regional development agencies into university business interfaces. If I might add, and I can only speak for my own region, East of England, there is also very significant investment going from the Regional Development Agency into the high level skills agenda: the co-funding of new university campuses in Ipswich, in Southend, one being dedicated now for Peterborough, Harlow. These are major investments by the Regional Development Agency improving the high level skills of the region.

Q478 Mr Marsden: Richard Brown, it has been suggested in other areas and in other sessions that the performance of RDAs, the choateness, if I can put it that way, is very patchy and, similarly, that the performance of universities working together on a regional basis is very patchy as well. You have an overview of the whole country. What is your impression?

Mr Brown: That the partnerships are stronger the further north you go and weaker the further south you go, and if you look at the south-east, it is perhaps not surprising. This is an enormous region. If I might, though, just put a couple of facts on the earlier question, if that is allowed, Chairman. The best estimates we in the DfES have made is that the market for work-based learning that higher education might access is around £5 billion. So it is quite substantial, to reinforce what Tim was saying. The supply side analysis suggests that universities capture just £300 million of that; so a very small percentage. Furthermore, of that £300 million. about £90 million is from major companies and just 4 universities have 50% of that market, and most of that is by business schools. 12 universities account for 50% of the income from all commercial and noncommercial organisations So, to come back to Richard's earlier point and your question about the Russell Group, we should remember that business schools have been at this for a very long time, and that is where most of the money is. The final bit of evidence and you have always encouraged us to produce evidence based proposals, Chairman, is that although universities say they are working closely with SMEs, only £18 million worth of money is captured from the SME market by universities, and nine universities capture over 50% of thatneedless to say, Hertfordshire is one-but I think that puts it in perspective.

Q479 Chairman: What was that last bit? *Mr Brown:* Only seven universities account for 50% of the income from SMEs.

Q480 Chairman: Can we have a note of that? *Mr Brown:* Absolutely.

Q481 Chairman: Which seven universities? *Mr Brown:* Yes, we can give you that.¹ *Professor Wilson:* I would like to pursue a bit more the Leitch agenda, if that is your question.

Q482 Mr Marsden: It was not actually, not specifically. I will come back to it, if I may Chairman, but it was really about the issue of how fit for purpose HE graduates are when they go into

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the business workplace. Perhaps you would like to comment on this, Tim. Leitch talks a lot, and there has been a lot of debate about, enabling skills, soft skills, call them what you will, and who should fund them?

Professor Wilson: Yes.

Q483 Mr Marsden: Do you think that we need to do more at an HE level on enabling soft skills, because we seem to be producing a significant proportion of business graduates who are perhaps very good with their paper qualifications in a business area but not very good in terms of enabling more soft skills?

Professor Wilson: I think that is a very relevant point indeed. I firmly believe that as many of our graduates as possible should have some form of employment experience as part of their programmes, indeed post-graduates as well, and I think this is a very definite and positive way forward. If we look at the employment statistics, those students who have had that work experience get better jobs quicker than those who have not. This is not just a coincidence, this is because they develop the social skills, the business skills, the awareness skills, the enterprise skills through that work experience, and universities like mine are looking to expand that. In my university placements are increasing each year. The national trend is to decrease, but ours are increasing.

Q484 Mr Marsden: I want to be very clear on this. We have touched on non-traditional students, but even with the traditional student cohort, the 18–21 cohort, you think there should be much more dipping in and out, or much more mixing of the concentrated academic work, if I can call it that, with experience outside of the campus?

Professor Wilson: For my form of university, yes, and it does not have to be a one-year placement experience, it could be a three-week placement experience, a four-week placement experience. To give you an example, every single *Harry Potter* movie has had my students working on it, not for a full year, but for a few weeks. *Charlie and the Chocolate Factory* is another one. These are students working for a few weeks in a real life commercial experience. That is invaluable in the context of their future careers. There are plenty more examples like that.

Mr Brown: On the RDA point, if there is one thing the RDAs could do it would be to develop and encourage those student placements within their areas. They have substantial funding. It would make an enormous difference for students to be going into SMEs opening the eyes of both who could learn from the other students solving business problems and bringing back those problems that can refresh the curriculum. There is a win-win in all areas there and we would encourage the RDAs to do more of that.

Mr Marsden: Hopefully we will have the opportunity to press them on that informally or formally.

Q485 Jeff Ennis: My first few questions are directed towards the two Richards, as it were. Does the CIHE's evidence concur with Leitch's findings that around 25% of the existing workforce have Level 4 or higher level skills? *Mr Brown:* I am sorry?

Q486 Jeff Ennis: Have 25% of the workforce got Level 4 qualifications basically, Richard? That is what Leitch concludes.

Mr Brown: We do not have the evidence on that. It looks as though I am continually criticising Leitch, and we do not want to, but Leitch comes from more of a supply side perspective than we would have hoped. Businesses by and large do not think in terms of levels, they have problems that need to be solved, and that is why this issue is extremely difficult. Our report, which I can give you a hard copy of, Chairman, finds it so difficult to identify what is spent by businesses at higher levels because they do not think in those terms.

Q487 Jeff Ennis: You are obviously setting a target, if it is 25%, give or take 5 or 10%, or whatever. You are saying there should be 40% by 2020. Is that an achievable target?

Mr Brown: I think it has to be, and, indeed, Ministers are rightly talking about 45%: because if we look at what our competitors are achieving, they are at those levels, and if we look at the future of the UK, as Richard Greenhalgh said earlier, in our report on International Competitiveness, our future lies in continuous innovation, in knowledge-based manufacturing businesses and services and they have to increase the percentage of graduates that they have in their midst. An analysis which we have done, which will be out shortly in another report which I can send you in two or three weeks, shows that the most successful companies in the UK are (a) stuffed full of graduates and (b) undertake a lot of research. A lot of that research is in the services sector and does not get counted in official statistics This all shows that the future of our economy rests on our higher education institutions.

Mr Greenhalgh: Can I add to that. I think that the real opportunity but also obligation is there on employers now with Leitch to respond to the demand side equation by being more articulate at defining what it is they want from universities and particularly what they want from graduates. It is too often, I think, a little bit headline stuff rather than digging deeper down into what one is really looking for. We know, Tim is absolutely right, that the interchange between being in university and being employed is a very important one, but we need to understand what it is that that brings to the graduate. It brings certain skills, but we also know that when it works it enhances personal capabilities, it improves general competences and those sorts of things need further definition, in my view, particularly for the SME sector.

Q488 Jeff Ennis: In your evidence you say that the upskilling of the existing workforce is perhaps the greatest challenge the business community and HE

sector has faced in a generation. Obviously we need to target the existing workforce in terms of achieving the targets that we have already outlined. What will be the sort of strategy for targeting the existing workforce?

Mr Brown: There, I think, we do entirely agree with Leitch. You have to work with the networks in which small companies belong. Tim can say a bit more about the Business Link because he is unique in owning one, but we have to work with the Sector Skills Councils and (to pick up the RDA point earlier from your colleague) the SSCs are even more patchy than RDAs. Many of them are new, many of them do not adequately relate yet to higher education. But there are many other networks to which small companies belong and higher education institutions just have to get involved in those networks and think of it through business eyes. Before we move on, perhaps this is an appropriate time for the advertising slot. I did bring a free sample of the report we have written with all the subject disciplines in higher education, which explains what employability capabilities you have from having studied the 53 main subjects. So, if you want to know why you should employ a philosophy graduate, this will tell you the employability skills which the academics have signed up to developing. We hope that this is part of bridging the gap, explaining to small companies and other employers exactly what today's graduates bring to the workplace.

Q489 Chairman: All vested interests produce literature like that to MPs, Richard. What do you say about the previous witness to this Committee, Professor Ewart Keep, who pointed out that there is this vested interest that always says more investment in higher education means higher productivity, means that the economy does better. He pointed to Scotland, which has a much better record for this sort of investment than us, right across the board, and it does not work; they have lower productivity. What do you say to people like Ewart Keep? Does it make you feel insecure?

Mr Brown: No, the answer is in this, my second bit of evidence, my second free sample, Chairman, which is from the Advanced Institute of Management and Research, which is jointly funded by the ESRC and the EPSRC and we have worked closely with them. If I can quote one of their key messages: "Skills can only make a substantive contribution to productivity performance if they are effectively deployed in the firm. Supply side skill policies are not sufficient by themselves." If we come to our colleagues over the border, there we have a real problem with, I think we call it, the absorption capacity of Scottish industry to actually take graduates and really use them. So, many of them will come south, many of them will add value in the City of London, less will remain in Scotland than they might desire. But that is a function of not being able to absorb the skills that are there and deploy them effectively within the workplace.

Q490 Jeff Ennis: Tim wanted to come back on that question?

Professor Wilson: If I may quickly. Richard was talking about working through existing networks, and that is really important I think. My colleague, the Vice Chancellor at the University of Teeside, for example, has put together a degree programme for SME chief executives designed by the Chamber of Commerce, by the way. The Chamber of Commerce designed it and sponsored the design. It was then adapted by academics and is now taught through the Chamber of Commerce. We acquired a business link, which gave us access to thousands of SMEs with trained people to address their business needs. There are different ways of doing this, and it is not just being imaginative and innovative in a higher education institution, we need to get access to these markets and to present our products, our services, in that sort of way.

Q491 Jeff Ennis: One final question. It is a follow on to the point that Gordon was making. It is really directed to Tim. Does Leitch mean that more universities need to take a lead from the University of Hertfordshire and the approach it has taken to business?

Professor Wilson: Far be it for me to claim that.

Q492 Jeff Ennis: Should every university adopt your model?

Professor Wilson: I am a firm believer in a differentiated sector. No, not all the universities are the same. We have world-class research universities in this country, we should support them, but we should not all try to emulate them. We acquired a business link 18 months ago, it has been immensely successful, its turn-over has nearly doubled, and other vice chancellors are now talking to me about what we are doing with business links, seeking to emulate what we are doing, and I think that is creating an increasing differentiated sector and that is healthy for our economy.

Q493 Jeff Ennis: Effectively, we should leave it to the business schools and one or two specialist universities in each region to adopt your type of model?

Professor Wilson: I might wish to argue, but not today, about the merits of the approach.

Q494 Chairman: Is there not a very serious point here: that it does depend on leadership. Universities are a bit like schools. If you have got good leadership in a school you see the school very often transform because they know how to manage the institution. When you leave Hertfordshire and come back to a proper part of the world—

Professor Wilson: I thought I had lost my dialect, Chairman.

Q495 Chairman: I do not think so. What will happen to Hertfordshire then? Is it embedded, or is it just you?

Professor Wilson: It is being embedded at this very moment. The university board is convinced that we are committed to being a business-facing, business-like university. That is what we are and that is what we will remain.

Q496 Chairman: So it is embedding a culture?

Professor Wilson: It is embedding a culture, it is really important, not just inside the university, in the surrounding businesses as well. We have this model of a revolving door: university and businesses going through that revolving door on a constant basis. **Chairman:** I think we will be hearing from

Manchester, who use a similar philosophy.

O497 Mr Carswell: There seems to be an assumption that the higher skills need to be attained by some form of planning by quango. There seems to be a sort of default assumption. You talk about our economic future depending on the UK achieving world-class levels of supply of high levels of learning. I want to take you up on this point. In what way would supply be constrained if the CIHE, and for that matter RDAs and OCAs, did not exist? You could say that our economic future could equally depend on us having a world-class supply of aircraft to transport things or telecoms to communicate with the world. There is no equivalent to the QCA or the CIHE or RDAs professing to run these. Why is HE different? Why can we not attain these skills by leaving universities and higher education alone, by letting business do what is knows best, which is in its interest (it does not need outsiders to tell it what to do) and by leaving people to pursue their own interests?

Mr Brown: I will leave Richard G to cover the quango angle, but we are certainly not a quango. We are funded by our business members primarily and we are funded because, if we look back 10 or 20 years, the founders of CIHE, including a major politician called Jim Pryor, felt that business was talking at and past higher and further education, that the world was moving extremely fast and that neither side was engaging in the dialogue that we needed to engage in. So, we are a facilitating organisation that not only gets people round the table to talk but also to develop an agreed agenda that we can go and influence the Government on and also produce documents such as this that can actually better inform both sides as to what each needs and what each can supply. We have similar partnership organisations in the United States-it performs exactly the same role-in Japan and in Australia, and we have helped to establish them in countries-

Q498 Chairman: Do not go into defensive mode!

Mr Greenhalgh: I am not a million miles away from you, in the sense that I think that employers need to be in the driving seat in this whole process and they need to be seen as a customer. By the way, that includes the Government as employers too. As the customers, as best employers do with their suppliers, they will set up partnerships, sometimes close, sometimes not so close, with the higher education

sector, and if they cannot get what they want from the existing sector, there is no reason at all why there should not be other ways of supplying what the employer needs. If your thinking is taking you down the road, for example, of a Tesco University or a Marks and Spencer higher education student, why not? Providing they are accredited, that may be a route we want to go. Competition in this field is all to be desired.

Mr Brown: We are seeing examples. We have the College of Law that has degree awarding powers; we have Kaplan International that is applying for degree awarding powers; we may well see Carter and Carter and corporate universities applying, and why not? We in the Council would support this evolution. We want to see a diverse sector, because our aim is to increase the skills base in the UK and, while higher education has an important role to play in that, we need to think of other ways of achieving that goal.

Professor Wilson: I think it is for universities to persuade business that they can add value to business processes, and it is not necessarily a one-way conversation; it is a two-way conversation.

Chairman: Again, we will come back to this in other questions. I am going to move on to Stephen.

Stephen Williams: Can I start off with Richard Brown. From your overview of the sector, if we use Hertfordshire as an exemplar of how to have good links with business, there are around about 130 higher education institutions, how does the rest of the sector fare? Are people catching up with Hertfordshire, or are there some universities who are a long way behind?

Q499 Chairman: Huddersfield is overtaking!

Professor Wilson: We will debate that later, Chairman.

Mr Brown: I make no comment about whether it is being lapped or not! I would like to pick up the point that Tim made earlier that we have always encouraged institutions to play to their strengths, to decide what their mission is and to focus on that mission and not to be distorted by government pots of money that tempt them to go in all different directions. There will therefore be universities, and you may hear from Alan Gilbert shortly, that are focused on international research and meeting the needs of international global businesses for worldclass research and world-class graduates, and if we do not have institutions in the UK that produce world-class graduates and world-class research, then our multi-national businesses will go overseas because they will acquire them from whatever country is providing that. Equally, if you are an SME, then you may have specific difficulties and that type of international agenda may not be for you, and it may be that the Hertfordshires or the Manchester Metropolitans or the Salfords—. If we think of our major urban areas, they generally consist of clusters of higher education institutions, all serving slightly different markets. So long as we maintain that diversity, then the market, in its various forms, can be satisfied.

Q500 Stephen Williams: So there is diversity in the sector, we all accept that, but would you think that it should be important and core to their mission that all higher education institutions should have a relationship with at least their local business community?

Mr Brown: I slightly hesitate, because the easy answer would be to say, "Yes", but for a Vice Chancellor of Cambridge University, a council member, I think that she would say that her market was global, and, yes, there would be important relationships with business on the Cambridge Science Park, but they will relate to wherever there is the world-class need for their world-class products.

Q501 Stephen Williams: Moving away from the general area of HE business partnership, how would you define knowledge transfer? Is that something that is different and more specific and is perhaps done by a smaller number of institutions?

Mr Brown: I think there is an important general point I might make about knowledge transfer. Most knowledge is transferred through the movement of people. That can be students into small companies on placements, it can be visiting lecturers, professors into universities and it can be through other ways other than the metrics which we tend to assume are the relevant things for valuing and rewarding knowledge transfer. Business start-ups, spin-outs, patents, and all of these types of things are hard bits of evidence, but that is not the way most knowledge is transferred. It comes back to our earlier discussion as to how we can encourage and value the movement of people, and it is not inconceivable that we could develop metrics, (and we are working with the Government on this at the moment) to see how we can value those people flows.

Q502 Stephen Williams: Do you think there is enough of a transfer in both directions of people, not just students and academics spending time in industry but the other way round as well?

Mr Brown: No, there is not, and there is a greater responsibility on business. It is no good businesses throwing grenades over the fence—this is back to Mr Carswell's earlier question about the role of the CIHE partnership-and saying you are not producing employable graduates but then not providing the quality work experience and placements that would help to produce those graduates. Equally, businesses play an important role in developing and delivering case studies. So, what are some of the issues that we face in our company or in our sector? How can I develop some of my management team by persuading them to go in and deliver some of that and be challenged by bright people? I think there is a two-way flow, but there is not enough business engagement with higher education.

Q503 Stephen Williams: Is the economic relationship a two-way flow, or is that mainly one direction? Does business benefit far more from the link with higher education and does higher education miss out on the economic benefit it should be deriving from its knowledge transfer?

Mr Brown: Businesses only spend about £250 million with higher education institutions on research. They spend a similar amount on consultancy, as broadly defined. That is a fairly small percentage of their own spend in those areas. So, you might say that, therefore, there is an enormous additional market that higher education should be seeking to capture.

Q504 Stephen Williams: Can I move, Chairman, to Hertfordshire. Does Hertfordshire do this because you want to do it? Did you go Hertfordshire University and think: "My mission is to make Hertfordshire different and distinctive from the rest of the sector and this is going to be my legacy", or were you recruited on that basis?

Professor Wilson: When I was appointed Vice Chancellor it was very clearly in my mission, my intention, but, frankly, Hertfordshire has always been like this. It was founded to support the aircraft industry, it was founded to train technicians and it has been supporting the economy in our region ever since it was founded. The difference now is that there is an opportunity to be very explicit about our mission, to be very straightforward and to recognise differentiation in the sector, which is essential, and to position ourselves as a business-facing university. If I may refer to your earlier question as well. Richard is quite right, most knowledge transfer takes place in terms of people flows, but I would not want to think that is where we need to focus completely because, if we look at the DTI knowledge transfer partnership programmes, for example, which are excellent examples of universities and businesses working together, quite often not in what you and I might think of as Blue Sky research; I would class this as incremental innovation-new products and new processes using university expertise to work with business expertise—it is not knowledge transfer, it is knowledge exchange, it is knowledge through working together. And that sort of programme is really essential for the thriving small business community, and long may it last.

Q505 Stephen Williams: Hertfordshire is also taking part in some HEFCE funded programme. There are four other universities apart from you. You have got a share of a £4 million pot. Does that mean you have got £800,000 or is it an unequal share?

Professor Wilson: No, we have received £2million.

Q506 Stephen Williams: So you have got half of it? *Professor Wilson:* No, the pot is larger than that actually.

Q507 Stephen Williams: Is it? *Professor Wilson:* Yes, it is.

Q508 Stephen Williams: It is an extract from your evidence actually.

Professor Wilson: We have received £2 million as part of that, we also received another £2 million for our employer engagement, so we have received £4 million.

Q509 Stephen Williams: How do you invest that public money effectively?

Professor Wilson: We are using that money to accelerate our strategic development. Richard was talking earlier about the time to market, the way we can improve our quality assurance processes. Quality assurance processes can take two, three, four years. I want to bring that down to three weeks. If we are going to be responsive to business needs, we have got to respond inside three weeks, so I have got to transform, re-engineer, a lot of our processes in order to make us more business-like and more responsive. That is part of what we are doing, but we are doing lots of other things. We are making an employment centre where business needs can be matched with graduate skills, not a careers advice centre, an employment centre, where we are matching our student skills to business need, business need generated by business link representatives, bringing it into the university and matching that with the skills of our graduates. That is the sort of thing. It is a whole wealth of activities where we are using that money and investing it for the future.

Q510 Stephen Williams: In the evidence you said, in terms of the relative importance of your mission, that teaching and research is your primary mission and that business relationship is the secondary part of your mission. What sort of feedback do you get from your under-graduates or graduate students about how they feel that balance? Do the students all buy into this business mission?

Professor Wilson: That is a very interesting question.

Q511 Stephen Williams: Is that why they go to Hertfordshire perhaps?

Professor Wilson: First of all, may I say that we undertake teaching, learning and research in the context of business. It is the context that matters. We are a university, we undertake learning and research, but it is in the context of business. Students who are coming to my university are very interested in their return on investment. It is not a cheap experience any more; going to university is a high cost experience. There is an interest in the return on investment and the sort of job they are going to get, and what sort of return they are going to have, and I encourage that philosophy, I encourage those thought processes. I would like to sit here and say people come to the University of Hertfordshire because they know they are going to get a good job when they finish. I cannot say that at the moment, but I think I will be able to in three or four years' time, because we have a brand of business-facing, business-like. The students will come to my university because they want to come to a businessfacing university. Some students do not want that; they want to study at the highest possible academic level they can and become researchers themselves. That is fine, but they should not be applying to my university, they should be going somewhere else.

Q512 Stephen Williams: We heard earlier about students increasing their employability by spending time in industry and *vice versa*. Does your institution—maybe one of the Richards could give us some experience from the rest of the sector as well—mix up the student level, the graduate level and the student level, say, between a student who is doing games technology and a student who is doing business, or accountancy and MBAs and get them to work together in this team, or is it all linear going out into the business in the same discipline?

Professor Wilson: Yes, that is one of the pleasures of working in a multi-disciplinary institution: to put teams together, students and staff, from different disciplines and see what is created. You can get some real innovation in those conversations.

Q513 Chairman: You have got an academic community at Hertfordshire, have you? Your academics see themselves as a community?

Professor Wilson: It is a mixed community. They certainly do.

Mr Brown: It is often in the very smallest institutions in the sector, the sector that is covered by GuildHE, as it is now called, SCOP as was, where you find a lot of that interaction where it is almost difficult for individuals to decide whether they are teaching or whether they are practising, and students when they are learning or when they are practising. Also we should not forget the traditional sandwich education which still exists in the UK—the numbers have been going down but nevertheless it still exists. Equally within many universities, and, again, let us quote Cambridge as another example of the Russell Group institutions, if you are undertaking engineering, in the engineering course you have to do a placement in a company on a real-life project. You may want to ask Alan Gilbert whether that is similar in Manchester, but I suspect it is the same with a lot of Russell Group institutions. So this is a broadly based practice. It is not to say that there should not be more of it and, back to your earlier question, not to say that businesses cannot play a greater role in facilitating that.

Mr Greenhalgh: If you look at our report on international competitiveness, you will see that one of the things that multi-national companies value about UK HEI is, in fact, the multi-disciplinary team approach compared to our competitor countries. We are actually good at that, and we need to continue to develop it.

Q514 Helen Jones: A question for Tim really. You described your university as business-facing, you said a lot of your students go there because they want a return on their investment, but we all know how difficult it is to predict the labour market well in advance. How do you build into your programmes the flexibility for those students to be able to

develop, as the world changes, to be able to change careers, change outcomes, because that is also important, is it not?

Professor Wilson: Yes, I think you are exactly right, Helen. A lot of this is about developing soft skills, developing skills which enable students to work in a different environment. Many of them will change their careers several times during their lifetime, and developing those soft skills and self-awareness really is part of a business type university education. It is not just about the acquisition of knowledge, it is about the acquisition of skills and the context of that knowledge and the awareness of those skills, and it is encouraging and inculcating that confidence and that ability to feel they can move between different careers as they go forward. You are right, it is a vital skill for the future.

Q515 Helen Jones: Can I ask Richard Greenhalgh, what in your view is the role of arts graduates in this new business world? What is the role of people like me with English or history degrees coming out of university now? When I came out a degree would get you a job. Well, it would not actually—when I came out it was in the middle of the eighties recession—but generally you could expect a decent job with a degree. What are going to be the prospects for people doing the arts, because they do not necessarily want to become researchers but they want to do that as their first degree?

Mr Greenhalgh: I spent most of my career with an Anglo Dutch company, Unilever, and I joined with a degree in social anthropology. I went into marketing and then personnel with that. My colleagues in the Netherlands were always amazed that someone with an anthropology degree could go into marketing, because the accepted wisdom in the Netherlands was if you went into marketing you were an economist, so do not think about going in with a degree in English. The positive thing about the system in this country is that you can go with an arts degree, obviously not into engineering, and you would not want your surgeons to have a degree in English, but there are still plenty of jobs out there for arts graduates. I think the important thing is, as Tim has been saying, provided your orientation is there. If you want to go into business and you understand business, you spend time in business. To some extent the degree is not the key thing there. The second thing to say is that added to that, I think in this country we tend to think about research being only science based, and it is wider than that. We have in this country fantastic creative industries and design skills where more and more a research-based approach is actually the right thing for the companies and the economy.

Q516 Helen Jones: Richard Brown, how do you think you can convince businesses of the value of that. You referred to the report that you have just done, but is it correct to say that many businesses still are not perhaps fully aware of the skills that graduates in various disciplines can bring to them? How do you get over that problem?

Mr Brown: I think that is right. That is why we hope that report will be helpful. If I was Chairman of KMPG or PwC here, I would say the last thing I would want is someone who has studied accountancy. I want somebody who has studied English and who has developed those analytical capabilities, because I can teach them the subject of accountancy. The same would be true of various other companies in the businesses services sector. As Richard said, we are special in the UK in that our recruitment is much more general and we value much more generalists and our businesses then invest more in their staff and their staff development than in other countries in Europe; there is research evidence on this, and I can give you that if that is helpful. So, they are able to recruit generalists because they invest more in the specifics of their own organisation and their own disciplines.

Q517 Helen Jones: Can I move on to another issue. We have discussed in this Committee quite often the Research Assessment Exercise and the prospect of changes to it. I wonder if Tim could tell us, does it have implications for his kind of university business collaboration that you are interested in? Is it helpful or not?

Professor Wilson: The Research Assessment Exercise is important for universities like mine, not really in the context of the money it will generate from it, but in the context of recognition, status and standing, because that status and standing gives us leverage to obtain R&D grants and knowledge transfer partnership grants from different authorities. So, it is not the money that drives us in the context of our Research Assessment Exercise, it is the status and standing. What is really important for universities like ours is to be able to use our research capability, not in the context of undertaking pure research, as you will hear later on this morning, but in the context of the application of existing research into business in order to enable innovative practice. That is where our real interest lies.

Q518 Helen Jones: There has been some talk of including output measures in the metrics, but, as we all know, there are difficulties in getting the design of that right. Do you think it is possible to get an accurate output measure for that? How would it change behaviour, or would it not change behaviour at all?

Professor Wilson: If I may speak in a HEFCE way here, I think the attitude is that there will never be a perfect system; it is getting the system as close to perfect as possible. The RAE, in my view, has served its purpose very well for two decades; it is time to review it and look far more at output measures than we ever have done before.

Q519 Helen Jones: Do you have any suggestions about what those might be?

Mr Brown: I was going to give a broad perspective, Chairman, on that question. We have said, in our view, that all forms of research and excellence in research needs to be valued. That means that the type of applied near-market research which Hertfordshire undertakes is as valuable as the type of fundamental research that certain other institutions undertake; that the user community needs to be involved in giving their views on what is international excellence, because the views of a BAE Systems and a Rolls Royce—and we have plotted this against five five-star departments—of course there will be an overlap, but in some cases the business view will be different from the academic peer review view of what is internationally excellent and we need to be able to support some of those departments that are really valued by business.

Q520 Helen Jones: We have talked about the needs for business of bite-sized learning and so on, but how would delivering that drive changes in the funding system for universities like yours: because at the moment the funding system does not help you do that, does it?

Professor Wilson: I have to say that that is a really very tricky problem for HEFCE, because the HEFCE model is not ideally suited towards funding bite-sized learning because it is designed, frankly, to serve a 120 credit year. But I think the will is there within HEFCE to alter the system, to enable the system to start funding smaller amounts of learning. It is not there yet in terms of delivery, but I think it will be there. I would not be surprised if it is not there inside the next 18 months. The will is there.

Mr Brown: You might remember, Chairman, that slightly west of Bristol, where HEFCE is, is another system and in Wales they are indeed funding by credit, and maybe we can learn a lot from the practices there.

Chairman: We have seen some very interesting statistics from both those parts of the country in terms of HE recently, but I will not bother you with that.

Q521 Mr Chaytor: Tim, you arrived in Hertfordshire in 2003, which was the year in which Richard Lambert produced his report on business and HE, and he referred to the profound culture gap. Did you find that was the case in your university four years ago, and, if so, what have you had to do to change it and, particularly, how has the organisation of learning and the range of the curriculum changed to reflect the new emphasis?

Professor Wilson: Firstly, I did not actually arrive in 2003, because I was Deputy Vice Chancellor. I was an internal promotion, so most of the problems I inherited, I had caused, I could not blame anybody else. More seriously, the Lambert Report was very timely for universities like mine and it enabled us to put our strategy around a very well respected public report. You asked about cultural change. Yes, cultural change does not come quickly, it comes over a matter of time; it involves a lot of discussion, conversation and debate. One of the strengths of the university is that you are dealing with intellectually strong people and they will respond to rational argument. I feel that we have moved quite a long way, we are changing the curriculum quite genuinely now, more and more of our students are taking working experiences, more and more of our staff are working in business at the same time as they are teaching. I encourage staff to run their own businesses. In some areas of my university half the staff are running their own business. What better way to bring to life to abstract concepts than to take it back to business reality.

Q522 Mr Chaytor: What kind of protocols do you need to have in place to ensure that staff who are running their own business are not doing it at the expense of the public purse which is funding their salary?

Professor Wilson: That requires quite a lot of sound management technique and sound management experience, but it can be done by sound management. I think it should be encouraged actually. We should encourage people to do this. Equally, quite a lot of our graduates start their own businesses and some stay on the university campus in incubation centres. Once you make running a business a respectable part of your portfolio, it spreads very quickly.

Q523 Mr Chaytor: Have you had to change the organisation of teaching in terms of the structure of the university year and the development of credit-based systems? Reference was made earlier to the limitations of the funding system. We tend to think in terms of three-year degrees and not smaller units of learning.

Professor Wilson: Yes, we have changed it, clearly. I will give you an interesting example. We work with MBDA, a major corporate in Stevenage. The students work with us two and a half days a week and work with them two and a half days a week. So these students are doing a full-time degree programme in five years instead of four years. We have had to play around with the curriculum to meet their requirements, to meet the customer's requirements. That is a model we will develop further with more corporates. We clearly have to move our curriculum around occasionally to accommodate work placements, but actually it is not that difficult, it is just needs the will to do it. Once you have got the will to do it, then you can create this sort of change.

Q524 Mr Chaytor: Is the typical Hertfordshire student still on a 30-week year?

Professor Wilson: No, all sorts. It depends what you mean by "typical", I suppose. We are open, like most universities, 52 weeks a year, but students will come and go at various times of the year.

Q525 Mr Chaytor: How many redundancies did you have to make to bring about the kind of cultural shift you wanted to achieve?

Professor Wilson: None. Some staff have chosen to leave, and that is fully understandable. We have to manage that situation.

Q526 Mr Chaytor: Have areas of the curriculum been taken out because they were not appropriate to the kind of future that you envisaged?

Professor Wilson: We have re-profiled certain areas of the curriculum. We have not extinguished parts of the university.

Q527 Mr Chaytor: Could I ask Richard about the question of innovation, enterprise and productivity. In our investigations we have always been told that the French and Germans are way ahead of us in terms of productivity. What are they doing that we are not doing and how do their universities compare to our universities in the emphasis on innovation and entrepreneurship?

Mr Brown: The received wisdom is that the productivity gap between France and Germany is largely caused by the weaknesses at supervisory and intermediate level, Level 3, if you like, rather than Level 4 skills, and that our productivity gap with the USA is caused by the lack of adequate investment in R&D in the UK compared with the US; so there are different causes for the productivity gaps. In terms of the effectiveness of higher education systems, Richard Lambert did another report with Nick Butler of BP on the EU system of higher education, and that was really a wake-up call to higher education systems in Europe, by saying that they are under-funded, that the mass higher education systems in Europe have to provide the higher quality that the US is providing and the UK is increasingly providing; and that would be our analysis. We are, and have been, part of a European partnership of like-minded organisations, and I would say that, although we may feel that we could go even further in the UK in building relationships between business and higher education, we are ahead of what is happening generally in continental Europe. That is not to say that in places like the Grandes Ecoles, where work placements, for example, are *de rigeur*, we cannot learn from that, but if you look at the mass higher education system in a place like France, I think you would realise the difference. If we look at the research rankings, again, whatever we think about that, and I know that a lot of research is undertaken in different institutions in various countries, nevertheless the UK undoubtedly has an edge over what is being provided in other European universities.

Professor Wilson: Can I come back on one point very quickly. You talk about learning styles. I think we have seen, not just in my university, but in a wider range of universities, students are learning on a 24-7 basis nowadays with virtual learning environments which are just pervasive. We had 10,000 log-ins on Christmas Day last year. Ten of them were mine!

Q528 Chairman: A lot of teachers log-on to the departmental website on Christmas Day! *Professor Wilson:* Correct.

Q529 Chairman: I did not catch what you said to David. Did you say your staff have gone to an American system and only get paid 30 weeks a year?

Professor Wilson: No, I did not say that.

Q530 Chairman: Is that a way we should go? *Professor Wilson:* It is an interesting model. I would not wish to take that one on, I don't think.

Q531 Chairman: Nobody else will speak up for that. Richard?

Mr Greenhalgh: No. I was not going to speak up for that. I was just going to add to the question that 10 years ago as a businessman one would have looked across the continent of Europe as much as across the Atlantic to see where you thought excellence lay in higher education. Now look to India and China is what I would suggest we do very, very carefully. There is enormous potential, particularly in India, particularly in basic research, which we need to link into. We should not see it as something that we close our doors to; quite the reverse. We have not discussed it today very much, but the need for higher education institutions to see themselves as global players, I think, is going to be very important. Not all of them—as we have said, there will be some who will be very focused on the UK even, indeed, perhaps a region of the UK—but others' futures will lie, just as it has done with companies in terms of being global-

Q532 Chairman: You would like to see MIT Cambridge sort of links, would you, but with India? *Mr Greenhalgh:* I would not like to say what sort of shape they might take.

Q533 Chairman: No-one ever mentions MIT Cambridge, which also incorporates British Petroleum, does it not? Richard you must know about that?

Mr Brown: MIT is a special type of institution. We would not want to say that the Chancellor was wrong in picking on one particular type of institution as a model for partnerships.

Q534 Chairman: It has £10 million behind it. Has that been a success, Richard?

Mr Brown: We are undertaking a study on internationalising higher education, and we would be delighted to share our results with you. We believe we have to develop global citizens, and Hertfordshire would want to develop global citizens, and it is not a question of just attracting bums on seats, paying full fees to shore up the finances of Hertfordshire University. In this interconnected world we have to develop those individuals that have a wider cultural awareness, and that can be done on campus even if you do not have partnerships with research-led institutions overseas and send students and staff overseas. Our businesses are looking for those students who have that global awareness.

Professor Wilson: I would not want you to think the local regional universities are not global players in a different sort of way. Each year we have Chinese postgraduate students from the Shanghai Bureau of Justice; we provide them with internships in local

companies here in the UK and that is part of our service to that particular profession. Increasingly, our students want placements overseas because they want to be global citizens. Next week I am meeting the Chamber of Commerce in Beijing and the CBI, then I am going to Mumbai to talk to the Bollywood people because that is a leading industry in my region. We must provide our students with that international experience and that is in work placement environments, not necessarily working in a university. **Q535 Chairman:** Tim, we will have to invite you to the Bollywood Awards in Bradford! I am sorry we have run out of time. See this as a taster; we see it again as a genuine partnership. We want to make this inquiry as good as it can be because we only do things where we can add value. As you leave this Committee and you go back to your day jobs, if there is something you did not tell us that we should have known, keep in touch with us and let us know. Thank you very much for your attendance.

Professor Wilson: Thank you for the opportunity.

Supplementary memorandum submitted by Richard Brown, Chief Executive, The Council for Industry and Higher Education (CIHE)

The following data have been extracted from the Higher Education-Business and Community Interaction Survey (HE-BCIS). They relate to section 2c of the survey: *Courses for business and the community*—CPD courses and CE (excluding those funded by NHS or TDA). They are 2003–04 figures reported by HE institutions in UK.

Table 1

CPD FOR SMEs (ie SPEND BY SMALL BUSINESSES ON CONTINUING PROFESSIONAL DEVELOPMENT AT HEIS)

University	Revenue	% share of UK total	% cumulative
University of Hertfordshire	£2.40m	13.1	13.1
Cranfield University	£1.71m	9.3	22.4
University of Durham	£1.10m	6.0	29.0
University of Exeter	£1.01m	5.5	34.5
University of Central England	£0.78m	4.3	38.8
City University, London	£0.70m	3.8	42.6
London Business School	£0.67m	3.7	46.3
University of the Arts, London	£0.53m	2.9	49.2
University of Nottingham	£0.50m	2.7	51.9

Source: HE-BCIS 2003-04 (HEFCE 06/25).

These nine universities have the highest reported income figures, and between them have over 50% share of the total revenue of $\pounds 18.3$ million for all UK HE institutions.

Table 2

CPD FOR OTHER (NON-SME) COMMERCIAL BUSINESSES (ie SPEND BY LARGE CORPORATE BUSINESSES AT HEIS)

University	Revenue	% share of UK total	% cumulative
London Business School	£22.8m	25.1	25.2
Cranfield University	£13.5m	14.9	40.1
Nottingham Trent University	£6.2m	6.9	46.9
University of Manchester	£4.8m	5.3	52.2

Source: HE-BCIS 2003-04 (HEFCE 06/25).

These four universities therefore have between them over 50% share of the total revenue of £90.5 million in this category for all UK HE institutions.

Table 3

CPD FOR ALL COMMERCIAL AND NON-COMMERCIAL ORGANISATIONS (EXCLUDES CE AND CPD FOR INDIVIDUALS WHICH IS INCLUDED IN TOTAL FIGURES IN TABLE 4)

University	Revenue	% share of UK total	% cumulative
London Business School	£23.7m	10.7	10.7
Cranfield University	£19.7m	8.9	19.6
University of Manchester	£12.0m	5.4	25.0
Nottingham Trent University	£8.2m	3.7	28.7
University of Leeds	£6.7m	3.0	31.7
University College London	£6.6m	3.0	34.7
University of Strathclyde	£6.0m	2.7	37.4
University of Birmingham	£5.5m	2.5	39.9
Institute of Education, London	£5.0m	2.3	42.2
Canterbury Christchurch University	£5.0m	2.3	44.5
University of Wolverhampton	£5.0m	2.3	46.8
University of Portsmouth	£4.4m	2.0	48.8
University of Warwick	£4.1m	1.9	50.7

Source: HE-BCIS 2003-04 (HEFCE 06/25).

These 13 universities have between them over 50% share of the total revenue of \pounds 221.4 million in this category for all UK HE institutions.

Table 4

University	Revenue	% share of UK total	% cumulative
London Business School	£23.7m	8.0	8.0
Cranfield University	£19.7m	6.7	14.7
University of Birmingham	£18.0m	6.0	20.7
University of Manchester	£12.0m	4.0	24.7
University of Central Lancashire	£8.4m	2.8	27.5
Nottingham Trent University	£8.3m	2.8	30.3
University of Leeds	£7.7m	2.6	32.9
University of Oxford	£6.8m	2.3	35.2
University College London	£6.6m	2.2	37.4
City University, London	£6.1m	2.0	39.4
University of Strathclyde	£6.1m	2.0	41.4
University of Wolverhampton	£5.5m	1.8	43.2
University of Portsmouth	£5.1m	1.7	44.9
Canterbury Christ Church University	£5.1m	1.7	46.6
University of the Arts, London	£4.9m	1.6	48.2
University of Glasgow	£4.8m	1.6	49.8
Robert Gordon University	£4.8m	1.6	51.4

TOTAL REVENUE

Source: HE-BCIS 2003–04 (HEFCE 06/25).

So, just 17 universities have between them over 50% share of the total revenue of £297.8 million for all UK HE institutions.

We hope this additional information is helpful to the Select Committee.

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Supplementary memorandum submitted by Professor Tim Wilson, Vice-Chancellor and Chief Executive, University of Hertfordshire

DIFFERENTIATION WITHIN THE SECTOR

There is growing recognition that, as the UK and other developed nations focus on achieving a knowledge economy, their HE systems need to evolve. These changes are needed to both research and teaching activities. Universities have a role to play not only in the generation of new knowledge through their research activities, but also in the application and exploitation of such knowledge, supporting innovation in business partners. In terms of teaching, universities must now go beyond their traditional didactic role and provide graduates with the skills on which a knowledge-based economy depends. This is a hugely diverse agenda and no one university can fulfil the entire spectrum of roles.

Explicit differentiation of mission, purpose and approach is vital, not only to delivering on the knowledge economy but also to securing the sector's sustainability. Such differentiation needs to be recognised, endorsed, promoted and financially supported by Government.

Business-facing universities will play as significant a role in the UK economy as research-intensive institutions. The latter are critical in sustaining our world-class research standing, expanding our knowledge base and working with business in specific leading-edge research fields. The former's importance lies in engaging with business in a consistent and comprehensive manner, supporting innovation in product and process and delivering the skills and competencies that business values.

RESEARCH AND INNOVATION

There have been significant changes in research funding for the sector in recent years and an increasing emphasis on the exploitation of university research. The new RAE funding stream and the creation of the Technology Strategy Board are both to be welcomed. But innovation is about more than academic research; it must also consider the application of new knowledge. The country cannot afford to neglect the vast potential contribution that universities can make to the innovation agenda in terms of putting new and existing knowledge to work in new fields.

The Knowledge Transfer Partnerships and other relatively small grant programmes can, and do, make a huge impact upon business competitiveness. There is an issue of efficiency in the evaluation of the proposals for such grants, but that must be improved through process change, not by raising the threshold for grants, a step that may inadvertently exclude many small and growing companies from working with business-facing universities to improve their competitiveness through innovation.

SOFT SKILLS FOR SUCCESS

Surveys of employers regularly emphasise the critical importance of non-cognitive skills—soft skills such as team working, problem-solving, self-management, speaking and listening and creative thinking. I have just returned from visits to China and India; employers there expressed the same concern with graduate skills. While graduates come into businesses with strong technical skills gained from an education system focused on delivery of knowledge, they often lack the interactive and discursive skills that group projects and work experience bring. It is these skills that universities such as Hertfordshire develop and promote in their students, through project-specific placements with companies, through problem-solving activities bringing together teams of students, staff and businesspeople, through an explicit focus on employability and entrepreneurial skills throughout the curriculum.

It is these skills that will also provide students with the platform for career development, allowing them to make career changes as the global job market itself changes over time. We see no conflict between a university's purpose to develop the individual and business need. By encouraging the ability to be analytical, innovative and a team player in an individual, we are also listening and responding to business need.

INCREASING THE ABSORPTIVE CAPACITY OF BUSINESS

During the evidence session, CIHE colleagues highlighted the issue of the absorption capacity of business. It's not enough to invest public money in the supply of skilled graduates—businesses must also know how to deploy those graduates, to translate their skills into enhanced productivity. We believe that our system of placements can help to address this issue also. Placements don't just benefit the student. The companies have the opportunity to experience incorporating an employee with contemporary, high-level skills, to explore how best to exploit their talent. We see placements as an exchange rather than a transfer, with companies gaining as much from the process as the students. As you heard in the evidence from CIHE, knowledge is most effectively transmitted through people; our students, our staff are our key assets.

HEFCE FUNDING

I would like to take this opportunity to provide the Committee with further information on our use of the £4 million of HEFCE money. We believe that our "third stream as second mission" and "employer engagement" projects lead the way in terms of effective use of public funds to develop a model of a business-facing university. The funding provided is being used to accelerate cultural change, re-engineer processes and secure in-depth engagement with business partners.

The Committee was particularly interested in the question of cultural change, and whether the repositioning of certain universities as business-facing depended on committed leadership. While effective leadership is always a critical success factor, I also believe that this challenge must be addressed holistically if it is to be effective. It is only when staff and students embrace and support the ethos that its full potential can be realised; Government commitment of resources will secure the embedding the new culture across a whole institution. We have dedicated funding to the permanent embedding of a business-facing culture at Hertfordshire.

In business-facing universities, students are exposed to and engaged with business from the beginning of their programmes. This commitment is exemplified through internships, short and long industry placements and accredited work experience. At Hertfordshire we are taking this a stage further; offering not just careers advice but an Employment Centre that matches business needs to graduate skills.

THE REVOLVING DOOR

The acquisition of Exemplas, Hertfordshire's Business Link, in 2006 linked the University to a network of 50,000 local businesses, the majority of which are SMEs.

It is important that the relationship between businesses and the University is one of exchange, a two-way process in which business need is identified and addressed in partnership. It is also the means by which businesses not currently involved with the University can be exposed to the new thinking, expert advice and advanced facilities on offer. The release of such latent demand will be key to realising the Leitch ambitions for an employer-driven post-19 education and skills system. Success depends on stimulating demand for higher skills in all types of business, including SMEs and public sector organisations, and meeting that demand with tailored solutions. It is worth noting that in the majority of cases, the solutions that have the greatest impact offer incremental innovation, process improvement that brings sustainability and growth. This is where the University of Hertfordshire can add most value.

In a differentiated sector, business-facing universities will need to be agile enough to gather, understand and deliver against changing needs amongst the business communities they serve. The model designed at Hertfordshire is proving effective and we will build on our current programme of annual evaluations with a comprehensive evaluation and impact assessment in 2011–12 to demonstrate the value-added of this approach.

WORKPLACE LEARNING

As the Leitch report indicated, over 70% of the 2020 workforce has already completed their compulsory education. The Review recognised that upskilling the existing workforce will be key to achieving our productivity and competitiveness goals.

Business-facing universities must take their place, in collaboration with FE colleges, at the forefront of delivery, providing education, training and CPD to employees on campus and in the workplace. At Hertfordshire, we understand that responding to this need means being flexible. We work with our business clients as partners, designing provision to fit in with the demands of the workplace.

Being able to deliver short courses and "bite-size" units of provision—for example 15–30 credits—is key to effective workplace learning. This will require significant changes to both national quality assurance frameworks and to HEFCE funding models.

ENTREPRENEURSHIP

In his recent Budget, the Chancellor of the Exchequer reaffirmed his commitment to the promotion of entrepreneurship as part of the drive for productivity and international competitiveness. In a business-facing university, such skills are embedded within the curriculum—enterprise is the context in which all teaching and learning take place.

However, we also directly support entrepreneurial activity through our Innovation Centre, which provides office space and access to high-level expertise within the University to both start-up and established SMEs, including graduate and academic entrepreneurs.

A business-facing university has a key role in the economic development of its locality and region. For example, the University recently opened BioPark Hertfordshire in Welwyn Garden City, which combines world-class bio-science research facilities and opportunities for knowledge transfer between University academics and SMEs. We welcomed the opportunity to work with the East of England Development Agency to secure high-tech employment in the local community and flexible solutions for many ventures through short- and long-term usage agreements. It is perhaps significant that the Local Strategic Partnership, Herts Prosperity, is Chaired by the University also houses the Chamber of Commerce on campus; an IOD office is expected soon.

NETWORKING

Being business-facing inevitably means both local and global reach. At Hertfordshire we recognise that we need to prepare students for an increasingly internationalised labour market. But we also acknowledge that we are part of a global education market.

We actively encourage a multi-cultural campus, with 97 nationalities represented amongst our students and 54 amongst our staff.

There is a temptation to see alumni primarily as potential donors. This is too myopic. Alumni provide an international network of successful people, with the potential to contribute immensely to the mission of the University in a wider sense. For example, many of our international alumni are now employers themselves. As such, they offer a rich resource not only in terms of business networking for other graduates but also for the University in the delivery of its mission, bringing internship, placement and sponsorship opportunities.

I recently hosted four international alumni events in China and India; my staff team and I met over 450 past students, each wishing to maintain connections with each other and with the University. Many see the value that both the University and our 120,000-strong alumni community can add to their business development. As part of our business-facing agenda, we have launched alumni websites that allow past students to log their employment history and network with others across the world. This will also help to ensure current and future students will be able to benefit from the connections, expertise and experience of their predecessors.

The UK has a mature, well-developed and respected University sector. If it is to realise its full potential in a twenty-first century knowledge-based economy, its capability must be fully exploited. It is time to recognise, promote and fund diversity in higher education. Within an explicitly differentiated sector, Hertfordshire will champion a new model of a University: a business-facing university.

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Witnesses: **Professor Alan Gilbert,** President, University of Manchester, and **Professor Michael Worton,** Vice-Provost, University College London, gave evidence.

Q536 Chairman: Can I welcome Professor Alan Gilbert and Professor Michael Worton to our deliberations. In order to get as much oral evidence as we can, we do have to do these double sessions. Everyone knows that on a Wednesday it is Prime Minister's Questions and, even more important, when the Chairman has question number three for the Prime Minister, we will have to keep to time. Alan and Michael, you have very contrasting backgrounds. Would it be unkind of me to suggest that there is Professor Alan Gilbert, who is in the process of merging two major and fine institutions into one, and Professor Michael Worton, who decided with colleagues not to merge with Imperial College? Was it you who made up that joke which Richard Sykes was supposed to have said, he was going to be totally equally fair in that merger, he was going to have part of his name and part of your name so it was going to be called Imperial College? That is not true, Michael, is it?

Professor Worton: I would just point out that we have wonderful collaboration with Imperial College, which is a 50-50 partnership in the London Centre of Nanotechnology; 50-50 partnership on our land, in our building!

Q537 Chairman: Excellent. You have both got the chance of your two minutes if you want it. Professor Gilbert?

Professor Gilbert: As you may detect from my accent, I came half way around the world to the University of Manchester a few years ago because it seemed to me then to be one of the most exciting and challenging higher education jobs in the world. By that stage, I had been a Vice Chancellor for 13 years, so it was not the excitement of being a Vice Chancellor and it was not just that Manchester was merging two fine institutions but the fact that the so-called merger was a double dissolution. Both institutions ceased to exist and a new institution was formed. That was what was arresting. I think mergers are uninteresting if they merely produce aggregation. The double dissolution was an invitation to all of us involved to rethink the idea of a university in the 21st century. Behind that was a very powerful commitment to try to create in the north of England one of the best research-intensive universities in the world. We decided that meant (on any commonly adduced measure of the kind that was emerging, particularly with the Shanghai Jiao Tong Index), an institution which could regard

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itself as a peer of the top 25 universities worldwide from time-to-time. Inertia in higher education is an enormously powerful thing but we have tried systematically to rethink everything. We abolished every committee, we inherited none by default; we abolished all regulations, statutes and by-laws, and we operate under a new Royal Charter. Just as a way of illustrating, for example, we used the of "mission", deliberately language and provocatively, differently from the usage you heard from earlier witnesses. We do not think of the first mission as teaching and research and the second mission as industry-facing or industry-linked activity; we think of first mission as producing graduates-the teaching and learning agenda-and the second mission as research, and we make no distinction between fundamental research and industry-facing research. Indeed. we have systematically created promotions procedures, appointments procedures, IP policies, to accord parity of esteem to research taken in collaboration with industry, or which is applied or clinical or relating to patient care in the clinical arena. Such research is not more important but as important as fundamental research. People will be appointed, promoted and esteemed equally on both grounds. We have tried to do that systematically. Our third mission is, in fact, the impact of the university on the world. Just let me end by saying in that area too we have tried to be innovative. I suppose the thing I am proudest of all about in our university is what we call the "Manchester Leadership Programme" which tries to mobilise particularly undergraduate students to think about, in what I suppose are triple-bottom-line terms, what it is going to mean to be a citizen of the world in the 21st century. That is a course which focuses on social entrepreneurship, commercial entrepreneurship, and leadership, which asks students to interrogate their own value systems, and which demands of them 60 hours of formally monitored voluntary or community work as part of the programme. This counts towards their degree, so it is a formal part of their education, and it means that this year we have been able to release into the immediate community, and to a lesser extent overseas, between 20,000 and 30,000 student hours of voluntary work. Most of this is being invested in primary and secondary education and remediation in Ardwick and Moss Side, some of the most educationally disadvantaged areas in the UK. There is a seamlessness about an attempt to think what a university ought to be like (not what a "Russell Group university" ought to be like or a "post-92 university" ought to be like), but what a university ought to feel and look like in the 21st century.

Q538 Chairman: Thank you for that, Professor Gilbert. We recently visited Australia and met some of your former colleagues and got a very good view of what UK higher education looked like when we were halfway around the world, and it was a very

energising experience. We would like to tap into your knowledge of that in a moment. Professor Worton?

Professor Worton: I had been intending to talk about the HEFCE/AHRC group on metrics, but I might leave that until later. If I may, I will just say a few things about the way that UCL has tried to position itself. In terms of some of the comments which were made earlier by Tim and by what Alan has been saving, when we decided three years ago that we needed an international strategy, and I was charged with drafting it. I decided that this should not be based on money. We are an institution like the other top multi-faculty, research-intensive universities that run to deficit, but this was not going to be about solving our deficit, it was going to be about a much more moral mission. Rather like Alan, we are using a terminology which I think would have been considered to be anathema 15 to 20 years ago, talking about the moral purpose of universities, the ethical purpose of universities, but whilst we are working very closely with India and China in terms of the great economic drivers which are happening in those two countries, we also must be working just as much with Africa, sub-Saharan Africa especially, with the poor countries in South America and so on, and a global, research-intensive university does have a moral responsibility to deal with global problems and contributing to solving problems around global health, global poverty, climate change, issues around water, and so on. Therefore, the moral is something which comes into a programme we have just launched this year on "global citizenship," which is a term which is all too easily overused or rather casually used. What we mean by this, and we are quite explicit, is when we are producing our students we expect them to be ambitious. We say, "We expect you to be ambitious but also idealistic and committed to ethical behaviour". We expect all of our students, be they philosophers or pharmacologists, to be committed to entrepreneurship and to understand what entrepreneurship is. Employability is an enormously important issue for us but not direct vocational routes into employment. We also consider it very important that our students can understand how they can engage in celebrating cultural difference. This is a major issue for us in London, but it is increasingly an issue in terms of our international relations. We also use a term which has been the subject of much debate inside our university, as you would expect; we say that we expect all of our students to be willing to assume "leadership" positions. The term "leadership" can cause antibodies. People will have a notion that we are somehow talking about a testosterone-fuelled, Anglo-American MBA model as the only model of leadership, and we say, "No, we are talking about leadership in the community, the family, the workplace, and it is not a constant leadership role, it is understanding that you assume leadership roles at certain positions", and that ties in very much with what we think the purpose of a university is. It is about education within the discipline, but also in a much more holistic way.

Chairman: Thank you for those opening statements. Let us go straight into questioning.

Q539 Stephen Williams: Thank you, Chairman. You mentioned at the start Prime Minister's Question Time, but what you did not mention is that today is Budget day. Of course it was a year ago when the Chancellor announced that he was going to abandon the RAE and move to a metricsbased system, so the sector has now had a year to cogitate about this. Are the two of you convinced that is the right way to move?

Professor Worton: If I could start from the position of the arts and humanities, although I have been working very closely with subject associations in the sciences, we honestly welcomed what the Chancellor said back in March, ie that he and the Government were still committed to the dualsupport system. Also, we were very pleased, certainly from the point of view of the HEFCE/ AHRC group which I chaired, to see that the Treasury's view had changed between March 2006 and the Chancellor's pre-Budget statement in December 2006, the notion that we should not consider there to be some kind of unbridgeable chasm between the STEM subjects on the one side and the arts and humanities on the other with, as it turned out, the social sciences nowhere, hovering above this abyss. Certainly in the work that we did, and in extensive consultation with the community, there was overwhelming support for dual- support and I think that is something we would want to keep banging the drum about. It is enormously important for us because we are talking about retrospective funding and speculative prospective funding, and that kind of balance, that kind of creative tension, is essential if we are going to have sustainable universities. For us, we said that for purposes of research assessment there is no fundamental difference, therefore, between STEM and arts and humanities, but also there needs to be within any assessment system sensitivity to disciplinary difference. That is something which I think is already being taken forward, both in terms of the Chancellor's speech in December and in work that is currently going on in HEFCE. From the point of view of the arts and humanities, we wanted to argue very closely that the research landscape has changed a lot. The notion of the lone scholar, the individual scholar, ploughing his or her lonely furrow is largely outmoded. That still does exist, but we are working increasingly in research groups, we are working increasingly with PhD students as part of the research process, postdocs still being part of the research process, and we need, therefore, to find an assessment system which is looking at the holistic research process rather than simply outputs, so a model that looks at inputs, activity, outputs and even perhaps outcomes, if you like, notions of significance, which I do think we need to be looking at. Perhaps the last point I would like to make is there is a difference between the views of researchers, who tend to be either curiosity-driven or user-focused or collaborative, and the views of government. Government is naturally very concerned with international benchmarking. I would argue very strongly that the Research Assessment Exercise, or whatever follows from it, should be helping DTI, OSI, to establish robust international benchmarking and I think metrics is one of the ways forward on that.

Q540 Stephen Williams: Would you, Professor Gilbert, wish to add to that? Before you do, we are going to go into STEM subjects and humanities in the next section, so do not dwell on that.

Professor Gilbert: I would say that you cannot answer the question about whether metrics is a good thing or a bad thing or how effectively metrics will replace or augment the RAE until we know what metrics are being proposed. I think we have to suspend judgment to see what the elaboration of the Chancellor's proposal means. I have been pleased in the last year that there seems to be quite a lot of common understanding about the fact that metrics will change behaviour in the way that the RAE changed behaviour. Metrics thought through in a fairly superficial way can have a devastating effect on performance. If, for example-and I will just give you one example but I could give you a whole list-you decide to count enrolments as the measure in relation to research training performance, what you will get is a very large leap in enrolments; if you decide you will count completions, you will get a completely different set of behaviours, and you really need to know how institutions will respond to different metrics. The setting of metrics is an extraordinarily difficult, sophisticated task, and most of us in universities will only be satisfied that the proposed change of direction is a good one and likely to be efficacious when we see the small print.

Q541 Stephen Williams: Chairman, perhaps I can stick with this as you have led me into the behavioural aspects of any Research Assessment Exercise as universities are going through the 2008 RAE at the moment. Do we know enough about how assessing research distorts behaviour, both in academic recruitment policies and then how you deploy those academics in between research and teaching, for instance?

Professor Gilbert: My view is we will never know enough, but we already know a great deal. I think universities could give quite a lot of advice about how particular metrics will work, about the lags, for example, between the performance and the reward, which is another issue in relation to metrics. I think a serious, consistent, ongoing conversation is what is needed here. There is a lot of advice that the system can give, not least that many metrics applied in isolation of peer review, rather than in conjunction with it, are likely to be downright dangerous.

Professor Worton: One of the worries in the sector is that there is an automatic leap from the word "metrics" to the notion either of bibliometrics or of research-income metrics and so one needs to be looking at a series or portfolio of these. Some of the work we did in the HEFCE/AHRC group was

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to model a variety of metrics against the information we had from 2001. There would need to be serious modelling of any system against both 2001 and 2008 outcomes, recognising that these are of course different exercises, so you cannot even compare directly 2001 outcomes with 2008, but there are ways of making comparisons. I think we need to recognise also that things like bibliometrics, I would argue, are not yet an exact science, but it is an area in which movement is going forward astonishingly quickly.

Q542 Chairman: Before we leave that, Alan, can we nail you down a bit on the Australian experience. When we were in Australia, people kept saying, "Oh, you are moving your way to us; we are moving from metrics to research assessment mode and surely that cannot be good", and what you seemed to be saying in your first answer to Stephen was that it is not a question of metrics, it is what kind of metrics. It is rather like what we all learned in this Committee, it is not PFI, it is what kind of PFI. Is that a reasonable comparison?

Professor Gilbert: That is right. I had the misfortune of being involved in action initiated by universities against the Commonwealth of Australia on the grounds that the Commonwealth was representing some metrics they introduced as measures of performance or reputation or excellence and, in our view, whilst they were measures of something, it certainly was not that, so we proceeded on grounds of judicial unfairness against the Commonwealth. It can get as serious as that if what metrics are purported to be doing bears no resemblance to the actual impact they have. The Australian experience of metrics was patchy. Metrics were used, and I think quite rightly, not just to try to describe the world but to change it, and I imagine that is certainly something the Chancellor had in mind here. What I would say is whether you mean to introduce metrics to change the world or whether you do not, they will initiate change, so it is very important to understand what their impacts are likely to be, unintended as well as intended, before you start to drive policy with them.

Q543 Stephen Williams: Are you satisfied that the sector is being fully consulted so far on the proposed changes? The consultation which took place after the Budget—we took some earlier evidence—seemed to be rather rushed. Do you think since that consultation you have been involved enough in the evolving process?

Professor Gilbert: The key words in your sentence are "so far". We have been consulted adequately "so far", but we have not been consulted enough because the detailed development of the metrics is yet, it seems to me, to occur and the conversation will need to continue to be quite an intimate one through that phase. But so far I think the voices of universities, CIHE and other bodies have been listened to. **Q544 Stephen Williams:** Do you think the timetable allows for that further consultation?

Professor Gilbert: I do not know.

Professor Worton: Because art and humanities were singled out as being this "rump" of the body politic of research in the UK, which some of us considered somewhat unfortunate, it gave us the advantage that we lobbied to have our own group with HEFCE. That was enormously important for us, but we also had to spend a great deal of time consulting, not just with institutions but with learned societies, professional bodies and so on. Having been asked to do this on the basis that people felt I had good internalised body armour and could deal with the slings and arrows of outraged academics, it was very interesting to see the community move from a position where people were naturally hostile to the notion of metrics by the time we published our report there was buy-in to what we were arguing for and people could see it, as long as the issues of perverse behaviour were addressed and as long as, as Alan was saying, there continued to be consultation afterwards, and I think that is going to be a key issue from now on. I will make one last point which is we know that academics are clever and they will always work their way round a system. One of the things I think the RAE hitherto has not addressed is being useful and perceived as useful by all universities. One of the things we can do in a new system, especially if it is looking at the research process in a more holistic way, is to be very useful institutionally; capturing data, in other words, doing metrics which would have an importance for the national exercise but also have institutional benefit. There is an awful lot of stuff that we are not capturing ourselves at the moment which we could usefully capture.

Q545 Stephen Williams: You say there is more buyin now, but is that something which is shared right across the sector? You both represent particular types of research-intensive universities but there is great diversity across the sector. Do you think there is more buy-in by non-Russell Group universities, for instance?

Professor Worton: Certainly in the consultation exercises which we did, it was right across the sector and we were getting as much support from, in fact, teaching-intensive universities as from the Russell Group. It was interesting also that after the publication of the report especially I spent most of my time talking to scientific groups because they liked the model which we had been arguing for.

Q546 Stephen Williams: Chairman, it has been mentioned that there is still a need for more consultation and discussion. Do you think there is still room for negotiation over the extent that peer review might still play in a future process?

Professor Gilbert: I would hope so because I think the hostile reaction to the initial proposal was motivated by two things, one being the threat of substitution, that is, that metrics would be substituted for peer review. I think that would have horrendous unintended consequences, because one

of the most potent forces which has favoured and built the reputation of UK higher education in the world as a brand, and clearly the second most potent higher education brand in terms of national system, has been the rigorous, internationally networked peer review which has driven the RAE. As a result, no one anywhere in the world doubts the validity of the findings of the RAE. They can be understood internationally and they can slot UK academics and universities into an international ranking. If the UK Government was seen to be abandoning peer review and substituting metrics for it, I think the damage to the reputation of the UK higher education system would be deep and prolonged. Substitution is not a language which should be used nor a methodology which should be pursued, in my view. I think that one of the reasons for a much greater toleration of the proposal is there has been movement by government away from replacing peer review, but I think there still is a danger that, if the new policy is based on substitution, then there will be continuing and increasing serious lack of credibility in the new system. I think the second issue which caused concern was the feeling that the metrics were being motivated by government concern and industry concern that higher education research was not sufficiently industry-facing, to use the metaphor which has been used so far. Whilst I think there is a lot of truth in that, there was a strong feeling that that proposition was not taking sufficient cognisance of immense changes that have occurred in the last few years and it was based on a fairly facile understanding of how universities are in fact linked to industry.

Professor Worton: If I could just make a point about peer review, I think we need to recognise that peer review is much more multiple than perhaps we recognise and it is not just the peer review of the Research Assessment Exercise. It seems to me that the real debate is really about whether we want a system which is peer review informed by metrics or a system which is metrics informed by peer review.

Q547 Stephen Williams: You have both made a very strong statement that peer review must be part of the future system. Just to go back to the timetable, we are going to get the 2008 RAE, we are going to shadow the metrics exercise alongside it, and then the current proposal is that in 2009 science, engineering and technology will move straight over to the new system after only one year. Is that a realistic timetable for that particular part of our education system?

Professor Worton: Given where we are at the moment and given where HEFCE is at the moment, it is going to be enormously tight. Given also that HEFCE has made an explicit commitment time and time again to consult widely with the community on the proposals, I would be surprised if that could be done, but we live in hope.

Professor Gilbert: If I can comment on that as well, I think it would be a serious mistake to move totally in one step from RAE-driven QR funding to metric-driven QR funding. It would seem very strange to have run the 2008 RAE if it is not going to have an effect on funding for some time, so I have always understood the notion that there might be an early introduction of metrics as not being a statement about a total change, but about a progressive introduction of the new scheme so that it might be 2011–12 or 2012–13 before the metricsdriven funding replaced the RAE-related funding. If it was to be done in one year at the beginning, I think a lot of people would just ask why we had spent all the money on the RAE.

Professor Worton: That is certainly what we have all understood by the Chancellor's pre-Budget speech in December 2006, that it was going to be phased.

Q548 Stephen Williams: I have one last question specifically about Manchester. Professor Gilbert, you have said that your mission is to have a "preferred future" where your new university is going to be in 2015 rather than starting from your *status quo.* Do you think this upheaval which is taking place in the assessment of research is going to help you with that mission or not?

Professor Gilbert: I would rather answer that in 2009, I would have thought, than now. My view is that it has been helpful, but it has also, however, driven a very adventurous first two and a half years in the university, so we, like many other Russell Group universities, have deficit-funded our preparations for the RAE. We have added net 2,800 jobs in the university, the great bulk of which have clearly been to strengthen the research profile. It has in a sense been reprofiling by growth because one of the outcomes of the Project Unity negotiations was that we were denied, by agreement with the campus-based unions, the right to address the structural deficit that you always get in a merger, for at least two years. So we have been both carrying a structural deficit by not being able to shed some of the redundancy which you always get when you merge two administrations, and we have in that period also taken on the deficit-funding of a very bold attempt to enhance the research profile of the university. We think that this has been very effective, but also most other universities in the UK have been doing the same thing, so the RAE is going to be an interesting test, I think, of the efficacy of quite complementary strategies which have been used around the Russell Group in particular, but across the system in general.

Chairman: This is all excellent stuff, but we have to move on.

Q549 Paul Holmes: This is partly on the tail end of what Stephen has been asking. I think, Professor Gilbert, you mentioned earlier that you have got to be acutely aware of the way in which whatever funding system you have affects the behaviour of the institution, so under the RAE system there have been all sorts of allegations that universities will cut this department, get rid of those staff, poach staff from somebody else because they have got a good publications list and that sort of thing. How far will

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the implications of the new metrics system steer the way that you achieve your 2015 goal, for example, for the University of Manchester?

Professor Gilbert: They will either do good or harm, depending on what they are. If I can just use one example which I think might be central to the deliberation of this group today, it relates to a notion that is often favoured by the Government that universities should be deriving more income from their links with industry. In a mass higher education system which is placing pressure on the public purse, universities have to substitute nonpublic funds for public funds and, therefore. universities are often put under pressure to derive a lot of that from industry, from knowledge and technology transfer. I think if one of the metrics was to measure income into the university through industry and technology transfer, that would be a mistake. In Manchester we think that deriving income from industry and technology transfer or the commercialisation of intellectual property ranks fourth or fifth in our hierarchy or priorities. The most important thing that universities need to do in relation to intellectual property is to create it. The second most important thing they need to do is disseminate it, make it available to industry, and I think the third most important thing they need to do is to have policies related to IP which help them recruit some of the very best people in the world. In other words, it is the generosity of the policies to create IP that is going to enhance the strength of this system. Universities can derive income and in many cases they derive lots of income from IP commercialisation, but it should not be the main driver. This year, for example, just to mention a point about scale, the University of Manchester has seen one of its start-up companies sold to a Swiss company, Novartis, for £308 million. Now, that IP was just an idea in two academics' heads seven years ago, yet in terms of wealth-creation it has now generated a £308 million takeover. Another company, Renovo, was floated in an initial public offering that was the second biggest on the London Stock Exchange in relation to biotechnology. The scale is huge, but it would have been much smaller if the University had been under pressure to derive income flows from these businesses. Therefore, it is the generosity of an IP policy which says to creators, "If you think you can commercialise your IP, the University's greed will not inhibit your being able to get third-party investment in it". We are less concerned about the number of companies formed or the number of licences undertaken, then about the value of thirdparty investment in those companies: what third parties making business decisions are willing to place as a value on initiatives that are happening within the University.

Q550 Paul Holmes: Are you saying that, if the wrong types of metrics are applied, then there would be a bad effect on innovative, blue skies thinking and academic research and launching of ideas where seven years ago it was two academics

and it is now a ± 308 million business because universities will play safe and go for what gets the cash in now?

Professor Gilbert: If the Government said that universities must derive a third share or a 50% share of the revenue streams emerging from commercialisation of intellectual property. I think that the outcome would be similar to a principle better-known in relation to taxation, that the higher the stream required by the university, the closer actual revenue will approximate to zero. What we have said, as a university, is that the university will never seek more than 15% of the revenue generated by intellectual property commercialisation or knowledge transfer and in many cases we may seek even less if, in our view, the commitment of the university to securing more than that is going to stop third-party investment in the IP.

Q551 Paul Holmes: Is it alarming, therefore, the point of what you have said, that 12 months ago when Gordon Brown announced this shift in thinking, he specifically said that he wanted to look at developing a metrics-based system where money is related to the impact of published papers, but also at how much money it attracts in grants and contracts? Are you happy that in the 12 months since then, between the joint committee that you chaired, Michael, and what you have said there, you have been listened to and that we can avoid that?

Professor Gilbert: Well, it depends how it is measured and, interestingly, I think that while the statistics provided earlier about the industry investment in universities were accurate, but they can be misleading. I visited our School of Electrical and Electronic Engineering vesterday and they told me that every EPSRC grant they have secured was what they call 'industry-leveraged'. Not one successful application to the Research Council for funding was not part of a bigger research enterprise in which industry was doing a substantial part of the research. What industry R&D was investing in in that larger research project under that project umbrella does not show up as industry investing in universities, but it was being leveraged by EPSRC funding, and I find it extraordinarily exciting that 100% of that school's EPSRC funding was leveraging cognate activity in industry. So you need quite a sophisticated measure, I think, to get a grip on how universities are reacting to industry when much of it will not show up in the bottom line of financial indices.

Professor Worton: We also could give you examples of the relationship between business and industry, but I think we need to look also at how knowledge transfer is beyond, that it is not just simply technology transfer rewritten, and we have got to look at how in fact the knowledge which is created in the universities is changing policy, how it is changing behaviour, how it is changing conduct. These are things which are actually impossible at the moment to measure in terms of any known metric, yet they are enormously important. I think

one of the most significant shifts over the last nine months certainly in terms of HEFCE, who in a sense are going to be running the system post-2008, is the recognition that we need to be looking seriously at issues around significance which is not the same thing as, if you like, the 1960s and 1970s debates about relevance, but it is something, I think, much larger, and we must get that right before going in blindly to say that income is somehow the all-important metric.

Q552 Paul Holmes: How do we allow for arts and humanities in this, and again your joint committee is looking at this, but it is easy to see how in science, technology, engineering and maths, the STEM areas, you can apply these measures, however crudely, but how on earth do you do it without destroying arts and humanities because they cannot measure up in terms of pulling in grants and contracts from industry in the same way?

Professor Worton: That is not strictly true, with respect, and I will give you an example of one of our professors of philosophy who is working very closely with Railtrack on risk. Why is it that there are more people killed on the roads than ever the railways and yet every time there is a rail accident there are headlines all over the nation? Therefore, can you take a philosophical attitude towards risk? How do you deal with the ethics of biotechnology and so on? There are many examples which one could give, but if you wanted to take, let us say, your card-carrying English literature graduate, as it were—

Q553 Paul Holmes: Or a historian.

Professor Worton: Or a historian, absolutely. Well, historians are essential in the sense that, there is the issue of how the present cannot exist outside of the past and outside of the desire, the tension towards the future, so in a sense, had we listened to the historians a little bit more, we might not be in certain situations worldwide in which we find ourselves at the moment. How do you measure quality of life? Now, that really is one of the biggest issues that we have and, quite frankly, there is nobody even pretending that they are anywhere near a metric on this. What you can, however, chart is how behaviours are being shaped, not necessarily that they are being shaped directly by the work that is being done by the humanities researchers, but what they are doing is that they are shaping policy decision-making and policy-shaping which is then ultimately itself having an impact on the communities. Now, that, I think, is something which is enormously important and the whole issue of how policy, governmental policy, whatever, is left out of the debate is, I think, one of the most worrying things about the assessment system.

Q554 Paul Holmes: You are saying that you can measure this in sophisticated ways, but, on the other hand, going back to some of the earlier questions, in theory we are going to start doing this by 2008–09, so how are we going to get all these

sophisticated measures in which save the arts and humanities from being squeezed out of the system in that timescale?

Professor Worton: For the arts and humanities, we have a much longer time-frame. The panels will be set up in 2013-14 in order for a more informed situation to be brought in in 2014. What we are doing at the moment is working within the communities and, interestingly, it is the humanities community which is working hardest on the metrics and I think that is enormously positive because you have got the people who may ultimately be judged by it testing them at the moment and it is not just simply being run by civil servants in the Treasury or DfES, but I think it has also got to do with the whole nature of how our communities are changing. We, for instance, at UCL have published a document for all of our staff called Excellence in a Shared Community which I can send to you, Chairman.

Q555 Chairman: Can we have a copy?

Professor Worton: Yes, will do. Basically what we are saying explicitly to all of our staff is, "This is what we expect of you in research, in teaching, in knowledge transfer and in enabling", which is our word for academic citizenship, administration and so on, and we say, "We expect you all to do all four of these things, not necessarily all at the same level every year of your career", but we also then have a section which says, "This is what we, as the university, will give you. As we are expecting this from you, you can expect this from us, a well-funded laboratory, proper libraries and so on".

Q556 Chairman: Alan, have you got a similar thing?

Professor Gilbert: The answer to that is I think we would expect those values within the university to be transferred through our strategic plan "Towards Manchester 2015", but I would certainly think that a contemporary university needs to be changing the culture in the community in precisely those ways. **Professor Worton:** What this is meaning, to go back to your point, Paul, about the arts and humanities, is that they are now getting very excited about knowledge transfer. They had felt excluded by technology transfer and now they are becoming part of this and they are looking at not perhaps the SMEs that we talk about so much, but the microenterprises and that is something which is not captured. I am chairing a research project for London Higher looking at excellence in the whole of London and we know that, if we put Imperial and UCL together, we have a crushing example of knowledge transfer, business investment and so on, but in the London Higher project we are precisely looking at all of the universities in London and trying to seek excellence and actually where it goes, and what is coming out of the work that we are doing. There is the importance of the microenterprises and we need to capture these data which certainly the LDA is not capturing at the moment. **Q557 Paul Holmes:** Is one way of protecting the arts and humanities, if you like, to maintain the role of expert peer review and not just to switch purely to metrics?

Professor Worton: Peer review as long as the peer review includes expert judgment as well, and I think that is a very important point that came out of our work, and the community certainly is totally with it. Defining experts in different ways as users, but also in other ways; it is about ensuring that it is not just being assessed by academics, but there is a relationship which goes beyond the academic world, and that, I think, is an enormously important step forward.

Q558 Chairman: You describe a very cosy world, but one of the shocking things when all of this started being discussed was when I read, and I did not know this, how few university research publications were ever cited anywhere, just a huge amount. What is going on? Is this a lot of public money into navel-gazing that no one else is interested in? There is a fair criticism there, is there not?

Professor Gilbert: I would like to answer that, if I may.

Professor Worton: I would like to come in as well! Professor Gilbert: I think it would be wonderful if we could eliminate the 50% of research outcomes that are not cited. But if you think you can identify them in advance, then we, as university managers, would like to know how. It does seem to me that we are in a winnowing process which is actually quite efficient. Fifty per cent might sound very high, but, if you think of analogous enterprises, preparation for the Olympic Games and the public money being invested in the training of athletes who may succeed to be absolutely world class, it will be much higher than 50% of those currently having resources invested in them who will fail to make the required level. In all of these enterprises, I think universities are actually quite efficient, and 50% sounds negative, but I think it is a measure of considerable efficiency because there is no way of knowing, when you are nurturing the talents of an early career researcher, at what stage the breaks will occur when a series of unquoted articles suddenly is followed by an article in Cell or Nature or Science which is hugely cited. We try to run universities through performance-monitoring and we certainly try to monitor the performance of our researchers, but it is very difficult to do it in the way that you rightly hope we might.

Professor Worton: It is very good to have a historian in the room because what we do know is that there has been research published which has been ignored, not just for a year or two, but for decades which then suddenly becomes seminal to future developments.

Chairman: I think you are talking about John Clare, are you not! They hate it when I introduce that!

Q559 Stephen Williams: John Clare and Huddersfield!

Professor Worton: The other point I would make is that I think there has been a systemic problem in the world of research which is that access to research findings has been enormously expensive and it also has tended to be rather Anglocentric, and the move towards open access is changing radically the way that we are actually seeing citations. I will just give you one example and I know it is a slightly unfair one, but it is one which makes me smile with joy in that one of my postdoc fellows came from the University of East Anglia, giving up a full-time job to come to a two-year postdoc fellowship, working in Danish film (we have the only Department of Danish in the country). She decided, with a bit of encouragement, that she would put her Edinburgh PhD on Danish literature online in our e-repository, our openaccess, electronic repository, but how many people would actually read her PhD in Edinburgh? It has been borrowed, I think, several times. I have a report run every term in a spot week on top citations. Salvador Moncada, the most cited scientist in Europe at UCL, he is usually up there. This young woman. Claire Thomson, had been cited in one week, been downloaded and then people were using her work 250 times. This term I again ran a check and there she is up in the top 10 again, 187, way above all of the scientists, the electronic engineers, the computer scientists. What we have now is a very different mode of dissemination experience, so now the citations you have of Claire Thomson are suddenly getting into the realm of the scientific citation levels because we now have means of access. There is another issue, I think, which is very important, that science is essentially international, but it is also essentially Anglophone, whereas in many other areas, notably the social sciences and the humanities, we publish in a variety of languages. This is not being captured, if you like, by the commercial indices, like ISI/Thompson and so on, so there is a European Science Foundation project on a European reference index in the humanities in which I am involved which will actually make available, explain and bring greater rigour and peer review to European journals. This, I think, will transform the way that European research is perceived internationally.

Chairman: That is absolutely fascinating.

Q560 Paul Holmes: If you looked over the last few years and you were a pessimist, you could say that we had an Education Secretary not long ago, Charles Clarke, who launched a tirade, saying we have too many people studying medieval philosophy or whatever it was, and in the argument over tuition fees that we had, the plus point of tuition fees, we were told, was that since students are going to be out of all this debt, and you referred to this earlier, they will start shopping around more for what it is going to buy them, what job they are going to get out of this, so it would push people out of the arts and humanities, and we are told allegedly that we have a Stalinist in the Treasury who likes to manipulate behaviour with grants and

money and means-testing. Are all these three, linked together, an indication that the aim is to reduce the role of arts and humanities in higher education and to concentrate more on practical, utilitarian subjects?

Professor Gilbert: I think it would be good if all politicians, and they probably have already, read Lord Rees's book, *Our Final Century*, the hypothesis being that humankind, human civilisation has a 50-50 chance of getting to the end of this century, and the answers, if they are going to be given, are probably not going to be given by scientists because the real challenge is how this species can learn to build sustainable civil societies. Much of the most important research work in the world is actually being done by combinations of social scientists and people in the arts and humanities, so, of all the generations, we should be the last one to discount the importance of social science and humanities research.

Professor Worton: Without waving too many shrouds, I think that the arts and humanities community has been somewhat defensive and has bound itself up in a kind of the winding clothes of defensiveness. What we have not been saying is how many of the problem-solving skills we are actually imparting to our students, and I think, therefore, that what we need to be doing is actually be much more explicit in the nature of the skills, the extraordinarily broad range of skills that our students are gaining and encourage them to be involved much more in things like internships and so on, which is already beginning in the research-intensive universities as well as in the other kinds of universities.

Q561 Chairman: Perhaps I can ask you a rather different question before we go into the last section. Alan, you have been here for how long from Australia?

Professor Gilbert: Three years.

Q562 Chairman: How do you view it? Do you get out of bed in the morning and think, "I'm glad I'm in HE in the UK", or what do you feel is the health of HE in the UK at the moment? What is your feeling about it?

Professor Gilbert: I think it is in relatively good health, but higher education around the world is in a state of enormous flux. Higher education institutions have had a monopoly of higher learning for 900 years and it is dissolving in our generation, so, when you talk about the health of higher education, I think this is a very healthy system under great stress. It is not without faults and risks, but it operates in an international context which is very fluid and in which the future is being shaped by parts of the world that previously we did not look to for advice or for models to follow. We have to be very nimble and able to move very quickly.

Q563 Chairman: Michael, do you want to add to that?

Professor Worton: A quick dart, given that we have such influential people interrogating us! I think one of the best things which has happened to UK HE plc has been the Science and Innovation Investment Framework, the commitment of the Government basically to double the funding for research. That has been enormously important and to have had a commitment from the very top of the Government to science research has, I think, been crucial and to have had a minister like Lord Sainsbury was wonderful for science. However, it is unfortunate in the way that the decision was made by the DTI to claw back money. Okay, it is a one-off and decisions have to be made, but what we do need is more statements, and I was saving this to Mr Darling when he was at UCL last week, that we do need to have more reiteration of the commitment to research on the part of the Government. People are asking us from overseas, "Has the UK Government stopped believing, as it used to, in research in the UK?"

Q564 Chairman: We will see this afternoon perhaps.

Professor Worton: Quite.

Q565 Mr Chaytor: If I could ask you first about the recent research councils' consultation on their methodology for allocating funding, are you broadly happy with what they are proposing?

Professor Worton: I think one of the interesting things which came out of it was, okay, it cost £196 million of which 62% is incurred by the preparation and submission of applications, but is this value for money? I think what is coming out of it is the fact that again, provided there is proper developed and sustained consultation, there are some important decisions to be made about the changes to the pattern of awards. I myself would actually welcome a move towards, if you like, larger, collaborative awards. I think there are issues here about the question of consolidation of awards so that we might move more towards five-year awards rather than three-year awards, and issues on the reduction of the number of applications, I think, are a really big challenge that we need to be looking at, recognising also that the simple thing to do would be to say, "Let's move the burden much more into the universities, so, rather than having it in the assessment at the moment in the research councils, let's have it in the universities". Some responses have been that this is a very unfair move, but I think there are ways in which one could actually look at this slightly more creatively, saying, "We all want to reduce the number of wasted applications, but many applications are useful, even if not funded, because they've got people thinking together, they're talking together and they're seeing the way forward", so, if that is managed properly within the institutions, I think this actually can be enormously creative. That is where again I think we need to be looking at how the research assessment things, like research funding, are interlocked with

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the way in which we are managing our own institutions and taking our own institutions forward.

Q566 Mr Chaytor: Would it have made more sense to have had this review done in parallel with the RAE review? If we have a dual system, there seems to be huge fragmentation between the two legs of the dual system.

Professor Worton: Some of us have made that point, yes.

Professor Gilbert: There are a couple of points on this. One is, I think, that there is a danger in the concept of waste, of equating with waste the unfunded, unsuccessful applications. I think there is often an immensely creative process that goes on when people reflect on submissions that they are going to make. In many cases, what is a failed application in one year is a successful application in another arena or in another year, so I think the idea that research management is costly really needs to be significantly looked at. The RAE actually costs about one per cent of the total funds driven by it, and that is very efficient. The RAE is 10 times as efficient as one of the exemplary research councils, Cancer Research UK, and that is not a criticism of Cancer Research UK, but it is just to put into context the cost of the RAE. The only thing I would add to that is that I could not stress more strongly that peer review has increasingly to mean expert review. "Peers" does not mean mates; "peers" means that you are being judged by the best people in the world, equipped by knowledge and experience to make a judgment, and I only say that because the concept of peer review is actually being cheapened in lots of ways and probably primarily by the ranking of universities where "peer review" means judgment by people who do not know and who just vote on the basis of reputation. So I think a tightening up of what "peer review" means might be one of the really strong outcomes of all of this.

Q567 Mr Chaytor: Would it be a reasonable outcome for the research councils' methodology and the RAE methodology to be at odds with each other? Can the system sustain two different approaches?

Professor Gilbert: We talk about the dual system, but I also think that there is very great importance in the research councils and the Wellcome Trust and other bodies appraising the system from a somewhat different perspective. Consolidation is not necessarily in the interests of the system.

Professor Worton: I agree completely with that, and I would also add that we need to remember that we do not actually have simply a dual-support system, but we have also got many other sources of funding. If you look at some of the most highly sought-after research funding, it comes from, let us say, the Gates Foundation. If you really want to make a difference in global health, you need money from Gates, but the way that Gates funds is a completely different way from the way the research councils do. In the humanities, the Andrew W

Mellon Foundation in the US funds in a completely different way; I have had £1.2 million from them and they peer assess in a very good way, but it is very different. They do not go down the route of responsive-mode funding, but very often it is a question of identifying needs, as with Gates, and finding the very best people in the world, which is a different mode of using peer review. I think increasingly it is the fact that we have these various different models working together which is one of the strengths of the UK and we need to be recognising that there are these different modes of peer review because I am slightly nervous myself about a narrow, simplistic and over-subjective view of peer review.

Q568 Mr Chaytor: In terms of national strategy, how do you see the balance between investment which would prioritise the driving up of quality and national competitiveness and the investment in research which would diversify our system and encourage new areas of expertise to develop? Are you centralisers or are you diversifiers?

Professor Worton: Government investment, do you mean, in research?

Q569 Mr Chaytor: I am thinking in terms of our national strategy. Should we be for ever trying to concentrate our research on centres of excellence or should we be, as a point of principle, encouraging the capacity of smaller institutions to develop new research capacities?

Professor Worton: Those two models are not necessarily opposed.

Q570 Mr Chaytor: But if there is a pot of something—

Professor Worton: I would certainly go for critical mass, and I would argue it is actually essential in the arts and humanities as well, even though it is 25% of the research base in the UK. Excellence is much more distributed than in big science for economic, financial reasons. However, I think that it is crucial to have absolute, world-leading, critical mass centres of excellence, but with spokes out to the others, so in a sense the very top, the real leaders are actually bringing others along with them and working with them.

Q571 Chairman: When Sir Richard Sykes was in front of this Committee the last time, he wanted a handful, to which I said, "Only five research-rich universities? They will all be in London and the South East", to which he said, "So be it". You would not agree with that, would you?

Professor Worton: As a Scot and a graduate of Edinburgh, it is very difficult! I do think here that actually the excellence of the work must determine it. I would be very nervous to move to a national or a governmental regional policy which says that we will create these. That is not the way it works.

Q572 Chairman: But you would not deny that York has come through the rankings as a quite fine research university? You would not decry that, would you?

Professor Worton: Of course not.

Professor Gilbert: I think this is a very important issue and I agree entirely. We have got to start with the assumption that there is no such thing as northwestern knowledge or UK knowledge. In research, excellence has to be defined in unqualified international terms or it is not research. It follows that, if you try to segment some funds to give to certain institutions or kinds of institutions, you are probably going to be wasting resources because there has to be a fundamental chasing of excellence. That means investment in scale, because the nature of knowledge creation and indeed knowledge transfer is now related to scale. What it must not mean, however, is that you simply fossilise history, because creativity will change, it will emerge in other places. If excellence is only in the South East, you should only invest in the South East; but if that

is the truth about excellence, it will be to the grave disadvantage of this country. I do not think you can find another economy this size which is as uninodal as the UK economy. If you look at the main international competitors, they are a mixture of very healthy sub-economies often with different economic growth patterns, so, if one industry gets into difficulty, the broader economy is driven by a multi-nodal economic reality. Every other region in the UK is below average because the South East is so potent. As I say, if that is the reality, then invest in it; but we ought to hope that other regions in the UK can build nodes of excellence which can compete. If it is possible, the UK should evolve policy frameworks which allow that to happen. That would be good policy.

Chairman: We have to draw stumps there, only because I will not get a seat for the Budget otherwise! Thank you very much. It has been invigorating and please remain in touch with us because this is quite a big enterprise we are involved in.

Monday 23 April 2007

Members present

Mr Barry Sheerman, in the Chair

Mr David Chaytor Paul Holmes Helen Jones Fiona Mactaggart Mr Gordon Marsden Mr Andrew Pelling Mr Rob Wilson

Memorandum submitted by Professor John Brennan, Centre for Higher Education Research and Information (CHERI), Open University

INTRODUCTION

1. The Centre for Higher Education Research and Information (CHERI) conducts research on higher education policy and on the broad relationships between higher education and society, both in the UK and internationally. This submission draws on this research and, in particular, on the following three ongoing projects:

- What is learned at university? The social and organisational mediation of university learning (funded by the Economic and Social Research Council).
- The flexible graduate in the knowledge society—a European study of graduate employment (funded by the European Commission and the Higher Education Funding Council for England).
- Higher education in Europe in 2010 and beyond: responding to economic and social pressures (funded by the European Science Foundation).

2. These projects are ongoing and the submission is not able to report on definitive conclusions at this stage, but it is able to reflect some emerging findings and also to draw on an extensive experience of national and international higher education research conducted over several decades by the author. Brief details of this work have already been submitted to the Committee.

3. I want in particular to attempt to draw attention to some of the features of UK higher education which are distinctive when compared with other (mainly European) systems and to consider the balance of advantage/disadvantage which might arise from this distinctiveness. Attention is also drawn to features of UK higher education which have undergone considerable change in recent years.

THE FUTURE SUSTAINABILITY OF THE HIGHER EDUCATION SECTOR

Differentiation and diversity

4. The higher education research literature frequently employs the terms "elite" and "mass" to describe the growth of higher education systems in virtually all developed countries over the last two decades. The terminology was coined by the American sociologist Martin Trow in the mid 1970s and included a third stage of "universal" higher education to refer to the kinds of participation rates that are now planned or achieved in the different parts of the UK. Mass and universal systems are frequently seen to be differentiated systems. It is also worth remembering that Trow did not see them as necessarily sequential stages. Elements of each type can co-exist within expanded systems.

5. Within the UK, a lot of concern seems to have been devoted over the last 10 years to ensuring the protection of elite higher education against the effects of expansion of the system as a whole. Research selectivity plays its part in this as does the popularity of institutional league tables and differential institutional funding. The UK system would generally be regarded as exhibiting the features of "vertical differentiation", marked by an emphasis on reputational hierarchy. This contrasts with the "horizontal differentiation" found more commonly in continental Europe where the emphasis is more on functional difference, possibly marked by different institutional types or sectors. Horizontal differentiation is generally associated with relationships of co-operation between institutions whereas vertical differentiation is associated with competition between institutions.

6. The reputational differentiation within UK higher education may be a reflection of a greater focus on processes of "elite reproduction" whereby supposedly "superior" institutions and experiences are reserved for the education of relatively advantaged social groups. This may limit the opportunities provided by expanded higher education systems to offer greater opportunities for social mobility to historically disadvantaged groups. Rankings and league tables, from this perspective, are essential mechanisms for mass

higher education to continue to play this role in elite reproduction. It of course all plays back into the school system and the ever more creative strategies employed by middle class parents to purchase social advantage for their children via perceived differences in the education system.

7. To some extent, the policy choice is between a vertically segmented and relatively closed higher education system geared to the reproduction during early adulthood of existing status differences in society and a functionally and horizontally segmented but more open system providing opportunities for mobility and personal transformation at all stages of the life-course. The latter would be associated with considerable movement of students between institutional types and sectors. The former would be associated with a separation of students between different types of higher education according to factors associated with social, ethnic and educational background. To a considerable extent, the two possibilities currently co-exist in UK higher education although with some degree of tension between them.

The student experience

8. We know from many recent studies that a majority of full-time undergraduates combine study with paid employment during term-time. Many also combine it with significant domestic responsibilities. There are institutional and social class differences in the extent of the out-of-class responsibilities of undergraduates and also in the extent to which they are likely to remain living at home while in higher education. A lot of higher education debate tends to assume the classic "full-time" student living away from home for the first time prior to entering the labour market. But a majority of today's students live busy lives and possess multiple identities. Identities which historically have been "sequential" (eg student, worker, parent) are now experienced in parallel and may occur at different stages in the life-course.

9. Additionally, the many part-time students—undergraduate and postgraduate—often are not given the attention they deserve in policy discussion. In many ways, a distinction between (i) full-time students on full-time courses, (ii) part-time students on full-time courses, and (iii) part-time students on part-time courses, may be more helpful that a straight full/part-time split. But probably more helpful is to remove the distinction altogether (following most of the rest of Europe). This would allow students the flexibility to alter the intensity of their study over the duration of their courses, to better accomodate the pressures of the other things going on in their lives. Opportunities for greater flexibility are also afforded by the introduction of new pedagogies, use of ICT, modularity and changing modes of assessment. These are altering teacher-learner relations and increasingly take the higher education experience outside the walls of the higher education institution.

10. Pointing to the variety and diversity of student experiences today is not to suggest that some types of higher education experience are superior to others. There may be a need for society to better understand and value the newer kinds of higher education experiences, especially if these differences are not going to underpin a new form of inequality—between the classic "full-timers" and the rest. There is certainly a case for reviewing the distinction between full-time and part-time study and also the duration of programmes of study in order to take full account of the considerable variations which now exist in the social contexts of learning.

Higher education and employment

11. In common with graduates from other countries, UK graduates continue to enjoy favourable employment opportunities. But there are some distinctive features: UK graduates, according to our research:

- appear less likely (than graduates from other European countries) to make use in employment of the knowledge and skills they acquired in higher education;
- relatedly, are less likely to be in jobs for which their degree subject was an essential entry prerequisite;
- are more likely to receive education and training support from their subsequent employers (and to receive more of it); and
- are more likely to value their higher education for its contribution to their personal development and its long-term career benefits rather than as an effective preparation for a first job after graduation.

12. The short duration of the English first degree, the different subject balance (less vocational programmes), the less intensive nature of study and the more limited use of work placements, may combine to provide a different division of labour between higher education and employers in the education and training of new graduates than is found in other parts of Europe. There may be advantages from this in terms of flexibility within the labour market but there is also a possibility that higher education is being used predominantly as a screening/selection device rather than as a genuine contributor to greater productivity in the workplace.

Shifting boundaries between higher education and other social institutions

13. The diffusion of knowledge creation across all social institutions as reflected in such concepts as "mode 2 science" and the "triple helix" creates interesting challenges for the long-term role of higher education within the so-called "knowledge economy", both in terms of its contribution to research and knowledge creation and in its effects upon teaching and the curriculum. With regards the latter, a further growth in the importance of workplace learning of a variety of sorts may be expected. These are likely to bring to the fore currently problematic issues of control, support and certification. With regards research, as boundaries between university and other institutional settings become more blurred, the continuing relevance of conventional notions of research outputs as embodied in the research assessment exercises may need to be questioned.

14. Open access to knowledge via the web may also suggest a reshaping of the roles of higher education institutions and of individual academics, possibly with greater emphasis given to the certification of knowledge acquired outside the walls of higher education rather than knowledge transmitted within them.

THE BOLOGNA PROCESS

Bologna and European harmonisation

15. The effects of the Bologna agreement have been given much less attention in the UK than in most other European countries. This partly stems from the perceived adoption of the Anglo-Saxon model of qualifications across the rest of Europe. However, the belief that it implies no real changes to UK higher education may be misplaced.

16. It is already clear that the implementation of the two stage bachelors/masters model is controversial in many countries with the bachelors qualification receiving little credibility with either employers or intending students. It seems likely that, initially at least, the bachelors qualification will be viewed only as a staging post on the way to a (two year) masters qualification. In these circumstances, it will be difficult to maintain a privileged status for the UK bachelors degree (possible in the past when lack of comparability with other European systems could be claimed). With the harmonisation of qualifications, it remains to be seen what the effects will be of harmonising the UK first degree with a qualification that lacks acceptance in certain other parts of Europe. The credibility of foundation degrees and accelerated bachelors degrees may become even more of an issue.

17. None of this might actually matter insofar insofar as national labour markets remain largely distinct. But if the relatively short duration of the UK first degree—coupled with the less intensive experience of study—is associated with lower levels of academic achievement, there may be implications for the quality of human capital supplied to UK employers. It should be remembered that the short duration of the UK first degree used to be justified in part by reference to the specialised nature of A levels, involving the claim that the first degree was effectively commenced during the sixth form. Such a claim becomes difficult to maintain when so many degrees are not a direct progression from specialist A levels but are commenced "*ab initio*" on entry to higher education. The greater role played by employers in the education and training of new graduates in the UK referred to in above may be a consequence. There are also implications for the provision of postgraduate qualifications, both after the first degree and subsequently throughout the lifecourse.

CONCLUSION

18. It has not been possible to present detailed evidence and references for the comments made above. But if there are particular points where elaboration would be helpful, this can be provided subsequently.

19. Debates about the future of higher education tend to be debates between interested parties and the role of the Committee in inserting a consideration of the "public good" is an important one. In an important book written over ten years ago, Peter Scott noted that the UK had created a mass system of higher education but retained an elite mentality for thinking about it.³⁹ In some ways, this reflects the underlying ideology of "meritocracy" which has characterised political debate about higher education in recent years. Unequal treatment of individuals on the basis of their different educational qualifications is regarded as legitimate in ways that other forms of unequal treatment are not. But this requires a belief that qualifications are themselves unequal and the construction of a reputational hierarchy of higher education institutions. Such a hierarchy may be functional if the goal is to create and legitimise difference. But there may be dysfunctional elements, for example in the emphasis upon the institution attended rather than what has been learned as the basis for graduate recruitment. For all the rhetoric given to debates about employability, UK higher education appears to be less well-tuned to the needs of the labour market (at least in the short-term) than some of its continental European partners.

³⁹ Scott, P, 1994, The Meanings of Mass Higher Education, Buckingham: Open University Press.

20. In terms of numbers, the UK already has high participation rates in higher education. But if account is taken of the short duration of higher education—ie participants receive "less" of it—then participation looks rather lower. It is paradoxical, therefore, that so much attention has been given to the introduction of additional short-cycle programmes when the "gap", in terms of international comparison, may be more at the postgraduate level. The length and character of the UK first degree seems to result in a larger role for employers in education and training but whether this division of labour is optimum—for employers, students or society—is another matter.

February 2007

Memorandum submitted by the British Council

INTRODUCTION

The British Council has six loci in submitting this evidence. It:

- leads on implementation of the second phase of the Prime Minister's Initiative (PMI2), (in partnership with DfES, and the UK education sector) along with the UK/India Education and Research Initiative (UKIERI) and the British Degrees in Russia (BRIDGE) programme.
- it works with partners from the UK higher education sector on HE reform projects around the world (eg, China, Japan, Middle East, Africa, Latin America).
- has strong relationships with the higher education sector through the Education UK Partnership.

The British Council also administers:

- Comenius, Lingua, Grundtvig and Minerva actions of the European Union's Socrates programme within the UK, and will be responsible for Erasmus;.
- the International Association for the Exchange of Students for Technical Experience (IAESTE) programme and the new DFID higher education links programme, Development Partnerships in Higher Education (DELPHE); the England Africa Partnerships; the Bond scheme on business placements; and.
- a range of international scholarship programmes, including the Chevening programme on behalf of the FCO.

This submission is confined to the international dimensions of the Committee's terms of reference, except where a broader perspective is necessary to provide context. It takes as given, rather than specifically addresses, the globalisation of higher education as these trends are widely documented.

SUMMARY OF CONCLUSIONS

- UK degrees are highly valued by international students for their global recognition. International students adopt an essentially utilitarian view of higher education which is likely to increasingly involve consideration of value for money, including opting for programmes at least partly delivered offshore.
- Higher education plays an important role in UK's cultural and diplomatic relations with other countries, and it should prepare UK students to be active global citizens (paragraphs 6, 7). Higher education is a major factor in making the UK an internationally competitive world-class knowledge economy, and is crucial in attracting creative and innovative talent to this country. Higher Education also plays a very significant role in the UK's cultural and diplomatic relationships with other countries.
- A stable and internationally competitive higher education sector should be a prime objective of Government policy. The UK is a successful but high cost provider of international education, which, if competitiveness is to be retained, may need to improve student satisfaction in terms of value for money. The evidence suggests that the UK is competitive in attracting high calibre international staff (paragraphs 8–11).
- With increased competition, it is likely that the UK will lose market dominance over the longer term. Some HEIs will need to take urgent action to balance their books if there is a downturn in demand. There is a greater risk to the viability of individual departments, particularly at postgraduate research level (paragraphs 12–17).
- For these reasons, it is important that the Prime Minister's Initiative on international education continues to receive stable funding from the various partners involved. As the competition intensifies, it is absolutely critical that we significantly increase our marketing activity while at the same time building stronger foundations through sustainable relationships with overseas education institutions and governments. PMI 2—the second-phase initiative launched in Spring

2006—provides for £6.9 million pa over two years for these activities. The PMI is, however, a fiveyear initiative and consistency of funding up to 2010–11 will be essential if the initiative is to meet its objectives successfully.

- The current differential (even after the partial deregulation of fees) between what an HEI receives for teaching a home/EU student and the tuition fee paid by other overseas students is difficult to justify and may have distorted HEI's recruitment and admissions' policies (paragraphs 18–20).
- The balance between postgraduate and undergraduate international student numbers is driven by the competitive advantage of the UK's one-year Master's, but this adds a degree of instability to the system because the students have to be replaced annually rather than on a three-year cycle (paragraphs 21–23).
- It is difficult to manage the postgraduate market, but it is in the own interests of HEIs to manage admissions to programmes to avoid student dissatisfaction with programmes made up largely of overseas students (paragraphs 24, 25).
- The Bologna Process should increase the pool of candidates qualified to enrol in postgraduate education in the UK, but there is a danger that one-year Master's programmes might be perceived as not of the same standard as longer programmes on the continent (paragraphs 27–29).
- It is unlikely that the development of the European Higher Education Framework and the European Credit transfer System (ECTS) will significantly increase outward student mobility from the UK which is constrained more by linguistic ability and financial concerns (paragraph 31).
- While there is a case for UK HEIs to look more towards Europe, it is difficult at this stage to judge the likely impact of the European Higher Education Area on recruitment to UK universities (paragraphs 32, 33).

THE ROLE OF UNIVERSITIES OVER THE NEXT 5-10 YEARS

What do students want and what should the student experience involve?

1. Students want to receive a high quality education which enables them both to realise their full potential and to develop knowledge and skills which equip them for employment in an increasingly global market place, including the learning skills to facilitate changing occupations during their lifetime. As tuition fees increase, value for money will become an increasingly important factor in students' assessment of their higher education experience.

2. International students want the international status which a degree from a UK HEI bestows on them. UK degrees are seen as having wide global recognition and are highly valued as a route to graduate employment. An added advantage is the expectation that students' command of the English language will improve as a consequence of studying and being immersed in UK society. However, students from some of the key sender countries (in particular China) are increasingly seeking the ability to add work experience to their educational qualifications overseas. International students are increasingly placing a high priority on obtaining work experience in the UK—either during or after their degrees. While schemes such as SEGS and Fresh Talent go some way to achieving this, relevant work experience is still difficult to obtain.

3. The high cost of UK degrees leads many students to want a degree of flexibility in provision, so that they can study at least part of a UK degree programme in their own country. Overseas governments often encourage entry from foreign providers as a partial solution to capacity constraints, to reduce the capital outflows and limit the brain drain. Flexible delivery, often referred to as Trans-national Education (TNE) in an international context, has become increasingly important as UK HEIs have grown international teaching links and partnerships integrating open and distance learning, e-delivery, and face to face programmes. There are an estimated 220,000 international students following UK higher education programmes delivered overseas, and the numbers may overtake those attending programmes in the UK by 2010. These innovative partnerships present new challenges, particularly around the maintenance of quality and standards, but potentially have significant long term benefits.

What should the Government, and society more generally, want from higher education: a stable, internationally competitive HE sector?

4. Higher education should play a vital role in educating UK students, not just as active UK citizens but as active global citizens. HEIs should produce UK graduates appropriate for a high skill global economy. It is in the interest of all students that, whatever their origin, they mix as equals on campus in an open and questioning environment. More than this, higher education should look at ways of "internationalising" its home students, for example through the curriculum or through outward mobility. While this has resource implications, it is our view that internationalisation would benefit the UK's future prosperity and position in the world as well as improve the prospects of the next generation of students.

5. Higher education has the potential to make a major contribution to the Government's international strategic priorities. It plays a very significant role in the UK's cultural and diplomatic relationships with other countries, a role which can only increase as the UK seeks new forms of engagement with countries across the world. In addition to the education of international students, partnerships in research and teaching are becoming increasingly important as a vehicle of UK engagement. The higher education sector plays an important role in the building internationally of the reputation of, and links for, UK's global economy.

6. The maintenance of a stable and internationally competitive HE sector in a globalised world should be a prime objective of Government policy. Besides acting as a leading source of wealth generation within the country, an internationally competitive HE sector:

- contributes over £4 billion in export earnings, of which nearly £3.5 billion is accounted for by change to UK HEIs (Johnes, 2004);.
- is in demand by international students who maintain a loyalty to the UK and are likely to "buy British" through the rest of their business lives; and who.
- contribute more than UK and EU students to the cost of their tuition.

7. It is important to recognise the risks in maintaining an internationally competitive sector with present levels of public funding. The UK is on average the second most expensive study destination for international students after private universities in the United States.

Table 1

THE TOTAL COST OF A DEGREE (IN US\$), INCLUDING TUITION, LIVING COSTS AND OTHER EXPENSES

	Total cost of degree		
	PhD	Master's	Bachelor's
USA Private	116,902	81,501	161,257
United Kingdom	95,306	53,257	93,382
USA Public	80,621	79,613	82,986
Japan	94,824	41,756	76,885
Australia	81,132	45,131	67,789
Germany	59,507	31,632	66,623
Malaysia	19,929	14,428	36,014

(Source: Australian Education International, 2006).

8. Many studies (most recently Hobsons' Global Recruitment Review [2006] which undertook an on-line survey of 28,000 students from more than 50 countries) demonstrate that students perceive the UK alongside the USA as providing the highest quality education. The danger is that the more difficult it becomes for these students to attain their ultimate career goal, the more the value of a UK education will be questioned. Respondents to a recent Council for International Education survey (UKCOSA, 2004) suggested 87% of international students were satisfied or very satisfied with their course, although the ratings were slightly higher among undergraduates (91%) than amongst postgraduates (85%). The implications for the UK are that as competition increases with many more affordable options available, the UK must be able to demonstrate value for money both in terms of quality as well as employability.

9. The ability to attract staff internationally is another important indicator of international competitiveness. In this respect, despite talk of a "brain drain", there appears less cause for concern (Bekhradnia and Sastry 2005). Over the period 1995–96 to 2002–03 there was substantial net immigration— on average about 1.4 academics arrived for every one who left. The UK tends to lose people in the early stages of their career, but attracts more people than it loses at later stages in their careers when they have built up a research reputation.

UNIVERSITY FUNDING

Are some parts of the sector too reliant on income from overseas students?

10. Over 14% of the student population in UK HEIs are domiciled outside the UK, with a greater concentration amongst postgraduates and particularly research postgraduates, 4 out of 10 of who are from overseas. By way of contrast, international students comprise only 4% of the student population in American universities, but 13% of postgraduates.

Table 2

	UK	Rest EU	%	Non-EU	%	Total
Undergraduate	1,602,305	54,190	3.1	98,410	5.6	1,754,905
Postgraduate	366,835	45,810	8.6	119,985	22.5	532,630
Total	1.969,140	100,000	4.4	218,395	9.5	2,287,535

THE STUDENT COMPOSITION OF UK HEIs, 2004–05

(Source: HESA Student Record, 2006).

11. Growth in the recent past internationally has been very considerable, with a 41% increase over the period 2000–04. Currently 2.7 million students study outside their home country, with more than half choosing USA, UK, France or Germany (OECD, 2006). A British Council study published in conjunction with IDP Australia in 2003 predicted that, even with a relatively conservative scenario, the number of students studying abroad will continue to increase.

12. Against this optimistic picture, the past two years have seen a significant turning point in terms of the global market for education:

- The global expansion of higher education means that there is more choice for students to stay at home to study—particularly at undergraduate level. In 2005, China was building universities at the rate of one per week.
- There has been a significant increase in competition for international students. USA and Australia have been increasing their investment in international education and developing national initiatives. Australia's international student recruitment measures are underpinned by £48 million over four years. The USA's international education budget for 2006 totals \$431.8 million, \$71 million more than in 2005.
- Other countries are developing strategies to become international education hubs and to attract international students. Singapore has 18 international campuses (mainly US and Australia), which have been created over a three year period.
- Half of non-EU international students come from just five countries (China, which accounts for almost a quarter, USA, India, Malaysia and Hong Kong in that order), which makes the UK very susceptible to a downturn in one or more of its major markets.

These significant changes mean that if the Prime Minister's Intiative is to be successful, there needs to be certainty of continued and adequate funding. As the competition intensifies, it is absolutely critical that we significantly increase our marketing activity. This needs to be supported by positioning the UK at the centre of the international education market through building sustainable relationships with overseas education institutions and governments. PMI 2 provides funding of £6.9 million per annum for these activities over two years. It is critical that funding for the full five year strategy is safeguarded and guaranteed throughout the lifetime of the initiative. The British Council will make provision for its share of funding of the PMI to be a high priority in its plans for the 08/09 to 10/11 triennium.

13. In 2003–04, fees from non-EU students accounted for 8.1% of the income of English HEIs, a slightly higher proportion on average than their research income. Sastry (2006) has shown that LSE (33.5%) and SOAS (31.9%) earn about one-third of their income from non-EU students, and a further 18 receive more than one-eighth. The small surpluses of most of these HEIs would be wiped out if their fee income were to drop by 25% which would necessitate immediate action to offset the loss of revenue.

14. While HEIs, particularly those predicting unrealistic increases in overseas participation, might be financially embarrassed by a downturn, the larger risk of an over-reliance on overseas students lies at subject level. International students comprise more than half of the research student population in six broad subject areas.

Table 3

INTERNATIONAL RESEARCH STUDENTS AS % OF TOTAL

Law	57%
Engineering & technology	56%
Business & administrative studies	56%
Architecture, building & planning	56%
Computer science	53%
Social studies	52%

(Source: analysis of HESA Student Record, 2006).

15. Some disciplines have a much higher exposure: for example, international students account for 63% of the research student body in Electric and Electronic Engineering and in Architecture, 74% in Finance and 78% in Accounting. As these are national averages, individual departments will be even more susceptible to a sudden downturn.

IS THE CURRENT FUNDING SYSTEM FIT FOR PURPOSE?

16. It is not part of the British Council's role to express an opinion on the principles or methodology of funding higher education. However, it is in a position to comment on issues which arise from the current funding regime, which should inform debate about future policy.

17. The very substantial increase in overseas student numbers over the last twenty years can be considered to be a great British (and British Council) success story. However, it is arguable that the recruitment and admissions policies of HEIs have been distorted by the gap between the total income they receive for a home/ EU undergraduate (in fee income and HEFCE support) and the fee income from an international student, allied with the premium price that overseas student are prepared to pay for a UK education at all levels. This undergraduate differential has been reduced with the partial deregulation of fees for students commencing their studies in 2006, but it remains substantial (Table 4).

Table 4

UNIVERSITY INCOME (IN £) FOR TWO CATEGORIES OF STUDENT, 2006-07

	UK/EU	UK/EU*	Overseas	Overseas
	2nd/3rd yr	1st yr	Median	95th %ile
Arts/social science student	3,721	5,521	8,300	11,100
Science student	6,326	8,126	9,900	13,700

(Sources: HEFCE, 2006 and Universities UK, 2006).

*Note 1: For the 93% of HEIs which are charging the maximum £3,000.

18. The range of undergraduate fees charged to overseas students (UniversitiesUK, 2006), after the current level of HEFCE support is taken into account, might be considered indicative of the fees which would be charged to home/EU students should fees be totally deregulated. While this would address the issue of differential pricing, it is difficult to see how leading institutions, lacking significant endowment income, could operate "needs blind" admissions policies without cross subsidising between students on the basis of ability to pay.

THE STRUCTURE OF THE HIGHER EDUCATION SECTOR

Is there clear intention behind the balance of post-graduate and undergraduate international students being sought?

19. The present balance is the consequence of market forces. The relative demand for undergraduate and postgraduate programmes is largely driven by value for money. Most countries in the developed and developing world have expanded their capacity to educate undergraduate students. It makes economic sense for students to undertake their undergraduate study (which on average takes three to four years) in their own country, or a country which is cheaper than the UK, and then to study for a one (calendar) year taught Master's degree in the UK. The UK has a competitive advantage in that these programmes are at least six months shorter than in competitor countries.

20. Taught postgraduate enrolments by EU and other international students increased by 120% between 1996–97 and 2004–05 (compared with a 36% increase in first degree enrolments and 44% in research degree registrations). The distribution of international students in the UK by level in 2004–05 is shown in Table 5: nearly as many international students are now studying taught postgraduate programmes as are reading for first degrees.

Table 5

INTERNATIONAL STUDENTS BY LEVEL OF STUDY 2005-05

Level of study	EU	Non EU	Total
Postgraduate research	13,850	31,665	45,515
Postgraduate taught	32,730	88,765	121,500
First degree	45,920	79,805	125,725
Other undergraduate	22,730	28,870	51,600

(Source: HESA Student Record, 2006).

21. This changing balance of take-up of one year programmes compared with three year programmes is putting pressure on UK institutions, which have to increase the number of students they recruit each year to maintain their enrolment levels. HEIs have to recruit 188,000 students each year to maintain the current international student population of 344,000 students. This in turn makes them more vulnerable to sudden downturns in demand (paragraphs 15–17).

Is this balance an area where the market should be managed? Can it be managed?

22. It is in the long-term interests of HEIs to manage admissions to their taught postgraduate programmes to ensure that they do not have overly-high levels of representation of international students within their overall student body. The UKCOSA survey (paragraph 10) suggests that there is a correlation between integration with UK students and satisfaction with value for money. There is a real danger that the domination of degree programmes, particularly Master's programmes, by international students (and frequently by students from a small number of origins) will have an impact on student satisfaction.

23. This would otherwise be difficult to manage. International student scholarships might be redistributed in favour of longer programmes both in individual HEIs and nationally (the Chevening Scholarships, for example, are generally awarded for at most one year), but this would make a minimal impact given the number of scholars to total enrolees.

THE BOLOGNA PROCESS

24. The British Council believes the Bologna Process provides a framework to encourage the convergence of higher education systems in Europe as an important component of the internationalisation of higher education.

Advantages and disadvantages

25. The framework founded on three cycles (levels) of degree based on learning outcomes should increase the transparency of European degrees and facilitate students moving between national education systems as they progress through the cycles. This is complemented by the determination of many European governments, particularly in the east, to use the Bologna Process as a tool to improve the quality of their higher education systems. Given the long-standing propensity of continental European students to look to the UK for part of their education, this should serve to increase the number of suitably qualified applicants to UK universities at postgraduate level.

26. The most significant threat is to UK Master's programmes, which the country is heavily reliant on for its competitive advantage in attracting international students (paragraph 22). The agreement at the Helsinki Conference in 2003 that a Masters degree should have a minimum of 60 ECTS credits (the equivalent of an academic year) at Master's level is positive in this respect, but it is difficult to envisage how integrated Master's degrees, which do not differentiate between the first and second cycle, could be considered to comply with the framework. The absence of machinery for enforcement and interpretation enables countries to adopt their own approaches to achieving Bologna objectives. However, it also means there is no possibility of a ruling that the learning outcomes of UK Masters programmes are equal to those in other countries of longer duration.

27. In these circumstances, a perception that, as other European countries move towards 3+2 year or 4+1 year route to a second-cycle qualification, UK Master's degrees were not of the same standard could significantly harm UK HEIs. It could be particularly severe if it led to professional degrees not being recognised for purposes of progression to professional qualification in other countries. Debates in the European Parliament in 2005 on the Directive on Recognition of Professional Qualifications highlighted this danger.

28. It is also worth noting how Bologna is perceived by our key competitors. Australia held a conference in 2005 to assess the feasibility of an Asia Pacific Education Area. It concluded that this was not possible as the priorities for East Asia are capacity building at this stage. As a result, Australia is considering adoption of the Bologna model in order to continue to be seen as being of high quality and relevant to international standards and requirements. This demonstrates how key competitors see Bologna as a source of competitive advantage for Europe.

Opportunities to enhance the mobility of students from the UK

29. The low, and declining, outward mobility of UK students is a cause for concern in an increasingly global age. However, it is unlikely that the implementation of the Bologna Process will impact greatly on this. A report (HEFCE, 2004), International Student Mobility, commissioned by the British Council and nine other national organisations, suggested that reluctance to study abroad in Europe was largely attributable to poor language skills and financial constraints; a minority of interviewees suggested that credit transfer at an appropriate academic level (which Bologna would address) was a major concern. The Steering

Group which guided the study made a number of recommendations for various parties—including the Government, HEIs, the funding councils and national organisations to consider in an attempt to increase participation.

The broader impact of Bologna across Europe

30. It is difficult at this stage to judge the likely impact on the UK if the ambition to develop the European Higher Education Area (EHEA) as a brand is realised. Arguably, as the major provider of international higher education in Europe, the UK stands to lose market share as other countries in EHEA take advantage of increased visibility, particularly as many countries are now offering postgraduate degrees through the medium of English. On the other hand, the higher visibility of Europe, allied with HEIs grasping opportunities to offer degree programmes in conjunction with European partners, might persuade students to forsake other traditional English-speaking markets, such as USA and Canada, in favour of the UK.

31. There has been a tendency for HEIs, (students from Europe are not counted in PMI2 targets despite the benefits they bring), to look at EU students as poor relations in the scramble to recruit high-fee students. In the British Council's view this is not entirely sensible. There are significant advantages in being more closely immersed in EHEA, not least a large pool of well-trained scientists and technologists.

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Witnesses: **Professor John Brennan**, Professor of Higher Education Research, Centre for Higher Education Research and Information, The Open University, **Professor Phil Brown**, Centre on Skills, Knowledge and Organisational Performance, **Martin Davidson**, Chief Executive, British Council, and **Professor Bernadette Robinson**, UNESCO Centre for Comparative Education Research, University of Nottingham, gave evidence.

Q573 Chairman: Can I welcome Professor John Brennan, Professor Phillip Brown, Mr Martin Davidson and Professor Bernadette Robinson to our proceedings. It is always a great delight to have such a talented group of witnesses. Sometimes I have to pinch myself and say, what if we were paying the consultancy fee of this lot for two hours, and then it makes more value, even more, the time we have with you. Normally we give people a chance to say something in their own defence before we get started, before we sentence, but that is a humorous way of saying if you want to say a couple of things, to get us started, you can, otherwise we will go straight into questions?

Professor Brennan: I have jotted down a couple of things, which I will mention, in terms of where I am

coming from, on this. One is essentially a comment about globalisation, and perhaps one can argue that globalisation may be more about becoming better aware of differences rather than about removing those differences. In relation to that, I should say that most of my own research focuses on UK higher education in a European context and my comment there is that there are huge differences between the UK HE system and its linkages to the labour market and the linkages in other countries; so I am not sure we are in a process of convergence.

Q574 Chairman: Are we better linked, or are they? Professor Brennan: We are linked rather differently and I think I would summarise it, there has been a lot of indicators, UK graduates appear to find less immediate relevance in their higher education to their employment. The second thing is a comment about international league tables. There has been some interesting work done in Germany which looks at national rankings based on productivity per researcher, as opposed to taking an institutional frame. That is quite interesting because you get a rather different set of league tables if you do it that way: in other words, the broad message from that is that how many top universities a country has might not be, at the end of the day, all that significant, that there is productivity of higher education systems which are not necessarily dependent upon a hierarchical system of individual universities. I thought that was perhaps worth saying. Probably just the other thing to say is that, whilst I recognise that the focus of this afternoon is looking very much at internationalisation, it seems to me that for all universities global, national, regional and local functions interpenetrate each other, so I am not sure that internationalisation can be completely separated from these other levels.

Q575 Chairman: Thank you for that. Professor Brown?

Professor Brown: I am from the University of Cardiff. I think one of the things I would like to talk with you about is our understanding of globalisation and the global economy. For the last three years I have been interviewing corporate enterprises, 20 of them in detail, across seven countries. We have had 180 interviews. We have also spoken to senior advisers in China, India, Korea, Singapore, Germany and the US, and on the basis of the evidence that we have collected and the trends I think we have identified then I think I would like to challenge, for example, the Leitch Review's actual title, that is *Prosperity for all in the global economy*; that assumes a win-win scenario, that there are no losers, and there are losers. The sub-title is World *Class Skills*; that assumes that the key to this is skills and also I would like to challenge that.

Q576 Chairman: We will come back to that; that was very interesting, Professor Brown. Martin?

Mr Davidson: I am ready to answer your questions, Sir, when you want me to.

Q577 Chairman: You know that the Committee is going to China, and Beijing, and your team have been very helpful in planning our visit and making it worthwhile. Professor Robinson?

Professor Robinson: Just to say a word on my background, I am fairly ignorant about higher education in Europe. I spend six or seven months of each year in China, working mainly in the west but also in other universities, so I do not come armed with a lot of facts and figures but maybe some perspectives from in-country, in China, and maybe Pakistan and some other countries, about the experience of higher education when students come here to participate in it. I come from Nottingham University, which has the largest number of Chinese students in the UK and which also has over 90 research projects ongoing with China at present: a lot of connections there with China for our university.

Q578 Chairman: Can we start the questioning then. Is it not a fact that if you are looking at the international higher education it is not totally different from any other competitive marketplace product, is it? Surely it is clear that we must retain our high quality, keep our reputation for high quality, if we want to attract students to come here to study, and to make sure that experience they have while they are here, of one year, or three years, or longer, is of the very highest quality. That will bring people back, will it not? Is it not as simple as that; or is it more complex?

Professor Brown: Obviously, you need to have very high standards of educational quality within the UK to compete internationally. The issue is, however, what others are doing, instead of what we are doing, and are we all doing exactly the same thing, in which case where is our competitive advantage. I think the second question would be do you treat higher education simply as a commodity, how do you understand the idea of the public good, should that be restricted to a region or to a nation, what does that mean within an international context, where is the public good and where is our understanding of higher education there, if we see this purely in terms of yet somewhere else to trade internationally. I am not saying we should be doing that. I think we should and we have to think in those terms, and the reason why we have to think in those terms is because everybody else is. Whether we like it or not, when you talk to those people, as you have, you know much better than I do that they will give you the spin about, "Of course, we see this in 'public good' terms," but underlying it is competition, a competition for places and students and research and technologies and we have got to be part of that game. I think there is a broader agenda which we also need to take into account here; if not, we narrow down far too much, I think.

Q579 Chairman: Could it be bad for British higher education to go too far down this route then; could we be undermining the quality of the product for our

own students, who are in the UK and in Europe, by filling too many places with foreign students, for example?

Professor Brown: I think we could. It goes back to that issue, does it not, of what is the public good, what is the purpose of higher education; is it there primarily for people within the UK, or is it there also for international students. The University of Oxford has been talking about reducing the number of places for home students, needy students, because of the problems of funding; so you have to link the funding issues also alongside these broader questions about the overriding purpose of higher education, I would suggest.

Q580 Chairman: Martin: I am reverting to first names and hope that is alright?

Mr Davidson: I think it is very important that we understand why international student flows take place, what it is that students are looking for, and the research is very clear on this. They are looking for, first of all, the quality of the educational experience they are going to get, they are looking for international comparability and usability of the qualifications they obtain, they are looking for the quality of the experience that they get and they are looking for the capacity to improve their work opportunities on graduation. That set of things which the international students are looking for is pretty well founded and clearly students see themselves as operating in the international market, they will move to whichever country, or set of institutions, is able to deliver that set of goods for them. I think the other issue which is worth asking at this stage is, given the sheer number of foreign students in British higher education, at the undergraduate level, at the postgraduate level, and indeed the number of foreign lecturers now working in British higher education, is it actually reasonable for us still to regard this as a domestic set of institutions which happen to attract a little bit of overseas international involvement, which is financially beneficial but that is about it? I would suggest that actually the entire market has moved, in much the same way as, say, the bond market, or the insurance market, for the UK is actually an international one; it brings goods within the UK but essentially it is an international one. In some senses. British higher education has moved into that same environment; actually now it is developing a whole set of deliverables, whether they are in terms of course design or the student experience, which are designed for an international market, which of course includes the UK but is no longer limited purely to the UK.

Q581 Chairman: Martin, if you were in the same profession as the group of people sitting opposite you, you would start to get a bit worried if people in your constituency thought that when their children came to apply to university they could not get a place because "I'm sorry but UK universities have gone

international and the university is full of people not from Britain." That is different from other products, is it not?

Mr Davidson: That is assuming that there is simply a limit on the number of places available.

Q582 Chairman: Certainly there is a limit on the places in a lot of universities?

Mr Davidson: There is evidence that the level of university student places does grow to meet the size of the market. I think also it is assuming that the international aspect of education provides no benefit to the British student. Again there is good evidence that the internationalisation of British higher education provides considerable benefits to British students taking part in that education, whether it is through a better understanding of international affairs, a better understanding of other cultures, a better engagement with people from other parts of the world, through to work opportunities and professional opportunities through that wider set of engagements.

Q583 Chairman: Martin, an awful lot of foreign students come here but not really enough UK students go elsewhere, do they? All this internationalism is fine in theory but we find that there is a poor uptake of overseas places. Even in rather welcoming places like the United States or the Scandinavian and Nordic countries, where English is spoken and a lot of the teaching is in English, still quite a low rate of UK students are taking advantage of the international education experience?

Mr Davidson: I think it is disappointing, the number of students, for example, who take part in the mobility programmes; we know, for example, that the number of students under the Erasmus scheme has reduced, year-on-year, rather than increased, there is something like a two to one disparity between European students coming into this country on those programmes and British students going overseas. There are a number of reasons for that, and we have undertaken some research, and they are the obvious ones of language but also they are questions about the transferability of credits, the acceptability of credits earned overseas in their courses back here, as well as questions about cost and utility, how useful do students see it who undertake those programmes. I think also there is evidence that there is a growth in the number of students going now to other countries, most particularly the United States, Australia, Canada and other English-speaking countries; part of that, of course, is language but part of it also is the nature of the experience that they are undertaking. For many of them, rather than having university experience, they are undertaking work experience or other forms of international experience as part of that course. Traditionally, the number of students from the UK going into other countries has exceeded other English-speaking countries, the United States, Canada, Australia, as a proportion of

the student population; the truth is that probably those countries have caught up with us over the last three to four years.

Q584 Chairman: Caught up, in what sense?

Mr Davidson: The proportion of students going overseas for study, and it remains an issue for us in this country, I agree.

Q585 Chairman: John Brennan, do students go because we have got first-class universities in the UK and other universities, many in Europe, are not very good?

Professor Brennan: I think probably there are different reasons for different patterns of mobility. Focusing just on Erasmus for a moment, I have seen there have been various evaluations of Erasmus programmes and I think there is some suggestion that UK universities give less encouragement to home students to go abroad than is the case in other European countries. Also there may be factors to do with the brevity of the degree courses in the UK compared with their European counterparts; there is just not a lot of time to fit things in. Whereas, if you have got first-degree experience, which can go from anything, from four, five, six and seven years, then there is more possibility of including a year abroad in that.

Q586 Chairman: We thought steadily the whole Bologna Process was bringing it all down to standard, three-year degrees; it is not happening?

Professor Brennan: What I hear, from within those European countries that I am spending my time visiting, which is quite a few of them, is that, whilst the formal, two-stage structure is being implemented, the view within universities and also employers was that there was considerable doubt about the extent to which the first-stage Bachelor's qualification will be an acceptable entry to the labour market. Those of us who can think back to Dip HE of many years ago; in other words, the Bachelor's degree will be there but it will be used as a staging-post on the way to the Master's degree, and that the reality may change but it seems likely to be a very long time in changing.

Chairman: Thank you for those first answers. Rob Wilson will lead us on.

Q587 Mr Wilson: If I could follow up on some of your questioning, Chairman, with just an overall question on the international research market, very quickly; do you detect that there is any brain drain within the British system of academics abroad?

Professor Brown: I do not have detailed knowledge of it but I would say, certainly in the social sciences, not particularly. Just thinking of people out there I would know of, who are regarded as leading figures, they have not gone to the US. I think there is even some discussion now in the US about talent leaving the US, but I think the politics of the US also is an issue for people now and would you really want to go and work for the US, because the US is the number one destination for British academics. I do

not think that is the case and I think also we are beginning to recruit more from the US and elsewhere, because we are struggling to recruit sufficient academics, so we are having to look internationally now for various people, but I do not know the detailed figure.

Mr Davidson: I think that there is evidence of brain gain rather than brain drain. The number of foreign academics working in British institutions, I do not think anybody has an exact figure but probably it is something like 15%. I think that the evidence, again which is anecdotal rather than carefully researched, is that a number of British academics, if they go overseas, tend to go early and come back, rather than being a permanent loss.

Mr Wilson: Brain gain, not brain drain. I will have to write that down. Can I turn to students, and how healthy do you think the market is, the international fee-paying student coming to the UK at the moment?

Q588 Chairman: What about Bernadette; she has got a lot of experience in China and other places?

Professor Robinson: I think the market is healthy at the moment but I am not sure it is going to stay that way. I think there are risky aspects to it. I am thinking particularly of the Master's level programme. The Master's level in the UK has the competitive advantage that it is short, but increasingly it is regarded with suspicion because the entry and exit levels are perceived as lower than other countries; so now the first choice in China for a Master's degree is not the UK generally but it is the US, because it is seen to have more value in the marketplace. I think part of this is to do with the length but part of it also is to do with the mismatch of perceptions of students coming, especially from China; they come and they expect to be taught, and that is not how Master's level programmes operate in the UK. Somehow the idea gets fixed that you can get a Master's degree in the UK, you have to go to maybe only five classes a week, not understanding the intensive study for the rest of the time that is needed. I hear a lot of conversation about where to go for Master's degrees and the USA now is the first choice for many of the Chinese colleagues I work with and for their students.

Q589 Chairman: They are not the sort of students we want, are they?

Professor Robinson: I think they are the sort of students you want; they are intelligent, highly motivated.

Q590 Chairman: Are they? Do they not want to be force-fed tit-bits, forced down their throat?

Professor Robinson: No; they are the ones who are the most able, the most ambitious, the most willing to work their socks off.

Q591 Mr Wilson: I was chatting to a vice chancellor the other day who said that the UK had become quite an unfriendly country towards overseas

students, in many respects. Do any of you sympathise with that view and what do you think is the basis of that view?

Professor Robinson: I think some of it is to do with mismatch of cultural expectations and not enough attention being paid to this when the students come here. I know many universities have officers who look after overseas students' welfare, etc., but it is a complaint we hear from UK students as well, that, our Master's programmes, or PhD programmes even, it is quite hard to get hold of your tutor. Tutors are very busy. The workload of academics is just crazy and they do not have time and are pressured to do research and it is very difficult to find time for students. They are coming from cultures where it operates differently so their expectations about access to tutors and their teachers at universities are different, and so they feel very much adrift. I think that is one reason why sometimes undergraduate students, from Asian countries in particular, find it difficult to get comfortable and get established on their degree programmes and do better on Master's programmes later on, when they have matured a bit and got some experience of independent learning.

Q592 Mr Wilson: Addressing this to Martin, do you think that whole episode of British foreign policy, the Iraq war and all the things around that and the restrictions that brought upon overseas students coming to some universities, from some parts of the world, whether that has given a very unfriendly feel to Britain and British universities?

Mr Davidson: I think there is very good evidence, from a number of surveys that we and other organisations have done, that individuals overseas, presumably you are referring particularly to students from Islamic, Muslim countries, are able to distinguish between the views and actions of the British Government and of the UK more generally. I do not think there is any question that many aspects of our society remain extremely attractive; in particular, the education. While I do not think there is any question that a decision to study overseas and a decision to study in which country is an emotional one and will be affected in part by an emotional environment, I do not think there is strong evidence that particularly the foreign policy has had a huge impact. What has had more impact perhaps is the perception of safety. Certainly it is true that for a large number of countries, most particularly China but also other countries, safety of the student while overseas is of paramount concern. For example, the bombings in London last year will have had an effect, but it will be, I would suggest, a rather marginal one. A much bigger issue of how friendly our education is seen is actually things like the visa regime and the visa regime has a very, very marked impact, and even if it is by reputation, rather than by reality, an unfriendly visa regime, without question, does have an impact on students' willingness to come here.

Q593 Mr Wilson: Have we got an unfriendly visa regime?

Mr Davidson: The reputation was poor about a year or 18 months ago and I think it has improved in a number of ways. I think that the Home Office setting up the Joint Visa Task Force, for example, has helped, it has given the sector an opportunity to contribute to the discussions around it. I think things like the new international graduate student scheme here, which provides opportunities for students to study for a year after graduation, is going to be a very important aspect in providing a rather friendlier environment for students coming here.

Q594 Mr Wilson: Bernadette, you seemed to be agreeing more with the premise than the question when I pitched it. Do you agree with what Martin has just said?

Professor Robinson: Very much. I think the visa issue has been an important one for some students, who have chosen not to come for that reason.

Q595 Mr Wilson: Have we seen a fall-off in students from, say, Muslim countries that you have noticed in the last couple of years?

Mr Davidson: I am not aware, off the top of my head, of there having been a marked fall-off. There has been a drop in individual countries, so China showed quite a large fall-off two years ago, but the overall number of students has stayed roughly level over the period.

Q596 Mr Wilson: The other point this vice chancellor made to me, when we were discussing this, was that many institutions are becoming heavily reliant on the fee income from overseas students; too much so, in many respects. Would anybody like to comment on that?

Professor Brennan: Just to endorse that perception; we know of several universities which, even at the undergraduate level, have got now something in the order of 40% of undergraduates from China, and that seems a very high proportion.

Q597 Chairman: Where have they got that percentage?

Professor Brennan: Several universities that I am aware of.

Q598 Chairman: Right across the piece, not for any department; in the whole university 40% are from China?

Professor Brennan: Yes.

Q599 Mr Wilson: Does that shock you, that there are so many from one particular country? *Professor Brennan:* Yes.

Q600 Chairman: Can you think of any particular ones which come to mind which have that percentage?

Professor Brennan: Two. One I think is the University of Luton and I think the University of Glamorgan has got a high proportion, but it may not be that amount.¹

Q601 Mr Wilson: Do you have a feeling of what the level should be of overseas students at a university; is there a right level and a wrong level?

Professor Brennan: I do not think I would come up with a particular level, but I would come up with a view that an international experience should involve interaction and integration with home students, and where within universities there is almost kind of a particular ghetto of certain courses, with students from another part of the world, I wonder about the quality of that experience as an international experience.

Mr Davidson: I would like to pick up that point about the impact of a very large proportion of foreign students on a particular course. I think there is very strong evidence of dissatisfaction amongst students about the educational experience they get if there is a predominance of foreign students, particularly if it is a predominance of foreign students from a particular country, most usually China, on that particular course. Certainly there are some courses in the UK where upwards of 75% of the students may well be from overseas, and I think that does have an impact on the overall reputation of the institution overseas.

Q602 Mr Wilson: At the moment, I suppose overseas students are the goose laying the golden egg. Do we have a realistic expectation of that continuing, or do we think that might change over time?

Mr Davidson: The research that we have undertaken-we undertook some research with IDP and with other institutions two years ago-indicated that there would be a continuing growth in international student mobility. The issue for the UK is about our market share. At the moment, we have about a 24% market share of the student flows. I do not think there is any question that we would be able to maintain that so well; the overall number may grow but the proportion coming to the UK, as opposed to other countries, is likely to decrease. There has been a very, very sharp increase in the flows to new countries, so countries like Malaysia, Singapore, China all have student recruitment targets set by governments. China has something like 110,000 foreign students studying there now, from a base of virtually nil two or three years ago; so the competition for foreign student flows is very marked. I think the other big shift in the market, which we see coming in, is a shift away from students travelling to other countries purely for education and looking for a much more mixed education environment, including some period of study in their own country, maybe followed up by study overseas, or indeed wholly-owned study within their own country but given through some mix of curriculum from a foreign university as well as a home university. The whole environment is becoming a much more complex one, though the overall scale, the overall shift, of students around the world is set to increase.

Q603 Mr Wilson: I have finished my questions but if we could have the figures for the Muslim countries that would be very helpful?

Mr Davidson: Yes. I have figures with absolute numbers. I do not have figures for change over time, but I can write to the Committee with this.²

Mr Wilson: Thank you.

Q604 Mr Pelling: Just to follow up on Rob Wilson's line of questioning, my understanding of how we work competitively, as it were, against the US, in terms of the quality and ease of visa applications, is probably about two years out of date. How are we standing *vis-à-vis* the US? My understanding is that the US recognised that there were some very real problems, in terms of the visa process for foreign students; could they be regarded now as being more customer-friendly than we are?

Mr Davidson: I would say that, yes, without doubt, the US has learned a very sharp lesson and is applying itself very assiduously to increasing student numbers. Virtually all our major competitor countries have put substantial sums of money into marketing themselves overseas and that includes establishing advisory centres, establishing new scholarship schemes and, most particularly, looking at their visa regimes in the US. While the US, like the UK, is seeing a drop in its market share, it is putting substantial sums of money, about US\$400 million a year, into trying to rebuild that.

Professor Robinson: I think Australia is seen as very visa-friendly to Asian students.

Q605 Chairman: We went to Australia. It is no wonder that they get students, they give permanent residence to people who take a course there. It is mixed in with a migration policy. Surely, that is not part of international competition; it is a different agenda, is it not, with the Australian Government? Bernadette, you said it as though they are much better than us; come on, it is not the same thing at all?

Professor Robinson: It may be a different agenda for the Australian Government but it is the perception of the students applying for the visa, and most of them that I know of come back.

Q606 Chairman: I have to say that most developed countries would be perceived as very friendly if they said "If you come in and study you can stay;" that is overfriendly, is it not?

Professor Robinson: Yes, but I do not think that is always the intention of the students who go.

¹ Note by witness: Proportions of international students of around 40% can be found in some places. According to a recent HEPI report (*Exposure to the International Student Market*) institutions with the highest proportions of international students include LSE, SOAS, the London Business School, Essex, Luton and City universities.

Chairman: Fiona; you know about this.

Q607 Fiona Mactaggart: Bernadette, of the people in front of us, I think, it sounds to me, probably you have spent more time speaking to students overseas. How important actually are the prospects of migration and future work to students, in thinking about where they may study overseas?

Professor Robinson: I think, from the perspective of China, many of the students there, as well as getting their qualification, want to get some work experience and many I know in the UK have been here for a few years working but intend to go back to China at some point. The work experience is a very important part of their motivation in coming to the UK to do a qualification, but also they have intentions about going back. For new graduates, I think the job market has changed in China. Before, until quite recently, if you had a foreign degree you were assured of a job straightaway when you returned to China; that is no longer the case, partly because more graduates are coming out of Chinese universities, with the expansion of higher education, and the job market itself has changed.

Q608 Fiona Mactaggart: John, your paper suggested that we have quite a short degree and then there is more training in employment. Do you think that connects with this point, and therefore the work after, that now we have got a visa regime which allows students to stay and do related work a year after; do you think that is significant in making the UK an interesting place or an attractive place to study, because of the fact that we do not have so much vocational training in our degree courses and various other places?

Professor Brennan: Again, in terms of the European comparisons, I think that analysis makes a lot of sense because the more general the academic programmes the more portable they are. If I may, I would add the point to this in terms of different stages of mobility, so whilst we were talking earlier about UK students being less likely to study or work abroad on Erasmus programmes we have been doing some recent research which does demonstrate that, but when one looks at work and study abroad after the conclusion of the first degree the UK figure is actually at the European average of 21%, which I think is quite high. In terms of that working abroad being long stay, in other words, for a year or more, the UK figure is actually higher than the European average. In terms of looking at student flows, I think there is quite a lot of different levels in looking at it, and it is not just during the course, it is after the course, there are issues of duration, do you come back again or not come back again, and I think it makes analysis quite complex, in that form.

Professor Brown: There is another term which has been introduced now, which is brain circulation, which is different from brain drain. The brain drain notion was where you went from India and China into, for example, the US or Britain and you stayed there, and so that talent was lost to India and China. Especially with the Indian experience, there is now

this idea of brain circulation, that it is kind of okay for people to go overseas to get their education because ultimately they are going to go back and add value to their national economy; so I think probably you will hear quite a lot about brain circulation, in terms of globalisation debates. How realistic that is, of course, is another question altogether, but what we do know is that more people, for example, from India, are returning to India, and as the job market improves in India and China, certainly certain parts of it, then you will get movement back, but still many stay on, if they can, in Europe or in North America because the jobs are better, the pay is better.

Q609 Fiona Mactaggart: I am also interested in the different models of study. Bernadette, your institution has a campus in China; and, Martin, in your evidence, the British Council predicted that by 2010 that might be a more common model than students coming here. I want to know what are the risks in terms of that for the British higher education product; is it good, is it the quality that we need? What are the guarantees that those kinds of overseas satellites can be good enough; what are the risks, in terms of them just being adopted as Chinese institutions or similar, and are people good at doing this? Is this a good model for the student?

Professor Robinson: I would like to start a stage further back, if I may, in answering this. I think there are three main ways in which the internationalisation of higher education can be turned into action, can be operationalised. One is by recruiting students to come to the UK, which is the very common one, which has been happening now for some years. Another one is through transnational courses of different kinds, distance education, different combinations of distance education and in-country. Then there is this model of locating your institution or locating your programmes in-country, with a special status, not just an offshore operation, which has been used by the USA and Canada and various countries and Australia. I think there are three models, but in the UK I think we have had the dominance of this first model, of students coming here always to do courses. I think that in the future, over the next 10 years, there has to be exploration of different models, there has to be development of different models to counteract the changes that are happening and also maybe different flows and surges of numbers coming into recruitment in the UK and other models. The University of Nottingham has two campuses; it has one in Malaysia and one in China, the first foreign university in China, the first Sino-foreign university, and I think the motivations of those three different models are different. The idea of students coming here is to generate income for universities. I think the Nottingham Ningbo model is a 'not for profit' model but for different reasons. I think the future of the internationalisation of higher education, certainly with some countries, like China and India, rests really on the development of relationships, that is the thing which is going to sustain flows of students, which is going to generate

research interaction and develop relationships into new models which we have not thought of yet. I do not think I have answered your question, but that is the kind of context.

Chairman: It was a very interesting answer anyway.

Q610 Fiona Mactaggart: Were you going to say something about your prediction on numbers, Martin?

Mr Davidson: Just a couple of things, quickly, I think that the model of a transfer or creation of a home campus overseas is unlikely to be a major form of transnational education in the future. I think that the other models, of courses, shared courses, joint curriculum development, are more likely, the nature of the transfer that we have been talking about. All of these, of course, lead to substantial issues around quality. I hasten to add, I have no comments whatsoever about the quality of the Nottingham offering in China and Malaysia, but it is a very substantial challenge to the reputation of British education to maintain quality through offshore delivery, particularly at the individual course level rather than the whole institution level. Maybe that is a challenge which we have to face up to. I would challenge a little bit Bernadette's assertion that the major focus of inward flows of students is financial; of course finance is an important aspect of it but actually it does have a number of other, very substantial, additional benefits to British higher education. I think there is a third aspect of British higher education's international agenda, which is about education reform and development in other countries. It is one of the aspects which are of really very considerable importance in our work, British institutions' willingness to work with foreign institutions on capacity-building, institutional development, as well as at a whole system level of looking at higher education system development in emerging countries. Student flows, creation of courses overseas and engagement with the education system overseas are all aspects of British higher education.

Professor Robinson: I was not suggesting that money was the only motivation, but for some institutions I think it is the primary motivation. Of course, there are all these other reasons why we need to recruit students from other countries, as Martin has said. I think I am not advocating the model of Ningbo as the ideal; what I am saying is that it is at one end of a continuum, and along that you have got all sorts of possibilities for combinations, sharing, etc. In the past we have had a lot of franchising but that raises whole issues of quality assurance and quality standards. I think there is scope for exploration of new models but they bring with them their own problems as well.

Q611 Fiona Mactaggart: One of the things which strike me about the university experience is that traditionally we have associated with universities academic freedom, freedom of thought, a number of things which actually are not necessarily the norm in some of the countries which are sending very large

numbers of overseas students. I am wondering whether, when you create an institution like that, those issues become issues in those institutions and whether you are exporting some values, or whether actually you are failing to, I suppose is really the question I want to address. Are students getting the traditional academic freedom, openness of debate, that we associate with British higher education, or not, and if they are how?

Mr Davidson: Other than agreeing absolutely that one of the huge benefits which flow from students coming to this country is access to the entire value system which underpins higher education, which I think then does go back to their countries of origin, as well as the sets of relationships they create, unquestionably there is an issue which I would suggest is part of the quality debate, whether or not those same values are going to inform the experience that they get in a different system.

Q612 Fiona Mactaggart: Bernadette, your institution does this kind of thing. I want to know whether you are confident that you are actually delivering that and what the struggles are. I cannot believe there have not been some struggles?

Professor Robinson: I am not here speaking on behalf of my institution so I must be very careful not to do that, but I can speak from my own experience of teaching in Chinese universities and what staff and I can or cannot do in our teaching sessions. Of course I can do most things in my teaching sessions, because I am an ignorant foreigner who can make all sorts of mistakes; but certainly there are sensitivities around some topics that one has to be careful of and I think there is control. I think the practice of having a Party observer in all teaching sessions is now gone. but nonetheless every university has its Party committee and the deputies of educational institutions are Party officials, so it is not entirely absent, and all students must do an ideology course, so one is working within that cultural framework overseas.

Q613 Fiona Mactaggart: What do we think that this does for the reputation of British higher education; does anybody else want to comment on that?

Professor Brennan: I know, a few years ago, a lot of foreign universities were setting up various kinds of shop in South Africa, and British universities. I think, were to the fore there, and of course they were having to satisfy the Quality Assurance Agency of the quality of what they were doing out there, and a year or so on South Africa created its own Higher Education Quality Committee which set about doing its own appraisals of programmes. It started with MBA programmes, and a high proportion of the UK provision effectively lost its franchise. The point here, I think, is that a good quality higher education experience in a UK context may not be actually what is required in a very different culture and context, and there may be certain elements which are in common and certain elements which differ. I do not think there were major problems, I think the UK providers changed fairly rapidly to

meet the South African requirements, but I think the question of who should be the ultimate arbiter of quality is quite an interesting one and clearly has implications for the international standing of UK higher education.

Professor Brown: It depends on the subject area, does it not; if it is engineering then it is not usually a problem, if it is social sciences often it is a big problem. The first thing we do is get our students to-we like using the term-critically assess, evaluate, and what does that mean to a Chinese student; it was a big problem because they want the answer, the correct answer, the one that the lecturer gives them. It is a real challenge to get them to say, "Well, it's okay but there are no actual right and wrong answers here; just look at the evidence and give an assessment of this." That is pretty hard, and within a different cultural environment it is even more difficult, it strikes me; so there are real problems. We could not teach half of our courses in social sciences in Singapore, for instance, because we would be challenging the system and that would not be acceptable: so I think there is a big issue about what it is you are going to teach, where, and maintaining those standards. If we are just chasing money then we have got a big problem, it strikes me.

Q614 Fiona Mactaggart: Do we have any mechanisms which ensure that people do not go out, exporting British sociology-based courses which say "This is the answer"?

Mr Davidson: Certainly there are mechanisms in place which look at the quality of British offers overseas, yes. I would be very surprised if those systems would accept a course which said "This is the answer" rather than "This is nature of the critical inquiry approach;" so, yes, there are systems in place. As John said earlier, alluding to the South Africa experience, those systems are pretty vigorous and on the whole do match up when challenged by local systems.

Fiona Mactaggart: It sounds to me, in terms of quality, when students are coming here, that we have a very strong draw at the really high end of the market, also perhaps at the other end of the market, and that there is an issue in the kind of middle-rank universities about how well they are drawing in and bringing in overseas students here. Is that an issue about reputation, is that an issue about marketing, is that an issue about actually how they welcome students in the institutions? I am not talking about the countrywide level, I am talking of the institutional level. Does anyone know?

Q615 Chairman: It is a big problem for you, is it not? If you were doing your job properly, which I am sure you are, you should be telling universities which do not come up to scratch or are not competing that your feedback from the big client countries is this and that way; or do you not have that relationship? *Mr Davidson:* Yes, we do have that relationship, and the Education UK Partnership is very much based around learning from each other. Marketing in an international environment is a very complex

business and I do not think there is any question that a number of institutions, which have come late to it, have found it quite a bumpy ride; whereas, obviously, there is a large number of institutions which have been involved internationally for a very. very long period of time. The issues which are critical tend to be around overreliance on a single market, overreliance on a particular level of education, and there are problems around, for example, one-year Master's degrees, in that you have to renew that constantly on an annual basis; the undergraduate market, you need to recruit them only once every three years. The other overreliance tends to be in a particular subject area; so an institution which is overreliant on Master's degrees or short courses in a particular subject area, in a particular country, is going to have a very high level of exposure. I think that there are issues about some institutions which have allowed themselves to get into that particular position. The sector as a whole, I think, absolutely does see the dangers to reputation of any part of it being seen to be too intent on simply recruiting students at any cost: so I think that the peer pressure around quality and ensuring quality, both in the recruitment process and the student experience, has grown very considerably over the last few years.

Q616 Chairman: Professor Brennan, I am getting a bit worried about some of your points because you seem to have a rather low opinion of British universities; is not that right? You thought we were overvaluing ourselves and that really we were not much cop, compared with our competitors, if we looked at the true stats: really is that what you thought?

Professor Brennan: No; no, not at all.

Q617 Chairman: It may be the truth. We like hearing from the OU, because you have not got that kind of institutional, long-term prejudice which sometimes we get from some institutions; so tell us how it is, from your view?

Professor Brennan: I think, to some extent, sometimes we assume that there is a particular Anglo-Saxon model which could be applicable everywhere and others would follow. I think what I would say is that there are a number of models; within the European context, higher education in the UK is relatively short-cycle, comparatively.

Q618 Chairman: Because it is output-based in that time?

Professor Brennan: Yes. I was going to say, that is not necessarily a criticism, but what I think it does suggest is that there is perhaps a somewhat different division of labour between higher education and employers, in terms of the preparation of graduates for work, different relationships with the labour market. I think there is some evidence to suggest that other European countries are rather more effective at managing the initial transition into work and graduates, in their first jobs perhaps, feel anyway rather better prepared for them than graduates within the UK.

Q619 Chairman: With seven years to prepare yourself for work, you ought to be ready, I would have thought?

Professor Brennan: Yes; a fair point. Indeed, rather than looking at duration within higher education, if one just took young people, I do not know, at age 27, would there be very much difference? Equally, I think there is an argument that there may be longer-term benefits from the UK approach, in terms of flexibility, in terms of lifelong learning, and really a much more open labour market in terms of the role that credentials play in moving people through them. I think the point perhaps I would want to emphasise is to recognise that the UK system reflects one particular model; there are other models around and I think we need to recognise and understand that.

Q620 Mr Marsden: Can we move on and talk about some of the issues around the international market for research. You have said already, I think, from the panel, that you do not think there is an issue in terms of brain drain and brain circulation—I am waiting for brain substitution—but is it the same thing when you are attracting academics, the same factors when you attract academics that you get when you are attracting students: quality, reputation, employment prospects? Is there any change in the rankings when you are trying to attract academics as opposed to when you are trying to attract students?

Professor Brown: I think the same things apply. Academics are driven by a number of things; one would be resources, will you get the resources you need, will you get the time to do the research that you are doing, will you be surrounded by people who are leading people in that field, these are things you are driven by. I think that applies to most academics, in most countries, to some extent; obviously, the salary makes a difference, but if that were the case then more British academics would go to the US, and they do not leave, so there are other considerations as well. There is absolutely no doubt about it that the key thing, in terms of attracting high quality staff here, is the reputation of the university, which I think is absolutely vital, and all the universities in the UK, it seems to me, are doing the same thing now, they are all looking at the Shanghai rankings, The Times ranking, they are looking at how they are being put together, and they are trying to work out how they can lift their profile. One of the problems with that, of course, is if you lift your profile globally then what is the impact on the domestic, national structure for the university and the competition, for example, within the universities in the UK, in terms of access to resources? Do we say that we should try to target, say, 10 universities in the UK to be in the top 100, in terms of global rankings, or do we say that we should give more resources to all the universities within Britain to improve the student experience and the staff experience? For example, in my university, I get a lot of time for research; in new universities there is far less time for research. It is not a level playing-field.

Q621 Mr Marsden: Professor Robinson, in other circumstances and about other issues when the Committee has looked at HE, it has become apparent that, in the UK set-up, in terms of UK students, the issue of particular schools or particular departments, rather than just the issue of the overall reputation of a university, is becoming more and more important. If I can put it this way, with not just your Chinese hat on but with your other experiences in other countries as well, is this something which is happening overseas? If you are a Chinese academic, do you think automatically "I really must go to Oxford or Imperial," as opposed to "I'm going to Nottingham" or "I'm going to Liverpool, because they're particularly good in my subject area"?

Professor Robinson: I think, first of all, they would choose the top band of universities that they would consider, and then, within that, they would look for the clusters of excellence.

Q622 Mr Marsden: There is still a banding approach?

Professor Robinson: There is still a banding approach. In fact, in China, I think the banding is more formalised than it is in the UK. There are, as it were, government rankings of universities, so they are expecting to find similar rankings when they come here.

Q623 Mr Marsden: There is a lot of discussion, and no doubt, when we go to China, we will probe it a bit, in terms of how far the economic and intellectual classes in China are able to develop their own ideas via the Internet. Is there the ability to have use of the Internet to pursue alternative views of where they should go, as opposed to the state views?

Professor Robinson: I think students have quite a free choice, in getting information about universities and deciding where to go, and many of them are not coming on government funding any more.

Q624 Mr Marsden: There is much more independent thought?

Professor Robinson: I think so.

Professor Brown: Of course, it depends which universities they have heard of; probably they have heard of only four or five universities in the UK so that immediately they are driven towards those universities. I think it is the issue of lifting the profile of some of the other universities in the UK which is important, to give them more of a choice about where they might go; that is an issue, I think.

Mr Davidson: From a different country, India, where we run an Education Research Initiative, recently we made 30 awards on linking departments to departments. Certainly it is clear, just looking down the list of those, that the Indian institutions have identified departments with which they are interested in being linked, rather than universities.

Q625 Mr Marsden: We will come on to ask a couple of things perhaps, Martin, in a moment, but I wonder, Professor Brennan, if I could ask you, in terms of where the UK stands over its global

reputation for research quality, where you think we stand today, compared with, say, 10 years ago, and are there particular areas where we are on the up, as opposed to on the down?

Professor Brennan: Honestly, I do not think I have got any real evidence to provide a good view on that. Perhaps I would comment though, on the point of internationalisation of research, on what I think is the growing volume of research collaboration on international projects and multinational research teams working together, that in many cases it is no longer a pattern of academics choosing to up sticks and go to live on the other side of the world, for many people now, your closest collaborators can be on a different continent. I think there is a different take perhaps on internationalisation.

Q626 Mr Marsden: Can I come back to you, Martin Davidson. Professor Brennan has raised the issue there of collaboration. We know, do we not, that scientific and technical research is a major issue, in that respect; do you think that the UK's generally good reputation for research in those areas has been affected, in terms of overseas perception, by the threatened closure of science courses at some universities, because clearly that has been something which has been in the news and around?

Mr Davidson: There is no doubt that anything which happens in British higher education gets reflected, to a greater or lesser extent, in different countries. For example, in Singapore, normally you will find an article about the closure of a department reflected almost the next day in headlines in the New Straits Times. It does vary from country-to-country. I do not think that the individual actions of universities' particular departments have a long-term impact. As I say, there is anecdotal evidence but also some statistical evidence that when we are talking about research collaboration the factors which are likely to have the greatest impact are the reputation of the department internationally, the opportunity for individuals within that department to have been cited in literature which a potential research collaborator might have read, and the opportunity to meet at international conferences. That tends to drive the selection of individual departments. Certainly it is true, if you take international citations of research as one element, that the level of citation from the UK research is as high as, if not slightly higher than, it has been over a number of years, it runs roughly around 30% of the most highly cited, at the moment. I think that sort of evidence actually is of more importance, in terms of decisions that departments make about where they are going to create their research, than any particular headline or particular institution.

Professor Brown: Just an aside really; we were talking about closing departments of science. In relation to engineering, I was reminded of an interview with a leading German multinational company, which said how appalling was the state of science and engineering in Britain and the US and how far we have to go to catch up with China and with Russia now. Certainly the view within some

multinationals is that we are already massively behind and show no evidence that we are moving forward, and it was a bit of a shock to hear this person, who had global responsibility for recruitment, talking about the state of science.

Q627 Chairman: Where did German and Russian universities come in the research rankings? I have always understood that Germany does not have one university in the top-ranked universities?

Professor Brown: It depends where you go. Within the top 100, I think there are five; which, of course, is how they responded, because now they are very worried about this, and before they had a level playing-field. They have said, "Look, all our universities are good," so pretty much they were defending as being across the board. Now, they have introduced this I think it is like an 'excellence' policy, and they try to identify, initially, five universities and put more money into those particular institutions. Of course, the consequence of that will be that internationally they will be seen to be the top German universities, that German students now will want to get into those universities, more and more resources will be fed into those universities, so what are the implications then for the other German universities, which have not been selected within that top five? That is how the impact of global competition and thinking at that level then can have national implications, which we need to think about. *Mr Davidson:* On that, going back to the point which you made much earlier, Phillip, Germany has roughly the same level of international citation as the UK for its research, even though it does not have a university in that top 20. Russia, in contrast, has about one-third the number of international citations.

O628 Mr Marsden: I might raise the issue of where the German citations come from, whether they come from German universities or German academics at other universities; but we will let that one pass, for the moment. I want to move on, finally and relatively briefly, to the issue of collaboration, which has been touched on already. The Committee has been given some facts and figures about the UK-India Education and Research Initiative, which is talking about developing 50 new collaborative research projects, saying, at the moment, I think, 40 new UK award programmes delivered collaboratively in India, 300 additional Indian research students, postdoctoral researchers and staff will have worked in the UK, and a target of 2,000 Indian research students completing research degrees in the UK through collaborative delivery. I would like Professor Robinson to comment on the specifics of that sort of model for China, but I wonder if any of the rest of you has any views as to how that particular model is shaping up, and how useful it is as a model perhaps for partnership and collaboration with other countries?

Mr Davidson: As you know, the British Council is managing this scheme on behalf of the partners. Inevitably, perhaps, I would see it as a very

successful model. We have already established 30 research agreements, six major ones and about 24 minor ones. I think perhaps more to the point than the numbers is the impact which undoubtedly it has had, in terms of the sense in India of the UK being interested in and committed to Indian research, the idea that the UK collaboration is not simply one way-"Give us your students; come and do your research here"-but that we are interested in the development of research capacity and capability in India and recognise the quality of the research which has been done there. I think that has made a significant shift, inevitably it is uninflatable, in perception of the UK and the UK's interest in India. Again, anecdotally, we have been approached by two other countries, most notably by Pakistan, to recreate similar schemes for them.

Q629 Mr Marsden: Professor Robinson, if we talk about India, and Pakistan perhaps to a slightly lesser degree, we are dealing there with countries and cultures with which, for good or ill, this country has had a very intimate relationship over a 200-year period, where the academic structures, the educational structures, are much closer to the UK's traditional structures than a country like China, for example. Would a similar sort of research partnership initiative work between the UK and China, and, perhaps the trickier question, when you have a country like China, which historically has not had a culture of open academic inquiry in the way that we have had, is that an insuperable barrier to the construction of something similar to what the British Council now are overseeing with India?

Professor Robinson: First of all, I would like to say, China is not the only country which has not had an open academic system. As I go to Pakistan tomorrow, I am very aware of the constraints on my work there. I think the models are good and have got potential in many contexts, so I see no reason why some version of these models would not work in China. The difference is the past historical relationship, I guess, with India and with Pakistan, and that may play a role. China has got a very strong government policy to develop research. The Chinese Government is investing in research and so it is very strongly policy-driven; so, again, that is a favourable environment. I guess, on the openness, it depends very much on the subject areas you are talking about. We think, for many technology, scienceoriented programmes, for management, business practices, languages, though that is maybe not of so much interest, for many areas of research I do not think there would be too many problems, though, of course, like other countries, there is a big bureaucracy to work through in getting some of these things implemented.

Mr Davidson: My own experience of China would be that I think many of these schemes would work extremely well there, and indeed in the past there have been schemes linking institutions together, including for joint degrees as well as joint research. On the question of openness, one issue which one always has to bear in mind is about the transfer of

data, and certainly there are problems with China, particularly in some of the social sciences areas, about transfer of data, if you are going to be involved in joint research. There are particular areas where there are some complexities.

Chairman: We are going to move on: but there is a bit of me that thinks we are not using your knowledge as well as we could. You know our topic for this; this is a major inquiry into higher education, a sustainable university, and what I want us to get out of this next bit is much more a focus which we started to get, some of you were getting towards it, because probably we were asking you the wrong questions, how sustainable is it? Some of you were getting near it when you were saying "But it's all about international competition: if the Germans are putting all the money in five universities, what happens to the rest?" This is what we are after, what is the kind of world we are living in, in higher education, now, and what is this international market doing; is it for good or for ill or are there real dangers, or should we be bouncing back and investing far more in whatever? Can we have that frame a bit more, from colleagues and in terms of the answers: Paul?

Q630 Paul Holmes: There always used to be a view that overseas students would study here, go back to their country and be an ambassador for Britain, because they would rise up the ranks of business and government and journalism and they would have fond memories of having studied in the UK and that would benefit us. Was that ever true and is it true now?

Professor Brown: I can give you an answer of sorts, on current research with these companies. Overseas experience is important, if you get the linguistic experiences and the social and cultural experiences, because that is what they are looking for in international companies. The problem is, if you stay at home, you might even go to an elite university but you do not have that range of experience that they are looking for; that is why a lot of the élite in China and India, and elsewhere, will still want to come to the US and to the UK. There is some evidence now, and this is one of the things we need to think about also, that, of course, some of the Indian companies and the Chinese companies are becoming multinationals in their own right and they are looking to recruit, and, of course, because there are linguistic and cultural differences between Europe and Asia, they are likely to recruit from their own élite institutions. We begin to see a slight change, where there are better job opportunities now within India and China, and especially the élite institutions in India, if you can get in one you will go in there. The Indian institutes of management and technology are the best in the world, they are more difficult to get into than Harvard; so if you get a chance to go you will go there and you might well end up then working for a company which has become multinational, like Infosys, or something of that nature. I think there are the beginnings of change. Going back to the general points, it seems to

me that the pace of change was so rapid that our knowledge at the moment, and all the assumptions with which we are operating, about higher education, jobs and rewards, I think is fundamentally flawed. I think we need to go back and look at this in much more detail and not assume simply that we understand what globalisation is. The basic model we operate with is this view that they are, if you like, 'head and body' nations, that the economy develops in an evolutionary way, you go through industrial to post-industrial development, it takes a very long time to develop good universities and to expand those universities, and therefore it will take a long time for India and China to catch up. We are the head nations in the developed economies and most of the high-skill, high-wage work will stay here, or in America, and our competitors, fundamentally, in what we see as 'knowledge wars' are within Europe and North America or Japan. I think that is fundamentally flawed. I think that does not understand whatsoever what is going on in places like China and India particularly. The pace of development is extraordinary: when you think that now China has more people in higher education than the US. China has 20 million students; the US is a bit below that.

Q631 Chairman: That is an accurate figure, is it? *Professor Brown:* It is from one of their senior civil servants.

Q632 Chairman: From our briefing, the Chinese are building a university a week; that sounds really strange to me?

Professor Brown: I think that is an exaggeration. One concrete example I can give you, and I do not know where you are going to in China but I suggest you go to Guangzhou, which is Canton, and there you will find, I think it is called, the University City; this is just on the outskirts of Guangzhou. There was nothing there in 2001. The regional authorities were concerned about the state of higher education, they thought they needed rapidly to increase their resources, primarily it was agricultural land, so they built 10 universities on this site; there was nothing there in 2001. In 2005 there were 80,000 students and that will increase next year to 120,000 students. I did not believe it, so I went there. You take the highspeed, underground tube, where the stations are like Westminster, one of the few which is built like that, and it is 'state of the art' buildings. They have done that in five years. When you combine that kind of knowledge, the largest training institute in the world, I think, is Infosys, near Bangalore, which can train 15,000 people at any one time, when you put this kind of information together with talking to the multinationals, which are themselves, if you like, denationalising their training and their skill formation, and previously they would go into a country, where it would be the home base, and basically they worked with what they had got, they knew there was a national system, but as they have become more globalised themselves, of course, they are having to think more strategically about what they put, where, and the greater flexibility they have to combine knowledge bases in Britain and Asia and elsewhere means they can do things differently. One of the things they can do differently, of course, is that they can get innovation at a much cheaper price. We are not competing just on skills, we are competing on price, and we are competing on price further-andfurther up the skills and knowledge chain. It seems to me that what we need to be studying is precisely what that process is, how extensive it is and what the implications are then for British higher education and for our students and for our competition strategy, because if we do not we are going to be finding answers to the wrong questions.

Q633 Paul Holmes: Phillip, effectively you are saying that the old view of overseas students being the ambassadors for Britain is just totally out of date. Martin, the British Council have said: "Higher education has the potential to make a major contribution to the Government's international strategic priorities. It plays a very significant role in the UK's cultural and diplomatic relationships with other countries." Which view is correct, the British Council's or Phillip's?

Mr Davidson: The British Council's, of course. I do not think there is any question whatsoever that in the past the opportunity for students to study in the UK and return to their own countries has been a very substantial and significant component of the longterm relationship which they create, whether it is commercial or, if they move into other areas of work, political or economic relationships with this country. You have merely to take China as a case in point, where the relationships built within an academic environment are relationships which last throughout a lifetime and are regarded as relationships which can be drawn upon. Clearly it would be foolish for us, as a nation, simply to regard that as something which is going to continue, because the flows of students in the past largely have been élite. The environment we are moving into is where there is a mass flow of students, a mass flow of knowledge, and we have to engage in that. As I said earlier on. I do not think any longer we can see ourselves as a domestic higher education system, isolated from the rest of the world. Like it or not, we have become part of an international flow of students, and you have only to look at some of the numbers, 74% of research students in finance are from overseas, 63% in electronic engineering, 56% in architectural building and planning. A large proportion of our research base is populated by flows of foreign students, our own students are moving overseas as well, while not perhaps at the undergraduate level, certainly at the postgraduate, and at the post-experience level British academics are working overseas. We are part of this global movement now.

Q634 Chairman: We may be part of the global movement but is it dangerous to our British higher education, or is it just a question of taking on large numbers of foreign students just to balance the

books, not about the integrity or, something that Phillip said earlier, the public good? Is this the way to death and destruction or going to hell in a handcart, just by following this market willy-nilly? Mr Davidson: I would argue that institutions have not simply followed the trend. It is part of the environment within which all advanced nations and nations seeking to create advanced education systems for themselves are going. Singapore, Malaysia, China, India are all making substantial shifts of their education system into an international environment. It increases the competition for us. The number of countries where actually you can now, in Europe, study in English, so that those education systems can take part in this flow of students, is enormous: France, Germany, all the Scandinavian countries, The Netherlands, all are now offering degree courses in English, in order to attract foreign students and to take part in this international flow. To an extent, it is the environment where we are. I suppose one may regret it. I am not sure one should regret it, but actually it is the environment in which we are working now.

Q635 Chairman: We heard Phillip saying we should be concentrating and make all our universities as good as possibly they can be, to train our own people to the relevant levels to compete globally. Is that what you were saying, Phillip?

Professor Brown: I think, more and more, we have got to stop thinking that we are going to be the winners all the time; basically, more of these research jobs now are going to go to Asia. I think the thing that we have to do, more than anything else, is develop the links, international links, with other high-rated universities and research institutes so that we will get some of this work. It is highly likely that the leading corporations will not be putting all their eggs in one basket, they will be spreading a lot of this work and development around and we have to get a slice of that action. I think there is no doubt about it, of course, we need to train up our students as well as we possibly can; now they need to do that in an environment which is not monocultural. The sooner we get away from class, middle-class, boys and girls, from the South East and elsewhere, the better. It seems to me, it is not simply the question "Is this class full of Chinese students?" but "Is the class full of white, middle-class, British students?" It seems to me, it is about the social mix, is it not? It is about how you get a mix of cultural experience, and adult learners as well; how you combine them so you improve the quality of the education for them to be able to have some kind of understanding of the world beyond London, or Cardiff, or wherever it might be; that seems to be absolutely crucial. If you have not got that kind of cultural understanding then you are not going to get very far in the way in which things seem to be going today.

Professor Brennan: To echo that point, in terms of UK students, part of a high quality, higher education experience needs to be an international experience, in some sense of that. That does not mean necessarily being mobile or studying

somewhere else, it is to do with what is going on in your own campus, and international students are part of that, as is the staffing profile, as is the overall activity of the university. Just a model which interested me, which I would share with the Committee, I had lunch, a few months ago, with a former vice chancellor of a British university, who has now been hired as a consultant to the Technical University of Kuala Lumpur. The Technical University of Kuala Lumpur is opening campuses simultaneously in London, New York, Beijing, and I think there is a fourth one as well as the Kuala Lumpur home. What I found quite interesting about this model was that a requirement of studying at this multinational university is that you divide your time between two of the campuses. To me, that is reflecting a model of internationalism which I found quite interesting; and these were quite substantial ambitions, they were talking about a campus for 4,000 or 5,000 students in the UK. Where those students come from is another question; they may be competing for the home UK market, which would be an interesting one.

Q636 Paul Holmes: Bernadette, from your point of view, you work with a lot of overseas students who come to Nottingham, you work inside Pakistan and China, are there two different goals here, the mass volume of business and science students and the more rarefied world of people who are going to go into government and journalism, for example, where the old idea of the ambassadors comes from?

Professor Robinson: I think the old idea of ambassadors is changing, and partly because now many people study in more than one country, so you find, in China, they do not come just to the UK, the same people go also to Malaysia or Korea or Japan even and they are getting experience of more than one country, Australia as well is very popular. The idea that they go to just one country and develop an allegiance to that country I do not think is true any longer, but I think it is true that, having worked with students, lifelong contacts develop with them and a relationship which you can use for other things as well. I would like just to throw in a couple of snippets; one is, nobody has mentioned the language issue and the students who come to the UK and get a PhD are coming and getting it often in a second language. They are then competing sometimes with students from the UK for the same jobs. Our students have a declining language competence and I think, unlike other governments, of course I should except the recent initiatives in the UK, many other countries have been promoting second, even third, language development. In China you cannot get a degree unless you pass an English examination, at any university, and we seem to be going in the other direction, recent initiatives excepted, so that we are producing graduates who, when their CVs are put together, will lose out because they are not as well qualified as some of their foreign competitors in the international market. The other snippet I would like to throw in is about research. There is growing research capacity in Asia, which I think will be very

challenging for the UK. If we look at US research investment, for instance, in recent years that has increased in China by 25% a year; in Europe, US research investment has increased by only 8% a year, so we have a declining share of investment in research from the US, which would reflect our perception of the research here. There is growing capacity elsewhere.

Q637 Paul Holmes: Is that 8% of a much larger starting-point, as opposed to 25% of a small base? *Professor Robinson:* I have not got the figures. I can give you the reference to the figures behind that. I think what it is indicating is a judgment about where the future lies and it is not in European research and American research, this is just China, there is also investment in other Asian countries as well.

Q638 Paul Holmes: Thinking of the concept that people talk about now, of a global citizen, if we look back in 20 years' time will the UK have lost out on that, because, on the one hand, the global citizens are this massive tide of expanding institutions overseas and, on the other hand, we have got an increasingly insular and non-linguistically able, like me, graduates in the UK?

Professor Robinson: It is an interesting question. I think another snippet is the EU's Innovation Scoreboard, where it compares EU, US and Japan on 26 indicators, and the EU comes much lower than US or Japan. Ján Figel', the Commissioner for Education and Training in the EU, estimated that it would take the EU 50 years to catch up with US innovation, yet innovation is one of the things which will determine the future of economies and education and the whole well-being of countries. I think that is a very interesting thing to look at, so looking not just at courses or programmes but the whole position in relation to the education system that research is producing by comparison with other countries I think is a big question which needs more explanation.

Q639 Paul Holmes: In a world of global citizens, in 20 years' time we are going to be the country bumpkins, are we?

Professor Brown: Our greatest strength is the English language; without that we would be in big trouble, I think, but with it we have got a chance. If you think about the Internet, and such things, and you talk to these companies, and what have you, the language is absolutely crucial. The relationship between language and culture, of course, is the interesting one. I think probably we could get away with our poor language education, but if we do not get those broader cultural experiences we really will be the country bumpkin.

Q640 Mr Pelling: Thank you very much, Chairman, for allowing me to be extemporary and off the beaten track of the questions, and also to say my daughter is studying currently at a university in Japan, so I think she is part of these flows of people backwards and forwards. I was very taken by the figure of the

72% of foreign nationals you said are doing finance research, positions, as it were, within our education. It is very concerning, I would say, that when finance is such a big part of the UK economy these days such a small percentage of UK students is taking up those places. Are they at some kind of disadvantage, in terms of taking up those places; is there something that employers should be doing to encourage more UK citizens to be pursuing the route to finance through taking up research positions? Is it something currently that is wrong with us that it is such a small percentage? It strikes me that if employers were to put a very strong emphasis, as I suspect they do in the City, in terms of taking people away who are very highly qualified, the City of London would become even more international in its approach and the opportunities for UK students to take advantage of that very strong, wealthcreating part of the economy will be further lost?

Mr Davidson: One always has to treat such statistics with a degree of care, because what we do not know is the number of new courses which have been started because of the students wanting to come here to study; in some sense, a very obvious place for people to come and study finance is the UK. It may well be actually that the capacity and opportunity for British students has expanded because of the flow of foreign students into there. I do not know the answer to that. What is clear, it seems to me, is that the opportunity for British students, by studying here, being given an international experience simply because of the flow of students in and out is very, very important. If they are not going to go and study elsewhere then they have got to get that experience somewhere if they are going to be competitive within the broader world. I agree absolutely with the issue around language though. While, of course, it is true that English language is a competitive advantage for British students, being monolingual is a huge disadvantage and there is very sound research which indicates the sheer disadvantage which students are suffering now from not being able to speak more than one language. That is equally true in finance. Again, I do not have the numbers to hand, but you just have to look at the numbers of foreign graduates now working within the City; what advantage are they bringing, it is a broader international perspective, a broader cultural perspective and a wider range of language as well as other competence that they bring in, and our students have got to be able to match that.

Professor Brown: It is the language of money which is the problem. Basically what happens is, after you have done your degree for three years, you have gone to a good university, you get snapped up by City firms offering you large amounts of money, so why would you bother going on to do a Master's degree or research in that field; you would not, so you go overseas to recruit in. I think that is the primary problem. If the City were not so buoyant you would get more people going into the research area.

Q641 Mr Marsden: Some of the things that we have just heard might render this question a little bit narrow-minded or redundant, but we have had an

enormous amount of discussion, as witnesses will be aware, and this Committee has just done a major inquiry into the whole issue of citizenship education and in that we touched very briefly on citizenship education in universities. If we are talking about the ambassador role, however changed it is, do British universities need to be looking more specifically at how they communicate some of the values of British society in their courses? I do not mean a sort of "These are the top 10 British values that you might all want to come and imbibe during your three years in Britain." I am talking about slightly broader issues, relating back to one of the things that we talked about earlier, in terms of academic inquiry.

Martin, I do not know whether you would like to comment on that initially, and perhaps Bernadette, from your experience?

Mr Davidson: I suppose my starting-point would be that values almost inevitably inform the nature of the study, the nature of the course, the way in which you both create and then run courses, so somehow distinguishing yourself as an institution from the values which inform your society, which go into your make-up, seems to me to be probably a false premise.

Q642 Mr Marsden: It is a bit like passive smoking, when you are forced to imbibe it by the nature of the forces there?

Mr Davidson: I think there is an aspect which may be allowed.

Q643 Mr Marsden: Perhaps that was not the right allusion, but you know what I mean?

Mr Davidson: Perhaps not the right one. I guess the question which worries me more is the extent to which the financial imperatives of bringing in more and more students may drive institutions into poor practices, weaker recruitment standards, weaker academic standards, and I think this is an issue which a lot of institutions are very aware of, the need to maintain those standards. In essence, in a globally competitive market, it is about institutions hanging together, because if you do not hang together you hang separately.

Q644 Mr Marsden: Bernadette, is it Britishness, however nebulously defined, which has an attraction for students who come here, or is it simply the hard nuts and bolts of the way in which they get qualifications?

Professor Robinson: I think utilitarian values rate very high in the decisions students make to come here; they see it as a route to a good job, and I think that is the primary value. However, I think when they are here the areas where maybe some of the biggest changes take place, I would not call those things directly British, but things like arguments which are based on evidence, learning to use arguments which are based on evidence rather than ideology, learning to examine a problem from different perspectives instead of making

assumptions about the nature of a problem, I think these are some of the big changes that take place for students.

Q645 Mr Marsden: Challenging academics? I was always very struck when, in my previous incarnation, I used to deal with German academics, German historians; whenever they stood up and delivered a paper you had to wait for about four paragraphs of indebtedness to their professors over the past 30 years before you got to the argument, whereas British academics tend to tear apart their supervisor in the first paragraph. Is that an aspect of this as well?

Professor Robinson: Yes. I do not know if John remembers a famous Open University course, which was produced, called 'That is Europe'. Each part of the course was written by a team from a different European country, and the discourse conventions were so different it was almost impossible to produce a coherent course, and the preamble from some countries was so long there was no time left for actually developing an argument. I think the nature of discourse and argument is different and people can learn different conventions and learn to understand the assumptions behind their own conventions, in doing this. I think this is one of the values of intercultural groups.

Q646 Chairman: Why should it be, listening to some of the things that you, not just you, Bernadette, but that some of you were saying, it seems always that we are hell bent on a different kind of university ethos. It is all about being, okay, better linguists, better competitors, adding more value, being able to earn more money perhaps. I always tell the story about walking across the hallowed turf of one of the most prestigious Oxford Colleges and asking the Master whether any of his students actually went into teaching, and he said, "No, no; they all go into the City." I did wonder why we were educating those people to a high level just to go into the City. Is not there a kind of rat race you are describing that we should be part of, is it not encouraged by university students coming from overseas? Bernadette says, "It's only about because they want to get a better job and earn more money;" is not that actually getting away from some of the values that we thought higher education was about? Is it not about other things? Should not there be something in a university which says something like giving back to the society which produced it, says something about going to be a town planner or a social worker; not going to the City of London? Is not that all disappearing because of this thing you seem to applaud, Phillip?

Professor Brown: I certainly do not applaud it and I know it is a huge problem for us, but what I am saying is that we have to begin to understand the problem properly and I do not think we have spent enough time understanding what the issues really are. This issue of people going to the City and not using their knowledge, it is going back to the public good kind of argument, is it not, about the university? The thing is that the labour market has

become so competitive that many people seem to be in higher education primarily as acquisitors. Basically, they want a credential and they want to get a credential that will give them as much value as possible within that job market, and they will trade for whatever they can get. That is a reflection of our broader culture. It is no good us just blaming the universities for all of this, it reflects the society in which we live. We are so driven by materialism in this kind of sense that we have forgotten these broader kinds of values that we have. The students themselves, I think, have a problem, and it is this: how do you behave in an alternative way; what are the alternatives? If there is this positional competition then not to play it means you have no chance of getting a decent career or a decent job, you could argue; maybe you still might be able to get into teaching, or something. I said it as a joke, of course. There are many areas, when you are talking about the upper end, where they believe there is competition and which they have to be part of. For example, with our own children, what advice do you give them these days: what do you say. "Don't worry about that kind of positional competition, about getting A-stars at A level, it doesn't really matter, because what we want you to be is a really good human being and we want you to contribute to society"? That is a problem that we have got.

Chairman: There is a difference between going into certain professions and with all the wonderful jobs in local government, town planning, in the Arts Council, let alone the British Council, all sorts of jobs that people do which add value and achieve wonderful things.

Q647 Mr Pelling: Some people get a lot of money? *Professor Brown:* These are very important jobs and we should encourage more people to do them; but in terms of describing my understanding of what I think is going on then I think there is a broader problem.

Professor Brennan: May I give some counter-data, to follow up, this is based on two large surveys of UK graduates three or four years after they had been in higher education. This was a question they were asked about what benefits they felt they had got from higher education. Round about 50% of them thought they had got a very good job, soon after higher education. This was much lower than the European average. However, 60-odd, 70% felt that their long-term career prospects had been enhanced, but nearly 90% reckoned that they had developed personally, as individuals, the personal development and change from their higher education experience had been extremely high. That was perceived to be the biggest impact and one that they valued most, and, in fact, one where actually the UK graduates were reporting probably amongst the highest in these international studies. I think that we do have to be careful not necessarily to impute values to students, and whilst I think there is quite a lot of research around which is saying that today's students are very instrumental, I do not think necessarily that precludes attaching a lot of importance to a lot of other values as well. One of the things, while I am speaking, I might just mention, because it is coming back to, I think, the Britishness and the citizenship, is the social and cultural elements of the student experience and I think others have mentioned the international nature of this. I would remark though that I think on some campuses the only students who are around to have a social and cultural experience are the international ones, because all the home students are busily working down at the supermarket to pay their fees. I think the extent to which the student experience is changing now is another aspect we have to take account of. **Chairman:** David, who has been extremely patient, will take us on to our last section, on mobility.

Q648 Mr Chaytor: Can I pursue this question of the apparently limited interest of UK students in studying abroad and ask specifically what are Cardiff University and Nottingham University doing about this? If we assume it is a good thing that the HE experience is internationalised, is there positive action from Cardiff and Nottingham? *Professor Brown:* I think Nottingham seems to be very good at it and I think we are really bad at it. We do not have a lot of overseas students. I think it is about 10, 12%, and I am not sure we want to increase that.

Q649 Chairman: You have a lot of English people? *Professor Brown:* We have a lot of English people in Cardiff, that is right, we do have, from the South East particularly. I think there is a big issue about how we address that international marketplace and I think now we are trying to do this.

Q650 Mr Chaytor: I am sorry, maybe we are talking at cross-purposes. I am looking at the question of British students studying abroad?

Professor Brown: I am sorry; it is round the other way. It is part of their experience. I cannot talk about the University generally but I can talk about our School, which is that we are desperately trying to go out there and sign agreements with other, and this is quite important, of course, in terms of understanding this discussion, what we would regard as leading universities elsewhere for the exchange of students. We have the same problem as everybody else, which is that students come to us from overseas but getting our students to go overseas is a problem, and I think it goes back to John's point.

Q651 Mr Chaytor: What is the problem for your students; what is the root cause of this?

Professor Brown: I think part of the problem is the three-year degree, that it does not give them much time.

Q652 Mr Chaytor: They have got three summer vacations to get off their backsides and go and visit some interesting European places?

Professor Brown: You can do that, but, of course, if you have got student fees to pay . . .

Q653 Mr Chaytor: Which they do not have to now, because it is deferred?

Professor Brown: They have still got to live, and I think they are in debt over time.

Q654 Mr Chaytor: They have loans to help them live?

Professor Brown: Most students have big problems, which is why they are working during their university studies to try to keep going during their three years. If you say, "Okay, we're going to extend it to four years, because we think it's a really good idea for you to go off somewhere else," I think it is a really good idea. I think virtually everybody should have overseas experience, or at least some kind of sandwich element, with a degree, but actually implementing that is extremely difficult, and there is the language issue, that unless it is the US or Australia, or somewhere, they have not got the language skills to be able to take up the opportunity.

Q655 Mr Chaytor: The language problem is historic and that is not going to be changed overnight until the changes in the primary curriculum filter through in 10 years or more. On the other issue, the financial issue, is there a stream of funding within Cardiff University which is set aside to support students going abroad?

Professor Brown: No, we have not got the resources to do that; maybe we could give them $\pounds 50$, or something. It is not going to help; it is a really big problem, I think.

Q656 Chairman: Why is not the British Council helping?

Mr Davidson: The Erasmus scheme, of course, we do administer now, and the Erasmus scheme does provide assistance.

Q657 Mr Chaytor: How many students a year go abroad with Erasmus?

Mr Davidson: Seven thousand; that was in 2005, I think, which is the latest figure.

Q658 Mr Chaytor: Do you have any figures, Martin, of the total number of UK students going abroad as part of their course, or would anybody have those figures?

Mr Davidson: I am not aware of any; whatever it is is anecdotal. What we are seeing is a decline. We have got figures on declining numbers of students taking up Erasmus places, so it has dropped from 12,000 to 7,000 in 10 years.

Q659 Mr Chaytor: Is that a reduction in the overall programme?

Mr Davidson: No, that is a reduction in British student take-up.

Q660 Mr Chaytor: So there are vacancies on the Erasmus programme?

Mr Davidson: There are vacancies available and money not spent on it. On taking over the programme, we have taken on a commitment to increase it to 43,000 students by 2012, which does not fill me with enthusiasm, I have to say; but the barriers are real. We did some research in 2003 with HEFCE and the barriers were language, finance and credit transfer. Language we have mentioned already, the finance has been mentioned and the other issue is the universities' preparedness to accept credit transfer from experience elsewhere, and, to date, the universities have shown themselves remarkably reluctant to accept credit transfer.

Q661 Chairman: Was not Burgess involved? On the one hand, we have had credit transfer with Burgess looking at it, is not there a Burgess report, domestically, in the UK universities? On the other hand, we have got the Bologna Process; has not that helped at all, that this may be a lesson? You have got rid of some of the Chevening scholarships, have you not; they have declined in number?

Mr Davidson: I am sorry, but Chevening is inward rather than outward.

Q662 Chairman: There is only one way?

Mr Davidson: Yes. On Erasmus; this is about average flow. They are two-way but each nation has an Erasmus agent who manages the flow out from their country into other countries. The flow into the UK, on Erasmus, is about double the outward flow, but that is administered by the national agencies.

Q663 Mr Chaytor: Can I ask Bernadette about Nottingham. Does the existence of your campus in China have any advantage for home students in Nottingham?

Professor Robinson: It does, but, as I said, I am not here to speak on behalf of Nottingham, but I can get that information and send it, about the mobility of students. I think Nottingham is fairly active; how successful it is I would not be able to say, in terms of numbers.

Q664 Mr Chaytor: Could I ask again, the growth of the decision by some European universities to offer degree programmes taught in English presumably is directed at Asian students to divert them from the UK, but is this likely to have an advantage for UK students, in encouraging them to study in Europe, or is that just not an issue at all? Is it in any way going to be attractive for UK students to, say, take a degree in English in The Netherlands or Germany as against here?

Professor Brennan: My perception is that this is something which is happening predominantly at the postgraduate level and the take-up at postgraduate level of UK students is still relatively low compared with the European norm. If we did see a movement and a growth at the taught Master's level, in other words, Stage 2 Bologna, that could be, arguably, the point at which this sort of mobility could start taking off, in the sense that the provision is certainly growing, as you say, in quite a lot of European

countries, although again there is still this, I think, central problem which has already been referred to: is the Master's stage a one-year or a two-year programme?

Q665 Mr Chaytor: Does this have any impact; the question of the need to internationalise the undergraduate and postgraduate programmes, does it have any impact on the one-year Master's problem, because if there is a concern that the one-year UK Master's is under threat because of the Bologna Process, would not building onto that some international component deal with this problem of credits and transfer? Has anyone examined that?

Professor Brennan: I do not know. My view is that there are question-marks about the sustainability of one-year Master's courses in the long run, and that would be quite an interesting way of extending it.

Q666 Mr Chaytor: Could I pursue with Martin the question of credit transfer, the transferability of the credits. Do you think that the way to improve the situation is largely through bilateral arrangements between individual universities, or do you think it can only be improved with top-down initiatives from government?

Mr Davidson: I think that the scale of the problem is such that probably it needs a multifaceted approach across the board. Certainly it is the case that individual universities, I think, need to do more to encourage student flows. The whole of the recruitment process when students actually go into university, the opportunity needs to be part of their consideration. I think that we need to begin to build in school, at sixth form level, a further exploration of opportunities through mobility. I think also it does require a greater top-down approach, which clearly indicates the advantage which this sort of mobility programme can deliver. I think it is quite important to recognise that the existing students, those 7,000 under Erasmus, which are the ones that we have data for, are almost exclusively from pre-1992 universities, in other words, the old research universities, and they are very, very predominantly from a small ethnic section, in other words, white, middle-class students, who are taking it up. There is virtually no ethnic minority take-up of the opportunity, there is very limited take-up from the new universities, and all that, I think, does indicate some potentially quite important social issues about the mobility of British students as well.

Q667 Mr Chaytor: Erasmus provides financial support to students who go abroad? *Mr Davidson:* It does, yes.

Q668 Mr Chaytor: The blockage here may be to do with language but it is not necessarily to do with financial support; but is it not an issue for the British Council in terms of marketing of the Erasmus programme if the take-up is confined largely to pre-1992 universities?

Mr Davidson: It is. I would say, in defence of my institution, we took over the marketing only in January so we have got a bit of a way to go yet; but, yes, there is an issue about marketing. There is also a slight tendency to blame the students for not wanting to go overseas. I think we have to start from the point that students make pretty coherent decisions about where their future best lies, and if it is not to have an overseas experience at the undergraduate level then I think we ought to be asking the question why it is not of value to them.

Q669 Chairman: Where is the leadership in the sector? Where would you expect the leadership to come from in the sector?

Mr Davidson: I think the leadership is going to have to come from two areas. Clearly, there is a responsibility on my own organisation; if we believe in international mobility, which we do, then we have got to start doing much more to publicise it. I think the institutions themselves have got to start seeing value in that and that means accepting the value of the overseas experience. Whether or not it is a university experience or some other experience, work attachment, for example, a number of universities are beginning to look at that as an opportunity as well, which might take up the issue about being able to do something during long summer vacations, etc. Also I think there is an issue for government, at the centre, also to start demonstrating the value which is attached to this sort of experience for students.

Q670 Mr Chaytor: Is Erasmus the only programme that would provide financial support for students to study abroad as part of an undergraduate degree? *Mr Davidson:* As far as I am aware, it is the only coherent programme. Individual institutions may have their individual programmes. There are other European mobility programmes at different levels but not at the undergraduate level.

Q671 Mr Chaytor: Erasmus is for an academic year only?

Mr Davidson: It is for a variety of different periods; they are small periods of time.

Q672 Chairman: You can go for a month or a term? *Mr Davidson:* Yes. You can go for a year, if it is appropriate, yes.

Q673 Chairman: John, why has not the Open University rallied the troops on this and said "This is all disgraceful; the carbon footprint of all this international travel for study is awful"? Could not a lot of this be done by distance learning? Research, I think we were getting there, but having a relative who is an academic, a young academic, describing how in a short time, 10 years, the nature of the research has been transformed by the accessibility, you do not have to go to the wonderful institutions with great libraries any longer, you can actually sit at your PC and get the original documentation on your

PC, so is not collaboration worldwide, in terms of research, so much more possible? That is the future, is it not; is it, Phil, is it, John?

Professor Brennan: As with other colleagues, I could not speak particularly for my University. Essentially, I think I would agree with the proposition that the possibilities of international contacts, exchanges, via the Internet, without leaving home, are huge, including the Open University is doing a lot, it has a huge number of international students and, of course, there are all sorts of potential mixed-mode experiences. We are talking about a time of a year abroad; if you can link a period abroad with some kind of e-learning experience which is internationalised, simply being abroad for a week actually might do it. I think that technology gives us a lot of new models.

Chairman: Someone going back to brush up their rather poor French and seeing the quality of the technology you can have to help you learn, on your own, I am just amazed how the world has changed. Should we not have a new University of Sangatte, not very far away, intensively teaching language to English students who have not learned any languages yet?

Mr Pelling: Some people might think that Sangatte is too close.

Q674 Chairman: The world has changed. What is the British Council doing to lobby, to turn this around, and say, "We could actually do something about the proficiency in languages in this country"? I go to your places in foreign countries and it is wonderful, you have got micro universities there, teaching people to learn English. You have all those techniques, why do you not turn them round, on this country; you are not allowed to?

Mr Davidson: Probably one or two people would object a little bit if we did. I think that what we are doing really is looking at how we can use IT techniques, virtual learning techniques, to widen the opportunity for students, both in this country and in others, principally, I have to say, at the school level rather than at university; but the sheer number of school links and other links which are now taking place, across multiple countries, is enormous and something which I think we should continue to grow.

Q675 Chairman: The OU was restricted on foreign language teaching, was it not, at one stage?

Professor Brennan: I am not sure; we do it now, certainly.

Q676 Chairman: Do you? I thought, in the beginning, you were frightened that you would be seen as unfair competition with the private sector: no?

Professor Brennan: I am sorry, I am not aware of that.

Q677 Chairman: We have come to the end of our session. Is there anything you have not been asked or would like to say before we close this session: what have we missed?

Professor Brown: There is just one thing, and thank you for giving the opportunity to broaden out the range of things that we have discussed, it has been very helpful, for me anyway, at least I have been able to say what I wanted to say, which is good. There is one additional comment I would like to make. We have not talked at all about differences in the graduate experience within the UK. One of the things which struck us very much from our research is the ways in which these leading companies, you would think that their big issue would be the wealth of talent, so if you look at the massive expansion of higher education around the world, that is their big concern, what are they going to do with all this talent, yet do they talk about that; no, they talk about the 'war for talent'. In other words, what they talk about is "how we recruit the right people for our organisations." Very often we are talking then about the top universities, no longer just in the UK but globally. They are internationally benchmarking universities now, and so, for example, if you are an international company it is likely that the UK would have probably only about four or five universities it would regard as world-class for its purposes. If you are in one of those universities then your chances of doing pretty well are pretty good; so for the top 10 or 15% of graduates in the UK I think their prospects are okay. What worries me a great deal is the rest; because the more people you put into higher education, whether you like it or not, going into higher education comes with a set of expectations. If you like, it is a psychological contract between the university and the Government, because the Government has pushed this very much; learning is learning, you go to university and you will improve your prospects. What I think is that for large numbers of graduates it is not going to improve their prospects very much, and so I think looking at the differentiation in the graduate experience is very important.

Professor Brennan: I think there is a lot of evidence to suggest that actually it is the prospects of students who go to many new universities that are almost transformed by going to higher education, because if you do not look at the input factors you can misunderstand the output factors. Some of our élite universities are very good at selecting an élite and that élite then is rewarded in the labour market; but, essentially, they were élite when they started and they are going to be the élite when they finish. The movement is actually taking place elsewhere in the sector and it may not be as spectacular, and of course they are not going to get as good jobs as being a member of the élite, but if you ask the question "How has your life been changed by going to university?" I am not sure that you will get the best stories from the élite institutions.

Professor Robinson: Just two points. One is, I think we need to look more at the equation of cost, quality and value for money in relation to international

students, both coming to the UK and on UK courses. The second point I would want to make is that I think there needs to be more exploration of different models of delivering courses for international students, using new technology, using different combinations of in-country, out of country, whatever. I think getting away from the idea, which many universities have, that there is only one kind of recruitment and that is bringing students here. I think the future lies with exploring the diversity of models and using them, not having just a single model, with a single audience, which may vanish, for some institutions, in the short term.

Q678 Chairman: Thank you very much for that. I did think, Phillip, as you were expanding on that last theory of yours, that if you were up in Huddersfield University, in terms of getting people jobs and adding value to their careers, that is just

Huddersfield, of course, but, like a lot of the new universities, we produce a lot of entrepreneurs. If you are blocked, if you have got the talent and you are blocked from getting into the élite professions, it may be that you want to do something a lot more useful than getting into the City.

Professor Brown: I hope you are right.

Chairman: It has been a very good session; can I thank you. Could you see this as a kind of 'hello'? I thought we started to get under the skin of the argument somewhere, as the process is kind of a development one, but now you know who we are and we know who you are can we remain in conversation and communication. As you are going home, wherever it is, if there are things you think you should have said to the Committee, please get in touch; we are here to discuss these issues, this is a very important inquiry for us and we want to get it right. Thank you.

Wednesday 16 May 2007

Members present

Mr Barry Sheerman, in the Chair

Mr David Chaytor Jeff Ennis Helen Jones Fiona Mactaggart Stephen Williams

Memorandum submitted by Research Councils UK (RCUK)

INTRODUCTION

1. Research Councils UK (RCUK) is a strategic partnership that champions the research supported by the eight UK Research Councils. Through RCUK the Research Councils are creating a common framework for research, training and knowledge transfer. Further details are available at www.rcuk.ac.uk.

2. This memorandum is submitted by RCUK and represents our independent views. It does not include or necessarily reflect the views of the Office of Science and Innovation (OSI). RCUK welcomes the opportunity to respond to these inquiries from the House of Commons Education and Skills Committee.⁴⁰

3. This memorandum provides evidence from RCUK in response to both inquires addressing the main topics and questions identified by the Committee, in relation to the Future Sustainability of the Higher Education Sector: purpose, funding and structures and the Bologna Process.

THE FUTURE SUSTAINABILITY OF THE HIGHER EDUCATION SECTOR; PURPOSE, FUNDING AND STRUCTURES

The role of universities over the next 5-10 years

4. The eight Research Councils have a combined budget of £2.6 billion (2006–07) of which the majority is invested in UK universities to support:

- an extensive range of world class research;
- postgraduate training (Masters degrees, PhDs & EngDocs);
- fellowships for researchers at each stage of their careers;
- research infrastructure, including IT, data management, and state of the art equipment;
- knowledge transfer initiatives to encourage the exploitation of research outputs; and
- initiatives to encourage researchers to engage with the general public to raise scientific awareness.

5. The Research Councils estimate that annually their funding supports some 30,000 researchers through research grants, fellowships and studentships, including 15,500 postgraduate research students. Funding decisions are made on the basis of independent, expert peer review. Research funds are awarded to universities in the form of project grants, with funding for postgraduate training being grants to individuals or as block grants to universities.

6. Over the next 5–10 years the Research Councils will individually and collectively continue to invest in a balanced portfolio of activities to contribute to the Government's vision that the UK should be one of the most attractive locations in the world for research and innovation. The Research Councils will play their part in ensuring that the UK is a key knowledge hub in the global economy, with a reputation not only for outstanding scientific and technical discovery, but also a world leader at exploiting that knowledge to deliver benefits for the UK in terms of new goods and services and in terms of better healthcare, better public services, policy making and cultural benefits. The Research Councils, as the largest collective funders of postgraduate research students, have a direct interest in the provision of high quality research training in universities. Although doctoral candidates are students rather than employees in the UK they are also on the first step of a research career and have many distinctive features setting them apart from undergraduates.

⁴⁰ http://www.parliament.uk/parliamentary_committees/education_and_skills_committee/espn031106b.cfm

What do students want from universities?

What should the student experience involve, including for international students?

7. The Research Councils fund postgraduate research degrees (Masters, PhDs and EngDocs), which are an important part of the student provision within universities.

8. In the foreword to "What do PhDs do?"" Sir Gareth Roberts states "Postgraduate study is fundamental to the development of higher level skills and the preparation of people who will engage with the problems of the next generation. The process of achieving a doctorate develops an enquiring mind, problem solving abilities and the ability to assimilate, articulate and defend new ideas. This intensive training equips the students to rise to challenges and be flexible and adaptable; all valuable attributes for today's knowledgebased environment." The Research Councils' experience is that this is what postgraduate students want from their university study, plus relevant training that will enable them to pursue their career choices within the university sector and outside. As such the Research Councils are keen to ensure that postgraduate training fulfils these requirements and have worked with the QAA who have developed a code of practice for the assurance of academic quality and standards in higher education: postgraduate research programmes. This provides a framework for the development of a university's policies and to inform student expectations in an environment that differs from that for undergraduate study. It identifies a comprehensive series of system-wide principles covering matters relating to the management of academic quality and standards in higher education. The code is a statement of good practice that has been endorsed by the higher education community. The code includes precepts about the research environment, clear definition of responsibilities, appropriate supervision and agreement of a student's development needs. The "Joint Skills Statement"" sets out the skills that doctoral research students funded by the Research Councils are expected to develop during their research training, which as well as research skills and techniques includes personal skills, communications skills, team building and networking and career management.

9. The Research Councils jointly fund the UK GRAD Programme, which supports the academic sector to embed personal and professional skills development into research degree programmes (RDP). Both through UK GRAD and other projects, the Research Councils engage with a wide range of stakeholders, including research students and employers and this helps to inform development both of the programme and the wider agenda for researchers' skills.

What do employers want from graduates?

Skills base, applied research, links with industry?

10. The view from the majority of the business community representatives who advise and work with the Research Councils is that what they value about the UK research base is its broad range of expert knowledge and its highly skilled people. In terms of skills there are been a number of helpful recent reports and studies from employer groups including:

- the Leitch Review of Skills (December 2006);
- the Engineering and Technology Board report "Engineering UK: a statistical guide to labour supply and demand in engineering & technology" (November 2005);
- the Association of British Pharmaceutical Industries report "Sustaining the Skills Pipeline in the Pharmaceutical & Biopharmaceutical Industries" (November 2005);
- the Roberts Report "SET for Success" (April 2002).

11. In addition, the recent report from the Council for Industry and Higher Education (CIHE) "International Competitiveness—Businesses working with UK universities" (2006), reflects the views of a range of multinational businesses. This identified that a spirit of inquiry and curiosity, problem solving, constructive questioning and lateral thinking are key skills for graduate and postgraduate recruits.

12. The acquisition of transferable skills plays a major role in future employability and the ability of PhDs to contribute to the economy. Research Councils have been actively supporting the university sector through direct funding: Using these drivers RCUK will continue to promote sharing of practice in skills delivery and embedding of the skills within the PhD thus improving the skills of PhD graduates beyond the substantially increased baseline achieved since 2003. Specifically we will encourage more skills with clearer relevance to academic and non-academic employers by:

- engaging with industry to ensure wider access to entrepreneurship, knowledge transfer and business skills;
- fostering development and delivery of researcher skills such as quantitative methods, public engagement and outreach to schools; and
- the UKGRAD programme. This aspect features as a high priority in our future activity.

13. The UK GRAD programme includes a network of regional hubs which support universities and supervisors in their region to deliver high quality needs-based personal and professional development for researchers. There is also a national programme of courses to support the personal development and teamwork skills of postgraduate researchers as well as events and publications.

14. It is critical that: (a) industry engages with the universities to help define the skills that they require and whether they are satisfied with the outputs and outcomes of research training and that (b) universities address whether they are meeting the needs and expectation of employers. The Research Councils have encouraged connections between these two aspects through: promoting industrial collaboration during research and training through schemes such as (CASE) Collaborative Awards in Science and Engineering, Engineering Doctorate etc. The projects for about 25% of the doctoral candidates with funding from the Research Councils include formal collaboration with companies and organisations with an interest in using the outcomes of their research.

What should the Government and society more broadly, want from HE?

A stable, internationally competitive, HE sector and internationally-competitive research capacity

15. The UK has an international reputation for outstanding scientific and technical discovery. In terms of its research base the UK is internationally excellent and highly productive, and by many measures is second only to the US in terms of the quality of its output. This reputation is built on the UK's R&D capacity—excellent skilled people, state of the art facilities and laboratories and a supportive regulatory and research funding environment. HE plays a major role in providing this capacity.

16. Successive studies have shown that the UK's economic competitiveness is underpinned by a spectrum of research which ranges from what can be termed basic, or curiosity driven research to strategic and user driven research that is directly targeted at specific business need or social and economic issues. Maintaining this spread of investment is essential—speculative and novel research provides the ideas and knowledge on which more applied investments can be made to generate new goods, services or policy or cultural benefits.

17. In a healthy research base the relative importance of different goals and priorities, and the levels of support provided, will ebb and flow over time in response to new knowledge, technological challenges and new strategic economic and social needs. The key to success is to ensure that the UK universities have sufficient agility and incentives to capitalise on new knowledge, technologies and socio-economic priorities, whilst retaining strength and expertise in core areas and those of strategic importance.

18. It is the role of the Research Councils to fund and support a balanced portfolio of research activities in this dynamic environment, working in partnership with other funders including the HEI Funding Councils of England, Wales, Scotland and Northern Ireland, the Technology Strategy Board and the research charities. In so doing, the Research Councils tension a number of research, training and knowledge transfer objectives, including: enabling the very best researchers to pursue innovative research ideas; nurturing new areas of research (particularly in the areas between traditional disciplines); sustaining the incremental progression of knowledge within established areas; stimulating collaborations and partnerships with end users, and maintaining a healthy UK research base with sufficient capacity, expertise and capability across the subject base and in critical areas of national importance. The balance between these goals is informed by expert opinion from the research community, business and government.

19. The Research Councils believe that potentially some of the most exciting research advances occur at the boundaries between disciplines. The UK's capability to undertake interdisciplinary research is dependent on the structure and organisation of the research base, and the availability of suitably skilled individuals with the knowledge and desire to pursue collaborative research. These are challenges for all partners in the research base—Government, universities, the Funding Councils and other funding bodies. For interdisciplinary research to flourish there is a need for those engaged in its support and delivery to think beyond traditional discipline based structures, given the cultural, organisational and communication barriers that these can impose. Research Councils have encouraged this through the establishment of actual and virtual centres and collaborations within and between universities. HEFCE encourages collaboration via its strategic development fund, and universities themselves are increasingly taking up the challenge eg the University of Manchester's Interdisciplinary Biocentre, which has been specifically created to promote interdisciplinary, challenge orientated bioscience and biotechnology—including training researchers to work across disciplinary interfaces.

20. Increasingly globalisation presents not only a challenge for UK business, but for the UK research sector. This challenge manifests itself in a number of areas: the need to train and develop the next cadre of UK researchers; the need to attract the brightest students and academics to study and work in the UK, and collaborate with our best research teams; the need to ensure that UK researchers continue to have access to

cutting edge laboratories and facilities wherever they are located; and the need to develop the UK as a key knowledge hub in the global economy, with a reputation not only for world-class research but also a world leader at turning that knowledge into new products and services.

21. The Research Councils aim to provide university researchers with flexible means to pursue international collaboration with the best researchers across the globe and to encourage the mobility of researchers to and from the UK. This includes the provision of travel grants, networks and workshops grants, and top-up funding as well as co-funding for collaborative projects through existing research funding mechanisms. It is also important for postgraduates, postdocs and researchers at all stages of their careers to be able to pursue opportunities for international collaboration and the Research Councils will continue to invest in these schemes. This includes support for fellowships with specific provision for working overseas, exchange schemes, and co-funding the Dorothy Hodgkin Postgraduate Award Scheme (DHPA). This scheme brings outstanding students from India, China, Hong Kong, South Africa, Brazil, Russia and the developing world to come and study for PhDs in top UK universities.

22. In terms of access to state of the art laboratory facilities and equipment, it is important to recognise that national capabilities are increasingly being replaced by international facilities. This reflects rapid advances in technology development which often drive more complex and expensive facilities which tend to be beyond the scope of any one country to develop. Research too, is being pursued to a greater degree on an international basis, reflecting the nature of global challenges such as climate change and the scale of major endeavours in areas such as particle physics. In this environment it is essential that the UK continues to take a long-term and strategic view of the facilities that UK researchers are likely to need access to and manage the investment of public funds accordingly.

Graduates appropriate for a high-skill economy

23. The role of the Research Councils is to:

- ensure that the best potential researchers are attracted into research careers;
- assist the universities to improve the quality of their research training and improve the employability of early stage researchers;
- increase the attractiveness of research careers by actively promoting improved career development and management of research staff in universities and fostering a culture of continuous enhancement; and
- enhance the international attractiveness of research training in UK HEIs.

24. In delivering this the Research Councils wish to encourage HEIs to embed transferable skills in the PhD thus raising value to employers, and improve career development for their research staff. This helps to address the employer needs for postgraduates with project management, team working skills, communication, and leadership capabilities. To support this aim the Research Councils run collaborative PhD studentship schemes many of which offer training in partnership with business. For example BBSRC supports the biotechnology Young Entrepreneurs Scheme and ESRC, the RDAs and the Scottish Executive fund the University of Cambridge to run courses for graduates on enterprise and entrepreneurship. The Research Councils also continue to encourage HEIs to use some of the money provided to implement the Roberts' Review on SET skills to provide business planning, enterprise, IP management and entrepreneurship skills training for postgraduates and postdocs.

Widening participation, contribution to social mobility

25. Universities have a key role in promoting diversity within the postgraduate student population and the research workforce and the Research Councils are committed to working with them to achieve this, by funding and promoting best practice initiatives, for example.

A much greater level of engagement with schools and engagement in society and democratic debate, and producing active citizens

26. The HE sector has a strong role to play in increasing opportunities for people of all ages and from all sectors of society to engage with science and research. Research Councils believe that public engagement activity helps people to be more aware of the opportunities open to them, and more empowered to take an informed part in the democratic process and the decisions affecting their lives. At the same time, activity of this kind encourages young people, their families, individuals and groups to become more aware of the contributions made to the nation's health, wealth and culture by research and the links between them. Such activity helps secure the supply of those wishing to become involved in higher education and research by enthusing and inspiring people of all ages through engagement with current developments in different subject areas, contemporary research and higher education opportunities.

27. Good quality public engagement should involve specialists listening to, developing their understanding of and interacting with non-specialists. The primary purpose should not be to generate approval or acceptance of the institution, nor to recruit students.

28. The Research Councils would urge the higher education sector to ensure that public engagement is part of their purpose, and to commit to developing this activity across all departments and incorporating public engagement training into staff/researcher development. The Research Councils are working with the sector to tackle some of the barriers to HEI staff participating in public engagement activities. A study co-funded by the Research Councils⁴¹ identified that a research-driven culture—including pressure to publish, attract funding for and building careers on "hard research"—means that public engagement is not always a priority within HEIs.

29. In partnership with the UK funding councils and in association with the Wellcome Trust, Research Councils UK has launched an initiative, "Beacons for Public Engagement",⁴² to address some of these issues by providing support for the recognition and coordination of public engagement activities within HEIs. There are a number of other initiatives led by the Research Councils which support the research community (within the HE sector and beyond) to undertake public engagement activity, and which the Beacons will complement. These include Researchers in Residence, National Science Week Awards, UK GRAD programme, public engagement grant schemes run by individual Research Councils, and public engagement training for researchers.

UNIVERSITY FUNDING

Is the current funding system fit for purpose? Is the purpose clear?

What are the principles on which university funding should be based?

30. The Research Councils strongly support the principle of the dual support funding system for research in UK universities. The implementation of the TRAC methodology and the full economic cost funding (FEC) model has brought greater transparency to the pricing and costing of university research and requires universities to recover, in aggregate, the full economic costs of their activities. As part of this model, the Research Councils have from September 2005 paid 80% of the FEC of the research they fund.

31. In line with the aspirations in the Government's Science and Innovation Investment Framework, Research Councils anticipate moving towards full sustainability early in the next decade, although this will require further increases in the Science Budget beyond 2007–08 if the current volume of research activity is to be maintained.

32. In terms of funding for innovation, the Research Councils support the HEIF as part of the Government's goal of raising UK investment in R&D to 2.5% of GDP by 2014, partly through strengthening links between the science, engineering and technology base, businesses and community interests. Research Councils also have an important role to play in the knowledge transfer and innovation agenda and are focusing on increasing their brokering activities and funding knowledge transfer as well as encouraging business and other user collaboration in the delivery of research. As such, the Councils wish to ensure that the significant funding available through HEIF is deployed to complement Councils activities.

Should research funding be based on selection of "quality"? How should quality be defined and assessed? How might this drive behaviour across the sector?

33. Each year the Research Councils invest around $\pounds 2.3$ billion in excellent research and training supporting the work of tens of thousands of researchers in universities and other research institutions across the UK. This funding gives the best researchers the resources, time and support to pursue their research ideas and helps to train talented graduates and postgraduates who will go on not just to careers in research, but also into business, finance, education and the public sector. The Research Councils fundamentally believe that the allocation of research funding should be based on quality and will continue to employ independent expert peer review for assessing proposals. This system is regarded as an international benchmark of excellence in research funding, and this provides a guarantee of the quality of UK research.

34. In terms of the allocation of QR funding the Research Councils believe that this too should continue to be made on the basis of quality. However, the Councils also believe that whilst having had a positive impact on the HE sector in the 1980s and 1990s the bureaucracy of the RAE has become counterproductive to the challenges facing the research base. As such, the Research Councils welcome the announcement of a new framework for research assessment and funding announced in the Pre-Budget Report (December 2006) and look forward to working with the Funding Councils in developing appropriate metrics that give sufficient encouragement and reward to multidisciplinary research, practice based research, knowledge transfer and economic development activities.

⁴¹ "Survey of factors affecting science communication by scientists and engineers", Royal Society, RCUK and Wellcome Trust, June 2006, available at www.royalsoc.ac.uk under "Our Work/Engaging with the public".

⁴² http://www.rcuk.ac.uk/sis/beacons.htm

How can leading research universities reach internationally competitive levels of funding?

Should limited central-government funding be directed elsewhere?

35. The Research Councils have a national remit and adopt a UK-wide strategic view on research capability. All Councils' policy is to fund the highest rated proposals they receive, regardless of institution or geographical location.

How well do universities manage their finances, and what improvements, if any, need to be made?

36. The Research Councils undertake a programme of "Dipstick Testing" at universities in receipt of Council funds. This provides assurance to Research Council Chief Executives on the propriety and regularity of expenditure on research grants awarded to these universities. Following the implementation of FEC Dipstick Testing will also be used to examine expenditure in relation to studentships funded by the Research Councils.

37. The process is generally well-received by universities who view it as "light touch"" but helpful in terms of helping to identify weaknesses in research grant administration. Dipstick Testing has provided the Research Councils with a high level of assurance in respect of the propriety of research grant expenditure by universities. In the rare instances where areas of concern have been identified, Councils have worked with the research organisations concerned to develop agreed action plans to remedy any issues.

THE STRUCTURE OF THE HE SECTOR

Is the current structure of the HE sector appropriate and sustainable for the future? How well do structures and funding arrangements fit with "diversity of mission"? Is the current structure and funding affecting growth of HE in FE and part-time study? How important are HE in FE and flexible learning to the future of HE? Would this part of the sector grow faster under different structure and funding arrangements? Can, and should, the Government be attempting to shape the structure of the sector? Is the government's role one of planning, steering, or allowing the market to operate? Should there be areas of government planning within HE—eg for strategic subjects?

What levers are available to the Government and how effective are they?

38. Concerns about the sustainability of the UK research base and about research provision have grown over recent years. The issues are wide ranging, and include rebuilding and maintaining the physical and scientific environment for conducting research (buildings, major equipment and facilities), the attractiveness or not of careers in research, maintaining international standards of excellence across the entire research base, and the funding structures and mechanisms for supporting research.

39. There is a need for all interested parties, including Research Councils, Funding Councils and the universities, to work in partnership to ensure that research capacity across the research base is maintained. This issue is being specifically addressed through the UK Research Base Funders Forum, who are initially focusing on the short term problems around health of disciplines and have developed of a set of metrics to help DfES, the Funding Councils, OSI and Research Councils create and implement evidence based policy on intervention in subjects giving cause for concern.

40. RCUK produced a summary of areas where there is a concern over the future supply of researchers and health of disciplines, together with information on grade profile and demographic analysis. This analysis reveals that the question of what constitutes a healthy research base cannot be answered simply: the answer is discipline dependent and not solely a function of numbers of staff or trends in student numbers. For example, there is universal agreement that the decline in numbers of full time staff in the physical sciences is of concern. However, there is also concern over the development, retention and recruitment of world class researchers in business and management, despite an overall increase in numbers of staff in these disciplines. Also, overall upward trends may mask shortages in key sub-disciplines, for example the biosciences appear healthy overall, but this masks gaps in whole animal physiology and some aspects of health services research.

41. The Research Councils are working with the Higher Education Funding bodies to identify where demand is likely to have an effect on the long-term health of certain research disciplines and to encourage the adoption of policies and support initiatives to enhance recruitment and retention where necessary.

42. Through the UK Research Base Funders' Forum, the Research Councils have been working closely with the Funding Councils over the past year to develop a range of metrics for monitoring the strength of research disciplines and sub-disciplines. This activity complements the work of the Higher Education Funding Council for England (HEFCE) on strategically important and vulnerable subjects in Higher Education.

43. The Research Councils recognise the attractiveness of the UK as a destination for the best researchers. They are committed to the ideal that the UK must remain the best place to undertake research and research training. We have, for example, raised the profile of the EU Charter and Code for Researchers

in the UK and developed strategies for its effective incorporation into UK practice whilst maintaining the momentum to further develop UK practice (eg through a new Code of Practice for Researchers). The Research Councils have also engaged with partners (ONS, HESA) to contribute to the OECD project to track the Careers of Doctoral Holders. This will deliver greater understanding of the distribution and roles of doctorate holders in the UK economy and enable comparisons with other countries.

THE BOLOGNA PROCESS

Context

44. It is a key aim of the Research Councils for the UK to produce internationally competitive postgraduates. The Research Councils collectively support 15,500 (mostly full-time) doctoral students of whom approximately 12% are from other EU member states. The Research Councils provide support for a limited number of non-UK students through sponsorship and operation of the Dorothy Hodgkin Postgraduate awards and through project studentships driven by the needs of peer-reviewed research projects. The Councils aim to assist the universities to improve the quality of UK doctoral programmes and to enhance the international attractiveness of UK research training noting that the HE sector is already an attractive destination for non-UK doctoral students. Of 58,000 full time doctoral students in 2004–05 48% are non-UK and 14% are from other EU member states—in addition of 54,000 part-time doctoral students 33% are non-UK and 11% are from other EU member states.⁴³

45. The Research Councils' interest in the Bologna Process prior to the Berlin ministerial summit in 2003 focused mainly on the impact of the developing two cycles of HE and in particular the developing 2-year Masters model in other EU member states. The Research Councils also had concerns that difficulties could emerge for the UK if the second cycle came to be adopted as a normal entry route to doctoral studies. The Councils' interest has extended significantly since the Berlin ministerial summit identified research as an integral part of European HE and the doctoral level was incorporated as a third cycle within the Bologna Process. The Research Councils note that, although doctoral candidates in the UK are students, they observe the appropriateness of the often-used description of the doctoral cycle as the third level of education and the first stage of a research career.

46. The Research Councils have, through the RCUK Research Careers and Diversity Unit, taken steps to engage fully with the development of the doctoral cycle of Bologna. In particular participating alongside representatives of the HE sector in agreeing the 10 Salzburg principles as the official outcomes of the Doctoral Programmes Projects run by the European Universities Association (EUA).⁴⁴ These outcomes were endorsed by the Bergen ministerial summit in 2005. The Research Councils have additionally incorporated Bologna discussions into postgraduate policy events run by the RCUK-funded UKGRAD⁴⁵ programme such as Profiting from Postgraduate Talent⁴⁶ in September 2005 and 2006.

47. RCUK has continued its involvement with the Bologna Process following the mandate from ministers to the EUA to further develop the basic principles for doctoral qualifications. In doing this RCUK has co-operated strongly with the UK Higher Education Sector Europe Unit with the overall objective of maintaining the position of the UK as an attractive destination for doctoral studies and to continue to ensure the high quality of its doctoral graduates. RCUK assisted the Europe Unit in producing a co-ordinated view from the UK HE sector on the doctoral cycle A key outcome of that collaboration was publication by the Europe Unit of a briefing note outlining the UK position and highlighting examples of UK good practice with regard to 10 key areas of doctoral education.*

48. RCUK was represented at the official Bologna Process seminar on Doctoral Programmes in Europe (Nice: Dec 2006). The draft conclusions of this seminar were broadly supported by UK delegates who had contributed to all debates and who were able to influence the thrust of the final draft document. Since the seminar UK delegates have contributed views to the EUA which will finalise the document for presentation to ministers at the London ministerial summit.

49. The Research Councils perceive that the Bologna Process has resulted in increased attention being given to the Masters cycle. Whereas the advantages of a common approach to degree structures in Europe are clear, the Councils have been concerned that a momentum could develop leading to a Masters degree becoming a necessary step en route to a PhD. This would have major funding implications if it were expected that this should become the norm in the UK—not least because of the traditional division of responsibility for funding mechanisms for undergraduate and postgraduate HE.

⁴³ HESA Student Statistics 2004–05.

⁴⁴ http://www.bologna-bergen2005.no/EN/Bol_sem/Seminars/050203-05Salzburg/050203-05_Conclusions.pdf

⁴⁵ http://www.grad.ac.uk/cms/ShowPage/Home_page/pleecddL

⁴⁶ http://www.grad.ac.uk/cms/ShowPage/Home_page/Events/Previous_national_events/ UK_GRAD_Annual_Conference_2006/p!eigpcjc

^{*} http://www.europeunit.ac.uk/resources/UKHEsectorpositionpaper_doctoralissues.doc

The agenda for discussion at the 2007 meeting in London-clarifying the UK position

50. The Research Councils are supportive of the draft outcomes from the Nice Bologna Process Seminar. In particular they wish to:

- Stress the importance of the diversity of purpose, duration and delivery of doctoral education in Europe.
- Encourage the continued development of transferable skills within doctoral training (an area where the UK has significant experience to share with other countries).
- Ensure the importance of institutional autonomy in defining entry requirements—particularly in relation to Masters degrees and entry to doctoral programmes.
- Continue to emphasise learning outcomes from doctoral programmes and avoid rigid stipulations about the duration of study.

The implications of a three-phase structure of higher education awards for to one-year Masters and short undergraduate courses (HNCs, HNDs, and Foundation Degrees)

51. The Research Councils strongly support the need for flexibility in progression to doctoral level. The Councils recognise that in certain disciplines doctoral students have often already obtained a Masters qualification (either stand-alone or as an integrated undergraduate degree) whereas in other disciplines there is no tradition of a Masters stage. They note that the pattern of progression for doctoral students supported by the Research Councils differs markedly by discipline—illustrated in the following table:

Research Council	Typical/dominant Higher Education Path
Arts, Humanities and Social Sciences (AHRC and ESRC)	Dominant model is: 3-yr Bachelor's degree + 1-yr Masters + 3-yr PhD
Life sciences (BBSRC)	The developing model is predominantly 3-yr Bachelor's degree + 4-yr PhD (up from 3 since 2004)
Environmental and Medical sciences (NERC and MRC)	Variable by HEI/discipline (MRC and NERC allow flexibility of length at HEI discretion leading to longer than 3 year average PhD)
Engineering and Physical Sciences (EPSRC and PPARC)	Dominant model is: 4-yr 1st integrated Bachelor's/master's degree + 3-4 year PhD (PPARC is considering a preferred 4-year PhD; EPSRC has 4- year Engineering Doctorate and flexibility in PhD through DTAs)

52. It is clear from this that any move to require the intercalation of a Masters degree between the undergraduate and postgraduate stages would lead to increased cost with no clear system-wide benefit in terms of the training of future researchers. If a 2-year Masters stage were to become the norm the value would be even less clear.

53. The Research Councils would have grave concerns if a Masters qualification became an eligibility requirement to undertake a PhD. The Councils note a potential problem for the standing of UK doctorates if the entry level were perceived to be lower (Bachelors) compared to the rest of Europe (Masters). They also wish to alert the Committee to the potential impact on mobility within the EHEA if students could not progress directly from a UK Bachelor's degree to doctoral studies in other European countries.

54. The Research Councils therefore support the draft recommendation of the Nice Seminar that "The Bologna commitment that the second cycle gives access to the third cycle should be maintained, but access to the third cycle should not be restricted to this route."

Awareness and engagement in the Bologna Process within HEIs

55. The Research Councils have observed that since the Berlin ministerial conference in 2003 the UK HE sector has engaged more fully with the issues impacting on doctoral education. In particular RCUK has engaged with the UK Higher Education Europe Unit and has welcomed the level of awareness that it has achieved through its briefings. RCUK has also participated alongside representatives of the sector in those Bologna Process seminars with a focus on doctoral education and has contributed directly to the formulation of particular outcomes. RCUK was fully supportive of the outcomes of the EUA "Doctoral

Programmes Project" giving rise to the "10 Salzburg Principles" presented to and adopted by the Bergen summit and the draft outcomes of the Nice Doctoral Programmes Seminar⁴⁷ which will form input to the London summit.

Opportunities to enhance the mobility of students from the UK

56. Although mobility in itself is not a responsibility of the Research Councils, RCUK is aware of the benefits that can accrue from researchers who have experienced education and research in other countries. RCUK is nevertheless alert to the potential impact on mobility within the EHEA if students could not progress directly from a UK Bachelor's degree to doctoral studies in other European countries.

The possible implementation of a European Credit Transfer System (ECTS) and a focus on learning outcomes and competencies

Quality Assurance systems in HE (teaching and research): the compatibility of UK proposals and Bologna

57. The Research Councils do not have responsibility for accreditation of degrees or QA issues in UK HE but have a strong interest in the maintenance of high quality education and research in a strong autonomous HE sector. The Councils perceive flexibility to be a strength of UK HE and do not support a single model of doctoral training in the UK—for example the Engineering Doctorate contains significant taught and formally industrially- relevant components and is available in addition to the PhD. A number of new models have been developed in recent years in the UK including Professional Doctorates, the New Route PhD and within the PhD itself there is a trend towards greater structure and inclusion of taught components. The HE sector is not in favour of the introduction of credit at doctoral level and supports the principles of flexibility and institutional autonomy.

58. The Research Councils participated fully in the development of the QAA Code of Practice for Research Degree Programmes in the UK and would anticipate taking an interest in any relevant development at the European level.

59. RCUK, through its Research Careers and Diversity Unit, represents the UK on the Steering Group for Human Resources and Mobility supported by DG Research. The SGHRM advised the European Commission on the development of the European Code and Charter for researchers and is monitoring its implementation.

Degree classification reform in light of Bologna

The broader impact of Bologna across Europe: a more standardised Europe and the consequences for the UK's position in the global market for HE (Bologna and the second phase of the Prime Ministers Initiative for International Education (PMI 2))

60. Moves towards a strong European University sector able to attract excellent candidates to its universities are congruent with the objectives of government for the UK HE sector and are supported by common degree structures. The Research Councils' objectives in relation to doctoral education sit within this framework. The Councils are concerned that moves to a common degree system should not compromise the attractiveness of the UK as a destination for the best potential researchers from Europe and overseas.

61. In some European countries PhD candidates may have employee status. In contrast those supported by the Research Councils are typically students. The UK's National Postgraduate Committee sees considerable benefits in this, notably exemption from income tax and National Insurance. The UK HE sector believes it is important that doctoral candidates are treated as professionals with access to skills training and development (including Continuing Professional Development (CPD) and that their status is a matter for each country to decide.

December 2006

⁴⁷ Note that the UK delegation at the Nice Bologna Process seminar on Doctoral Programmes in Europe was second only in size to the French delegation.

Memorandum submitted by The Royal Society

SUMMARY OF KEY POINTS

- Any discussion about the role of higher education (HE) needs to take into account the varied nature of HE provision and the wide diversity of qualifications, students and learning modes encompassed by HE learning. This diversity is good: it shows a healthy sector in which institutions are able to "play to their strengths" and offer a wide range of students the learning opportunities that are appropriate for them.
- The prime responsibilities of a university are to teach, to maintain and develop the corpus of knowledge and to transfer this knowledge, both through teaching students and through other activities such as interaction with business. While there are changes to the ways in which universities deliver these aims, for example their developing role in transferring knowledge to business, we believe that this broad role is constant.
- Universities are dependent on the funding that they receive for both research and for teaching. It is important that the funding regime adequately funds both functions and does not inadvertently provide incentives to concentrate on one activity over the other. It is also important to recognise that there are interdependencies between teaching and research, such as the need for scholarship.
- We believe that the UK should be exploring more broadly whether our current HE system is delivering what students, employers, the economy and wider society need from its graduates and how this will change over the next decade. The Society's *Science HE 2015* and beyond study is considering these wider issues and how the structure, content and purpose of the different stages of our current HE system may need to evolve in the future. The Bologna Process has the potential to act as one driver for such change.

1. The Royal Society welcomes the opportunity to submit evidence to the House of Commons Education and Skills Committee inquiry on *The future sustainability of the higher education sector: purpose, funding and structures.* This submission has been prepared with the advice of the Society's higher education (HE) working group and has been approved by Professor Martin Taylor FRS, Vice President and Physical Secretary, on behalf of the Council of the Royal Society. We are also submitting evidence to the Committee's inquiry on *The Bologna Process.*

2. HE is a vital component of the UK's education system and plays a major role in maintaining the nation's intellectual vitality and culture, preparing its students for their future contribution to society and building a leading knowledge-based economy. The Society's HE working group has recently published a report entitled *A degree of concern? UK first degrees in science, technology and mathematics* (Royal Society 2006b), from which many of the points in this submission are drawn. A copy of the report is enclosed with this submission. The group is currently engaged in a broader study considering the fitness for purpose of UK science, technology and mathematics (STM) HE into the middle of the next decade and beyond, *Science HE 2015 and beyond* (see Annex A for further details). This study will report in autumn 2007 and the group will be developing its thinking on these questions over the coming months. We would be happy to expand further on the points in this submission or to give oral evidence to the Committee.

3. The Committee's inquiry is very broad. While we welcome the ambition of the inquiry, and appreciate that many issues relating to HE are inter-related, we would caution that such a wide scope will involve considerable time and effort if each issue is to be considered with the care that it requires. In this submission we focus on the role of universities over the next 5–10 years and university funding, and consider briefly the structure of the HE sector. Our response is organised under these main headings. As the UK's national academy of science, our response focuses on science in its broad sense, encompassing technology, engineering and mathematics. However, we also elicit key principles about the HE sector and its purpose, funding and structures wherever possible.

THE ROLE OF UNIVERSITIES OVER THE NEXT 5-10 YEARS

The diversity of the HE sector

4. We believe that any discussion about the role of universities needs to take sufficient account of the varied nature of HE provision and the wide diversity of qualifications, students and learning modes encompassed by HE learning.

5. HE is supplied by universities, university colleges and further education colleges. These institutions all position themselves in different ways and have different levels of engagement with their communities, and with local, national and multi-national businesses.

6. HE is delivered at undergraduate and postgraduate levels. Undergraduate qualifications can be further divided into first degrees (those leading to the award of bachelors or integrated masters degrees, typically taking the equivalent of three or four years full-time study) and other undergraduate qualifications, such as two-year Foundation Degrees and Higher National Diplomas and Certificates (HNDs/HNCs). In 2004–05, while over 65% of students studying first degree courses were under 21 years old, over 85% of students

studying for other undergraduate qualifications were over 21 and just over 60% were 30-years-old and over. Students can study full-time, part-time, through distance learning or through mixed-modes of learning, for example a combination of work-based learning and university attendance. In 2004–05, 85% of UK domiciled first-year students studying for a first degree were studying full-time, while only 33% of UK domiciled first-year students studying for other undergraduate qualifications were full-time students (HESA 2006).

7. This diversity is good: it shows a healthy sector in which institutions are able to "play to their strengths" and offer a wide range of students the learning options that are appropriate for them. However, this range is not equally available to all students, and puts a premium on giving good advice to young people making degree choices from among this array of options.

8. We also strongly support efforts to widen participation in HE. In common with virtually every other country in the world, participation in UK HE has dramatically increased over the past century, with much of this expansion taking place over the past 40 years. However, it is important to recognise that some of this expansion is due to changing definitions of HE participation—for example, until the 1990s only under-21 year-olds entering full-time or sandwich degree courses were counted in HE participation statistics, with students undertaking other HE qualifications such as HNDs and HNCs omitted. These changes in definition bring a fuller picture of the true level of participation in HE.

9. Since the late 1980s, successive UK governments have pursued policies to widen access to HE and increase overall participation. The present Government's aim of increasing participation in HE towards 50% of those aged 18–30 by 2010 is largely being tackled through an expansion in other undergraduate qualifications such as the two-year Foundation Degrees introduced in 2001. Figures from the Higher Education Statistics Agency (HESA 2006) show that there was a 25% increase in the number of UK-domiciled first-year undergraduates studying for first degrees between 1995–96 and 2004–05, while the number of UK-domiciled first-year undergraduates studying for other undergraduate qualifications increased by 105%. Again, this emphasises the valuable diversity of the HE sector.

THE ROLE OF UNIVERSITIES

10. We consider this question under the Committee's three headings of students, employers, and government and society more broadly, though there are naturally links between the needs of these groups, particularly as their membership is not mutually exclusive.

What do students want from universities?

- 11. Higher education, in any subject, should provide students with:
 - (i) intrinsic value—developing critical and analytical thinking and an inquiring mind;
 - (ii) preparation for life—enabling people to contribute to civic life and democratic debate; and
 - (iii) preparation for work—developing the skills, knowledge and experience desirable for employment and further study, and preparing graduates for the ongoing learning and development that will be necessary throughout their careers.

12. With the introduction of tuition fees, students are increasingly "consumers" of HE: there are more options than ever open to them and they rightly expect to receive value-for-money for their education. For science courses, which often last four years and require a time-commitment to practical work which can reduce the opportunity for term-time working, this could have adverse implications for future student numbers. This issue is considered further in paragraphs 32–34.

13. Concern has been expressed about the level of mathematical skills and practical experience with which students are starting first degree courses in the sciences (see, for example, Engineering Council 2000, Ove Arup 2003). From a student perspective, it is highly demotivating to achieve the A level or equivalent qualifications necessary to enter HE and then arrive and find that your level of knowledge or experience is considered insufficient. Against a background of increasing student choice within the 14–19 curriculum and widening participation in HE, it is imperative that universities recognise the multiplicity of entry qualifications and subject combinations with which students are starting their courses and actively help students bridge the gap between 16–19 qualifications and degree-level study. HE curricula therefore need to adapt to reflect changes in the 14–19 curriculum. In parallel with this, it is important for the HE community to articulate the skills, knowledge and experience that are perceived to be desirable in new undergraduates and to be involved, alongside other stakeholders including employers, in shaping the future development of 14–19 education. However, there have been many changes to 14–19 education over the past decade and greater long-term stability is necessary to create a sustainable situation in which the gap between 16–19 education and university study is minimised.

14. Finally, we believe that policy makers should give greater consideration to ensuring that HE courses at all levels are satisfactory as a start to lifelong learning, and that they equip their graduates with the flexibility to change career direction as required.

What do employers want from graduates?

15. We believe that it is crucial to maintain the high standard of all UK honours degree courses. These degrees encourage students' critical thinking and, particularly in science, engineering, technology and mathematics, expose students to the generation and critical analysis of experimental data.

16. Graduates from science and engineering degrees will enter a wide range of occupations, some of which will directly use the technical knowledge gained through their degrees and some of which will draw mainly on wider skills. The main recruiters of science and engineering graduates have traditionally looked for technical knowledge and intellectual capability in those that they employ. There appears to have been an increased emphasis in recent decades on combining subject expertise with good interpersonal skills, practical employment experience and commercial understanding. The respective roles of the HE system, employers and the students themselves in developing these attributes have been less clearly articulated.

17. The recently published report of the Leitch Review of Skills (Leitch 2006), commissioned by the Government in 2004 to provide an independent review of the UK's long term skills needs, considers the balance of responsibilities of Government, employers and individuals for investing in skills in the UK. The report recommends that the UK skills system should be fully demand led, flexibly delivering the skills that employers and individuals need, rather than trying to predict future demand for different skills. The report proposes the establishment of an employer-led Commission for Education and Skills to deliver greater leadership and influence in this area.

Work experience

18. Graduates who have gained work experience during their studies are highly valued by many employers, but in many subjects it is difficult to find enough employers willing to offer such work placements. For many smaller companies it can be particularly difficult to offer such experience. The pressure on graduates to arrive in first employment with prior practical experience partly reflects the intensification of competitive pressures facing employers in many sectors combined with the effects of "delayering" in many organisations, resulting in fewer people being available to supervise inexperienced graduate recruits.

Feedback mechanisms between HE & business

19. Relationships between university departments and employers tend to involve primarily large firms, and be confined to only a few such relationships per department. They are often focused on research or knowledge transfer, rather than on curriculum development. In addition, most small and medium-sized enterprises lack the resources to engage in such relationships, although there are notable exceptions in highly science-dependent sectors. There is also an important role for university careers services to play in maintaining links between universities and employers.

20. It is vital that, as the needs of UK employers develop and change, the requirements of science and engineering employers are articulated to the HE sector effectively. In particular, HE institutions developing new courses, especially those that appeal to students hoping to enter particular careers or employment sectors, should seek employer involvement in the course design and structure.

Quantitative demand for graduates

21. Although any attempt at estimating the total number of graduates with particular skills is fraught with difficulties, we can be confident that the development of the UK as a major knowledge-based economy will require:

- an excellent and vibrant university research base, covering a wide spread of subjects;
- a sustained supply of science, engineering, technology and mathematics professionals with appropriate skills, knowledge and experience, including school and college teachers, university faculty, researchers and technicians; and
- a good mix of discipline backgrounds, crucially including science and engineering, within the general graduate workplace.

Any review of employer demand for STM graduates must take account of quality as well as quantity issues, considering the skills, knowledge and experience that it is desirable for STM graduates to develop through their studies.

What should the Government, and society more broadly, want from HE?

22. The prime responsibilities of a university are to teach, to maintain and develop the corpus of knowledge and to transfer this knowledge, through teaching students and through other activities such as interaction with business. While there are changes to the ways in which universities deliver these aims, for example their developing role in transferring knowledge to business, we believe that this broad role is constant. The activities comprising this role are interconnected. There are obvious dangers in trying to make policies in one area without understanding the interdependence on other areas.

23. From these overlapping aims—teaching, developing knowledge and transferring knowledge—it is clear that universities' responsibilities to the nation include the following:

- supplying skilled graduates at all levels:
- to build an adequate work force;
- to create an educated democracy, empowering people to contribute to civic life and democratic debate;
- to widen participation in higher education; and
- to enhance the nation's quality of life;
- carrying out research—in the UK the bulk of fundamental research is undertaken at universities and they are largely responsible for the high international standing of UK research;
- providing appropriate career structures for future researchers;
- providing advice and consultancy for, among others:
 - business;
 - public sector services; and
 - policymakers—for example, in area studies or science policy;
- attracting and retaining firms, both to local regions and to the UK;
- providing public space for networking and debate;
- contributing to the overall cultural vitality of the UK;
- contributing to the economy as businesses themselves, for example as large employers and as purchasers of goods and services.

UNIVERSITY FUNDING

24. Universities are dependent on the funding that they receive for both research and for teaching. Individual institutions are free to focus their efforts on research or teaching, and many seek to excel in both. It is important that the funding regime does not inadvertently provide incentives to concentrate on one activity over the other. It is also important to recognise that there are interdependencies between teaching and research. Scholarship, in the sense of a deep understanding and ongoing engagement with the concepts, ideas, methodology and analysis being taught, is necessary as a background to any professional activity in the universities, and indeed throughout education.

FUNDING TEACHING

25. A recent study by PricewaterhouseCoopers (PwC) for the Royal Society of Chemistry and Institute of Physics (PricewaterhouseCoopers LLP 2004) considered the economic costs and benefits (to the individual and the state) associated with education to first degree standard. These were compared with those for an individual with two or more A levels as their highest qualification. The study concluded that, as well as the substantial economic benefits to individual graduates over their working life, there are economic benefits of HE to the state. Although the state bears significant costs during the period of study itself, there are substantial tax benefits to the Exchequer, particularly later in a graduate's working life, as earnings and related taxation payments increase. It currently costs the state approximately £21,000 to provide higher education to first degree level for the "average" graduate, but the additional return to the state in terms of the tax and national insurance associated with earnings following qualification is approximately £93,000. However, the economic benefits of HE to the country are primarily in the form of GDP growth and the payback to government is clearly much larger than the tax graduates pay.

26. In addition to these returns to the public purse, there are clearly social and cultural imperatives for the state to fund HE teaching to the extent that it does.

27. Universities receive their funding from a variety of sources, and the proportion of a university's income intended for its teaching activities varies considerably across the sector. In the four universities with the highest overall income in 2003–04 (Cambridge, Oxford, Imperial College and University College London), funding dependent on teaching represented only 22% of total income. However, in the post-1992 institutions, teaching income represented, on average, 67% of total income. This variation has several important consequences, including the need to cover the full costs of teaching. These costs not only include

the direct cost of teaching students, but also the costs of the necessary scholarship to enable staff to keep up with developments in their subject, and liaison activities with, for example, potential employers of graduates appropriate for the particular subject.

28. Despite the significant increases in the Higher Education Funding Council (HEFC) teaching grant since 1998–99, this now represents a decreasing share of the total funding, with course fees from non-EU overseas students becoming, proportionately, an increasingly important source of funding (Royal Society 2006b). The number of international students choosing to study in the UK is highly dependent on several factors including exchange rates, UK Government policy and the policy of the government in the student's home country; for these reasons income from overseas course fees is likely to be volatile and universities should resist becoming over-reliant on it.

Cost of laboratory-based subjects

29. Universities will be aware of the overall costs of their various activities, including teaching, and some will have disaggregated information to departmental level and to various levels of courses. However, sector-wide comparable figures will not be available until the new Transparent Approach to Costing (TRAC) exercise for teaching is completed. A pilot implementation is taking place in 2006–07, with robust figures expected to be reported by early 2008. The need for full costing for the teaching function is particularly important in the UK because, almost uniquely, the UK public funding for HE has separate streams for teaching and underpinning research.

30. Laboratory-based subjects have been particularly badly hit when research income from the Funding Councils has been cut. The funding of science and engineering courses in England has been reduced after the change from 2.0 to 1.7 in the weighting used in the formula for calculating the block teaching grant for laboratory based subjects (HEFCE 2004). In response to the House of Commons Science and Technology Committee inquiry into strategic subjects, we expressed the view (Royal Society 2005) that teaching, particularly in science and engineering subjects, was under-funded and subsidised from research activities, and possibly from lower-cost teaching activities in other subjects. Recent studies of the finances of samples of physics (IOP 2006) and chemistry (RSC 2006) departments have shown that on a TRAC basis all of the departments considered were in deficit.

31. We welcome the news that the Higher Education Funding Council for England (HEFCE) is to provide £75 million in additional funding to support very high cost science subjects, which are defined as strategically important to the economy and society but vulnerable because of relatively low student demand or by a concentration of the subject in institutions which may be particularly vulnerable to change. However, it is vital to know how much it really costs to teach different subjects at university level, so that more expensive disciplines, including the sciences, can be funded appropriately in the long-term. The additional HEFCE funding should help to support the more expensive lab-based subjects until the TRAC data are available, but it is vital that this temporary measure is then replaced by a sustainable long-term set of arrangements.

Student fees

32. At present, the additional year of fees for four year science and engineering courses can be a disincentive for some students and we are concerned that additional disincentives to studying science and engineering subjects are avoided.

33. In our response to the White Paper on the future of HE (Royal Society 2003) and more recently in evidence to the House of Commons Science and Technology Committee inquiry into strategic science provision (Royal Society 2005), we have warned about the possibility of science and engineering subjects being disadvantaged by differential student fees. As noted in paragraph 28, course fees are an increasingly important source of teaching income for institutions and this has implications for the level of compensatory fee that could be levied on students studying more expensive lab-based subjects. Even if science and engineering subjects are not disadvantaged through differential fees, their students might find it relatively difficult to minimise debt and supplement their income because of the content and length of their courses.

34. We are also concerned that if there were any differential between course fees this could be a disincentive to middle/lower-income students studying more expensive subjects. It is not yet clear how effective bursaries will be at alleviating such problems.

FUNDING RESEARCH

- 35. There are seven overlapping reasons for funding fundamental research:
 - (i) to support the basic interest that exists in all advanced civilisations in scientific discovery and the pursuit of understanding;
 - (ii) to maintain and develop knowledge, skills, and long-term research infrastructure, both for unforeseen eventualities and also to maintain a capacity to keep in touch with, and understand, developments occurring elsewhere in the world;

(iii) to solve problems—for example, to underpin solutions to societal challenges such as those in the health, social, economic and environmental areas;

(iv) to fuel economic activity, creating new and better/cheaper products and new and better/more efficient services;

(v) to train PhDs and post doctoral researchers and to provide within universities an exciting and challenging learning environment for first degree and masters students;

(vi) to retain existing expertise in the UK, and to attract inward migration of skilled people; and

(vii) to retain business investment and to attract "foreign" companies/capital.

Implicit in many of these are the key roles that fundamental research plays in maintaining culture and a community's standing within the world. Martin and Tang (Martin & Tang 2006) at SPRU in Sussex, identify seven similar such channels of benefit from publicly-funded basic research to the economy or to society more generally and argue, that, taking all seven together, university research offers an incontrovertible benefit to the economy and to society.

36. From these reasons it can be seen that there are significant localised benefits from fundamental research activity including:

- maintaining expertise across a wide range of disciplines, with people able to pick up and run with new ideas wherever they are generated—this capacity includes being available to provide advice to regional and national governments;
- providing the entry ticket to the international research community, sometimes through formal collaborations, but at other times just through attendance at conferences and informal contacts;
- maintaining an interface between universities and the business and wider community; and
- educational benefits of a research-active department.

37. Research in the UK receives public investment selectively, via the dual support mechanism which sustains high quality research and nurtures promising projects and individuals. Research Council (RC) funds are distributed on the basis of specific grant applications, judged on promise, while HEFC Quality Related (QR) funds are allocated on the basis of past achievements, as assessed by the Research Assessment Exercise (RAE). RC funds must be spent on the project for which they were awarded, whereas HEFC QR funds can be used at the discretion of the institution.

38. In our recent submission to the Department for Education and Skills consultation on the reform of higher education research assessment and funding (Royal Society 2006a), we stated that we agree with Government (HM Government 2006) that dual support is an effective mechanism to sustain excellent research. The vital plurality of judgement, which is a central feature of dual support, is lost if either funding stream is directly dependent on the other.

39. We welcomed Government's decision to review the current RAE, recognising that the assessment process needs to be more efficient and streamlined for institutions and assessors, and that user-focused and interdisciplinary research should be better recognised and rewarded. However, we were very concerned about the proposal to allocate QR funding via a metrics-based formula, particularly where the metrics to be used were all income related.

40. The recent announcement in the 2006 Pre-Budget report and associated documents (HMT 2006) set out new proposals for research assessment. We are pleased that the 2008 RAE round will go ahead as planned, and the timetable for change appears satisfactory. We are also pleased that expert review will remain part of the assessment for non science, engineering and technology (non-SET) subjects, which are here defined as including mathematics.

41. However, we are very disappointed that there is no proper role for peer review in the evaluation of SET subjects, and that a decision has been taken to assess different subjects in different ways. The majority of responses to consultation were against this, including that of the Society. Interdisciplinary work is a significant, important and increasing part of UK research effort, and measures that may discriminate against areas that bridge SET and non-SET are concerning.

42. We are also very concerned about the £60 million of QR funding that will be allocated to university/ business research. The mechanism for distributing this money will be of prime importance. We look forward to discussing proposals with relevant parts of Government and HEFCE.

43. The Society remains strongly committed to the need for subject-based review panels. These should be, as now, informed by a series of qualitative and quantitative indicators. We also believe that any reward-linked assessment will influence individual and institutional behaviour, so behavioural responses to any system will need to be monitored to identify negative effects.

THE RELATIONSHIP BETWEEN TEACHING AND RESEARCH—THE FUNDAMENTAL IMPORTANCE OF SCHOLARSHIP

44. A key feature of HE teaching is the high level of scholarship required, defined here as a deep understanding and ongoing engagement with the concepts, ideas, methodology and analysis being taught. The necessary staff time for this activity is insufficiently taken account of in central funding, exacerbating the shortfall in the funding of teaching. The issue is complicated by the relationship of scholarship with other activities that enhance it, such as: active research; and professional development, including close interaction with innovative employers of relevant graduates, attendance at international meetings, and collaboration with professional colleagues in the public services and business sectors.

45. The importance of research activity within departments has featured in the discussions on recent closures of science departments. However, research activity can take many forms, including: the collection and analysis of new data; modelling; and the analysis and synthesis of existing data. Although the cost of such activities can vary greatly, at a minimum it is necessary to cover the relevant cost of faculty time. The relationship between teaching and research was the subject of a review by the HE Research Forum, which was set up jointly in 2003 by the then Minister for Lifelong Learning and Minister for Science and Innovation (DfES 2004). This reported that those students who are not learning in an HE environment that is informed by research, and in which it is not possible to access research-related resources, are at a disadvantage compared with those who are. Accordingly it recommended that universities that have a low level of HEFCE research funding should receive funding to support research-informed teaching. This recommendation was accepted by the Government and subsumed within the HEFCE funding calculations for the Teaching Quality Enhancement Fund (HEFCE 2006). It is important to monitor whether the level of research-informed learning improves as a result of this initiative.

THE STRUCTURE OF THE HE SECTOR

46. The Committee raises a number of important questions about the structure of the HE sector and its future development. The Society's Science HE 2015 and beyond study (see Annex A for further details) is considering whether the overall structure of the UK HE system will be fit for purpose in 2015 and beyond. The study will consider this question in the light of many of the issues raised by the Committee and will report in autumn 2007.

47. We believe that the Bologna Process has the potential to act as a driver for change more generally in UK HE. Aside from the opportunity the process provides for the UK to consider how the structure, content and purpose of the different stages of our current HE system compare to the arrangements in other countries, we should anyway be exploring more broadly whether our current system is delivering what students, employers, the economy and wider society need from its graduates and how this will evolve over the next decade.

STRATEGIC SUBJECTS

Science department closures

48. Ensuring that the education system as a whole will provide the education and trained individuals to maintain economic and social well-being in the UK into the future is clearly the responsibility of Government. Equally, it is the responsibility of individual universities to determine their own future development. While we strongly believe in the autonomy of individual institutions, it is vital for Government to have the right incentive structure in place to ensure the future health of vulnerable disciplines.

49. It is notable that many closures have occurred in departments with low research income. This supports our belief that teaching is under-funded in science and engineering subjects and has to be cross-subsidised with research income. The science and innovation investment framework (HMT 2004) stated that approximately 15 physics and 11 chemistry departments have closed over the past ten years, based on data from several sources including the research assessment exercise (RAE) and UCAS.

50. More recently, the 2001 RAE created a large gap in funding between 5 and 4 rated departments. Since then high-profile withdrawals of physics undergraduate teaching have occurred at the Universities of Reading and Newcastle, both rated 4 in the 2001 RAE. The Chemistry Department at the University of Sussex also came close to closure this year, reportedly because the university was concerned that it might not retain its 5 rating in the 2008 RAE and would therefore lose research funding. This threat appears to have been lifted, and applications are reported to be buoyant.

51. As noted in paragraph 31, we welcome HEFCE's recent announcement of an extra £75 million to support very high cost science subjects, which are defined as strategically important to the economy and society but vulnerable because of relatively low student demand or a concentration of the subject in institutions which may be particularly vulnerable to change. We are also supportive of the programmes designed to both increase and widen student participation in science and engineering subjects, which have been developed in collaboration with the relevant professional bodies and communities and in engineering, physics, chemistry and mathematics, with a similar programme for computing in development.

Geographical provision

52. Science provision can be considered at a range of levels—Europe-wide, UK-wide, by country or by region. To some students and large firms the location of a particularly attractive university course or research programme is irrelevant. However, the advent of a mass HE system, the reduction in individual student support, and the imperative to provide equal opportunity of access to HE mean that local teaching provision is very important. The formation of regional "deserts"" created by closures of university departments increases the risk of discrimination against those who may need to stay near home because of family commitments, cultural or financial pressures. Furthermore, without local university departments in the physical sciences and engineering, the opportunities for increasing universityschool links in these subjects, as promised in the Government's science and innovation investment framework (HMT 2004), will be severely reduced in some areas.

53. Although larger companies can access information on a worldwide basis, small and medium-sized enterprises (SMEs) can be very dependent on their local universities for access to research or expertise and consultancy, as well as for the provision of public space for networking. Hence, it is still relevant to consider what provision is required at a regional level.

The supply network

54. The future of university science departments also depends on the success of schools and colleges in supplying a sufficient quantity, quality and diversity of science students. While the traditional supply chain into universities has become a complex network of schools, Further Education Colleges, universities and employers, we are facing a long-term decline in the popularity of A level subjects that provide young people with the most common route into the physical sciences, mathematics and engineering at university. While the 2006 A level results showed improvements in entries to mathematics and further mathematics, and a more modest recovery in chemistry entries, the number of physics A level entries fell to a new low with 2.7% fewer UK students taking the subject than in 2005, or a 37% decrease since 1991 during which time the total number of entries across all subjects have steadily increased, reaching a new record peak in 2006.

55. Major and fundamental changes have been introduced to GCSE science courses from September 2006 and A level is currently under review by the Qualifications and Curriculum Authority. These and other changes allow schools and colleges a very wide range of academic and applied courses from which to choose what they offer their students. While such range can be welcomed, it is not clear on what basis choices will be made and how this will differ across institutions. It is important therefore to monitor these and other changes in school science education to ensure that they do not have any negative effects on continuation into science in HE.

56. In March 2006, the Society held a stakeholder conference on increasing uptake of science post-16 from which arose a number of recommendations for action and research. The priority for increasing capacity in the school/college sector is to ensure science teachers with appropriate backgrounds are recruited, retained and given access and entitlement to professional development throughout their careers. A skilled, enthused and appropriately deployed teaching profession will be able to tackle some of the weak points in the supply network: maintaining interest in science through the often problematic transition from the end of Primary school into Secondary school; raising the profile of vocational science and engineering courses; and motivating students to continue with physics, chemistry and maths post-16 despite perceptions of their relative difficulty or relevance.

Academic careers

57. It is essential to ensure that sufficient high quality graduates are retained within universities. The Society has a range of programmes designed to help some of the highest quality scientists and engineers at key transitional stages (see paragraph 62), but we have major concerns about whether academic careers are now sufficiently attractive to secure the future faculty of the university system. While the Government's response to the Roberts recommendations (HMT 2002) has gone some way to improving the situation at postdoctoral level, more needs to be done to improve the attractiveness of permanent academic teaching posts.

RELEVANT CURRENT AND ONGOING ROYAL SOCIETY ACTIVITIES

58. The Society's ongoing policy work in HE has already been mentioned (paragraph 2 and Annex A), and we will keep the Committee informed of progress. The Society also has a number of activities and schemes that are highly relevant to the issues underlying this inquiry.

59. The Society is committed to considering the education system in its entirety wherever possible. The future of science in the HE sector is dependent on the opinions formed and vital decisions made during Primary and Secondary education, and of course these sectors are directly linked through the supply of science graduates into initial teacher training. Our policy work therefore includes a focus on: maintaining

quality and purpose for science and mathematics within the 14–19 curriculum; increasing supply and retention of specialist science teachers; and ensuring adequate provision for young people to undertake scientific investigations in schools and colleges.

60. The extent of the challenge is such that a major, coherent response to the challenges facing science and mathematics education is needed on the part of the science, engineering and education communities in collaboration with government, the devolved administrations and industry. The Society is playing a prominent role in bringing this about. Together with the Joint Mathematical Council we set up ACME, the Advisory Committee on Mathematics Education, which successfully brings coherence to the views of the mathematics community and helps chart the future of mathematics education. With a view to providing a similarly coherent and influential voice for the science community, we have taken the lead in establishing a partnership of key science community and science education organisations, SCORE (the Science Community Partnership Supporting Education). The group comprises the Association for Science Education, the Biosciences Federation, Institute of Physics, Institute of Biology, Royal Society of Chemistry, Science Council and ourselves, and is devoting its collective resources to increasing the numbers of young people studying science at school and progressing to study science and engineering at further and higher education levels.

61. The Society also directly supports collaborations between universities and schools through its Partnership Grants scheme, offering up to £3,000 to schools wanting to undertake a creative science project in conjunction with a scientist or engineer. These experts can bring cutting-edge knowledge and enthusiasm into the classroom, and can act as motivators and role models for young people. Therefore we are also piloting a new training course for scientists interested in working with schools. Our Summer Science Exhibition also attracts around 1,000 post-16 students each year.

62. The Society also has a number of schemes, funded both from the Science Budget and from its own resources, to support academic research careers. The Society believes that the key to the highest scientific achievement lies in the recognition and fostering of individual quality. The Society's largest funding programme, the University Research Fellowships, aims to provide stability for promising researchers and the freedom to build independent research careers. The scheme has been running since 1994 and during this time over 800 researchers have been funded. Currently the scheme offers up to ten years' support in the form of salary and research expenses.

Royal Society/Wolfson Research Merit Awards aim to attract key researchers, with great potential or outstanding achievement, to this country or to retain those who might seek to gain higher salaries overseas. The awards provide funding for salary enhancement and some research expenses. The Society also aims to provide schemes to retain scientists within academic research at different points during their careers:

- Dorothy Hodgkin Fellowships provide a first step into an independent research career for excellent scientists and engineers for whom career flexibility is essential.
- UK Relocation Fellowships aim to help researchers who wish to move to follow a partner who
 has changed place of work and moved a significant distance.
- Professorships provide long-term support for world-class scientists, allowing them to focus on research and collaboration.

We are further supporting these exceptional individuals through new training and mentoring arrangements to help them play key roles in strengthening the UK science base. Increasing our emphasis on applied science and engineering, we are introducing new initiatives to enhance the transfer of knowledge from the science base into business. Through training in innovation and entrepreneurship, the research fellows will be better equipped to capitalise on research with the potential for commercialisation. The Royal Society is committed to supporting and recognising innovative science through a range of funding schemes and awards:

- Brian Mercer Awards for Innovation and the Brian Mercer Feasibility Awards provide funding to test the viability of an idea or concept through to near market commercialisation.
- The Mullard Award is an annual award recognising the scientific achievements of an individual and their contribution to the national prosperity of the UK.
- Paul Instrument Fund finances projects designing and constructing novel scientific instruments in the field of the physical sciences.
- Industry Fellowships support knowledge transfer between academia and industry.

UK science is strengthened by interaction with the best scientists and engineers worldwide and to facilitate this we are expanding our range of grant schemes which cater for incoming and outgoing fellowships and visits, joint projects and conference attendance. We hope soon, with government support, to supplement our existing exchanges with a new international fellowship scheme modelled along the lines of the Humboldt scheme in Germany.

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Annex A

ROYAL SOCIETY STUDY: SCIENCE HE 2015 AND BEYOND

1. BACKGROUND

In 2005, the Royal Society responded to the House of Commons Select Committee on Science and Technology's inquiry into strategic subjects. This prompted the development of a pilot project, which explored the supply of and demand for graduates from first degree courses in science, technology and mathematics (STM). Work undertaken as part of the initial study has started to provide a better idea of the numbers of and skills, knowledge and experience of students joining the university system and has been reported in A degree of concern? UK first degrees in science, technology and mathematics. A number of issues identified in the report have resulted in the setup of this project to consider whether STM HE provision in the UK will be fit for purpose by the second half of the next decade and beyond.

2. Scope of the Project

This phase of the project is considering whether the overall STM HE provision in the UK will be fit for purpose by the second half of the next decade. Considerations of whether UK STM HE is fit for purpose must include the needs of society and the economy for STM-trained individuals at all levels; the skills, knowledge, experience and intention of those entering the HE system; the international competitiveness of the UK HE system; and the political and economic context in which HE exists. Selected issues that have been identified for further investigation are:

- The demand for STM graduates from the economy and wider society, and how this demand is changing.
- The quantity of those graduating at all levels of the higher education system, and the quality, depth and breadth of their educational and training experiences.
- The length of time HE studies should take, and how that time should be broken down (with
 reference to the Bologna proposals to standardise the structure of HE across Europe).
- The current discipline boundaries and whether a general science first degree option could be appropriate.
- The changes to the skills, knowledge and experience of those entering the HE system and how the HE system can accommodate such changes.
- The need to allow students to be flexible in their choices of occupation as they gain their qualification and afterwards.
- The impact, on the UK, of international flows of students and STM professionals.

The Society's HE working group issued a call for evidence on these issues in summer 2006. The group is now taking forward work in these areas and expects to report in autumn 2007.

3. Membership of the Higher Education Working Group

Professor Judith AK Howard CBE FRS, Head of Department of Chemistry, University of Durham (chair).

Dr Kathy Barrett, Higher Education Careers Adviser, UCL Careers Service & Honorary Senior Research Fellow, Department of Anatomy & Developmental Biology, University College London.

Professor Amanda Chetwynd, Pro-Vice-Chancellor, Lancaster University.

Professor Patrick Dowling CBE FREng FRS, Chair, Royal Society Education Committee.

Professor Laurence Eaves CBE FRS, Professor of Physics, University of Nottingham.

Professor Alexander Halliday FRS, Professor of Geochemistry, Oxford University.

Professor Edgar Jenkins, Emeritus Professor of Science Education Policy, University of Leeds.

Mr Geoff Mason, Senior Research Fellow, National Institute of Economic and Social Research.

Dr Andy T Merritt, Global Director of Outsourcing and Molecular Tools, GlaxoSmithKline R&D.

Mr Philip Ruffles CBE FREng FRS, Former Director Engineering & Technology, Rolls Royce. Professor John Spicer, Reader, Marine Biology and Ecology Research Centre, University of Plymouth.

Professor Joan Stringer CBE, Principal & Vice Chancellor, Napier University.

Professor John Wood FREng, Chief Executive, CCLRC Rutherford Appleton Laboratory.

December 2006

Professor Diamond: I gave evidence to the Committee three or four years ago.

Q680 Chairman: I know you reasonably well, but I could not remember whether it was from the Committee or on other occasions. It was four years ago when we looked at universities before, so a return performance, Professor Diamond. Professor Petersen, you are also very welcome. You have an option here: we want to look at the long term stability of higher education and part of that is, of course, the research side of that. We want to hear from you how we can ensure that this country does

Witnesses: **Professor Ian Diamond,** Chair of Research Councils UK and Chief Executive of the Economic and Social Research Council (ESRC) and **Professor Ole H Petersen,** FRS FMedSci, previous Vice President of the Royal Society and MRC Professor of Physiology, The University of Liverpool, gave evidence.

Q679 Chairman: Can I welcome Professor Diamond and Professor Petersen to the Committee's proceedings; we are very pleased to have two people of such outstanding reputation in the field of research. You are very well-known to us by reputation, but I do not think either of you have actually given evidence to the Committee.

have a viable research programme in the long term, not just in the short or medium term but in the long term, and how do we bring that about—who are the key people who could bring that about and if there are challenges, problems and concerns we want them really to be dragged out into the light of day so that we can think about them. You can say something for a couple of minutes to introduce your background and your knowledge and expertise in a way, as a thumbnail sketch, or we can get straight into questions. Which do you prefer?

Professor Diamond: Whichever is easiest for you.

Q681 Chairman: Why not say how you think we can have a sustainable higher education research programme going into the future?

Professor Diamond: As you know, I am the Chief Executive of the Economic and Social Research Council, but I am also privileged and have been since 2003 to chair Research Councils UK, which is the consortium of all Research Councils working together to ensure and enhance UK research. We do so very much in partnership with the Funding Councils, with the higher education sector and indeed with all other stakeholders including business, government and industry. It is terribly important that this is a holistic issue, that we really have to work together. The Research Base Funders' Forum, which has now been going for three or four years, is actually a good way of bringing all the stakeholders together and there is, if you like, no one place where all research is funded from or strategised from, and that is entirely right and proper. At the same time what we have to do is ensure that we are complementary in the way that we look at things and that we are agile and able to identify barriers to great research taking place in the UK and then to remove them very quickly.

Q682 Chairman: In a sense you have described a very interesting scene, if you like. We are very used to, as a scrutiny committee, scrutinising things for which the Department for Education and Skills has sole responsibility. This is a much more difficult area, is it not, because we have a whole number of organisations and departments involved in the research programme-indeed, the most recent is that we have seen the Treasury taking a great interest in this—but is there not a bit of you that would say that somebody somewhere has to have the overarching view, not interfering in research but having the kind of concept of looking at international competition, what is happening in terms of research in other competitor countries and having a kind of holistic view of what the future looks like?

Professor Diamond: That is what the major stakeholders have to work together very carefully and very closely to do—that is what the vision was behind the Research Base Funders' Forum and it is actually making good progress and doing good things. At the end of the day though we have to remember that research is undertaken by researchers and the great ideas bubble up from researchers; what we have to do, as the organisers of the funders of

research, is enable an environment where great researchers can (a) be developed, (b) flourish and (c) have the facilities and the access to the facilities in order to make that happen. That simply requires that we do accept that there are a multiple number of stakeholders and that they are complementary and co-ordinated in a coherent way.

Q683 Chairman: Your organisation has that role and you feel comfortable that that is a good way of protecting the research budget and the research programmes for the future.

Professor Diamond: I believe the Research Councils as a whole have a very important role to play; we do not have that role alone. We are a very important stakeholder, undoubtedly, as are the Funding Councils—that is why we attempt to work very, very closely with the Funding Councils. We believe very much in the dual support system. The higher education institutions themselves are obviously critical as autonomous institutions and in a number of very, very important research areas in this country the charities also play a very important role. That is why we must be absolutely clear in working together.

Q684 Chairman: If someone was looking at the capacity, the potential, the holistic approach that I have described, it is going to be up to the Prime Minister politically, is it, he is the only person, the apex, who has that sort of responsibility across all departments?

Professor Diamond: That is perhaps taking it a little high. What we do absolutely need to do is ensure that the right people meet together under the right leadership. I have mentioned the Research Base Funders' Forum three or four times already and I believe Keith O'Nions has done a very good job in chairing it. That fora does bring together the Research Councils, the Funding Councils, the development industry, regional agencies, government departments-DfES and DTI-and I am sure one or two other people whom I neglect to mention, not in a pejorative way but simply because my brain is not functioning that well.

Q685 Chairman: Can I switch it to you, Professor Petersen, if all is well in this science realm why change it, why change a system that seems to be working relatively well? Why do people want to change it?

Professor Petersen: You are referring to the proposed new system for research assessment?

Q686 Chairman: Yes.

Professor Petersen: I guess the Royal Society's view is that it should not have been changed, not changed as radically as the present proposals seem to imply. The basic point that we have made very clear when the responses were made to various relevant consultations, is that there is something intrinsically right about the present research assessment exercise. One may certainly worry about the details and the somewhat excessive bureaucracy around it, but the idea that you send a message to individual

researchers, show us you four best papers, they will be read by your peers and evaluated by your peers, that is giving the right kind of message to individual scientists. Now it is supposed to be replaced by some formula-driven quantitative indicator, the type of situation in which citations or papers come in and these are secondary things now that are supposed to be assessed in the new system rather than the primary thing, the real research. There is something intrinsically right about it at present, for all its somewhat bureaucratic faults, and there is something intrinsically wrong about the new method of assessment that is being proposed. Of course, we have not seen the details and we are certainly eager to be involved in discussions about how it could still be operating as one way of informing peer review, but we do believe that there is no way you can really assess research outside what you may call the classical peer review process. It has faults, of course, it is a little bit expensive, it is timeconsuming, but nobody has really come up with a better method of assessing research.

Q687 Chairman: With the greatest respect is that not a little bit complacent between the two of you, Professor Diamond and Professor Petersen, because you are saying, Professor Diamond, we have this broad church where all these players come together and perform the relevant tasks, and Professor Petersen is saying we have a very good system, do not let us fix it. Surely there are people who have been giving advice to ministers, the Chancellor of the Exchequer and other people who must differ with you.

Professor Diamond: I certainly would differ a little on behalf of the Research Councils with regard to the RAE, and if we wish to spend a little time on that I would be happy to give their view. I would not want to say that everything in the garden was just absolutely lovely and brilliant, leave it alone, but having said that we have to recognise that the UK science base at the moment is incredibly competitive globally; on any count, it is second only to the United States across the entire piece and in very many areas, sub-areas and areas of science, leading the world. We have to accept that as a really good place to be; there has been incredible investment in science in the last few years which we can really see the pay-off from, so it would be absolutely wrong, firstly, to say let us throw the baby away with the bathwater and start again. Having said that, there are incredible challenges coming down the road at the moment and if we simply said we are the best in the world or nearly the best in the world, let us just sit on our laurels and stay there, then we would be (a) making a huge mistake and (b) letting the very people down who are paying for this in the first place in the main, and that is the people of this country. We absolutely have to believe, as we do in the Research Councils passionately, that the only chance this country has got to become the country we want to be in 15 to 20 years time is to invest in science and for science to have the pay-off. There are a number of areas that we have really got to work in over the next few years in order to get there. One of

them, if I may say so, concerns the RAE because we all recognise that the RAE over the last 20 years has played a role in increasing the quality of UK research. Having said that, the view of Research Councils is that as currently formulated it does not encourage and reward areas such as interdisciplinary research, areas of research related to professional practice-I am thinking, for example, of education research which might have a real impact on educational policy or social care research having an impact on social work practice, for example. It does not reward properly innovation into industry, where one might spend a relatively large amount of time taking forward the results of a piece of research and turning it into something which might have impacts either on government policy or taking some new piece of exciting kit into the marketplace, but if you do that, that might be at the expense of your next academic paper, and we need properly to reward those kinds of areas. Those are challenges for changing and for updating the research assessment exercise that we really believe have to be taken. The Research Councils' view is that there is a role for a metric-based approach but one that maintains a degree of light touch of peer review in some of those areas that I have just described to you, and that is why we believe it is very important that we work hard across the piece with the Funding Councils, as we do, to ensure that the mechanism that is proposed to go forward post-2008 is one that all stakeholders feel comfortable about and which rewards the things that the nation wishes to reward from its research base.

Q688 Chairman: Professor Petersen, do you agree with all of that?

Professor Petersen: Not entirely. First of all, let me take your question about whether everything is wonderful. That was certainly not the implication of what I wanted to say; there are some serious problems about research in this country and first of all I would question that we are at this point in time the best country in the world in which to do research, which has been the stated objective of the Prime Minister and the Chancellor. I do not think it is the case. It is true that by many indicators we are doing very well; however, if you express these things in relation to the size of the country we are not number one. In Europe, in the biomedical field for example, Switzerland is by many accounts doing better than the UK, if you relate it to size. We forget that very often when we talk about the US being the best and we are number two or in some areas number one. It is not quite true; it depends on whether you look at the size. The amount of money that is spent on research in this country is absolutely insufficient to sustain that basis, one has to be absolutely clear about that. The Government is very proud of the increase in the amount of money that has been given to research over the last years; my personal view is that it has to some extent compensated for a number of very bad years under the previous Conservative administration, but in terms of funding rates we are by no means amongst the best. In relation to GDP, if I remember correctly, we are number 17 or

something like that, so we are punching about our weight, we are doing relatively well in relation to the relatively poor level of funding, and by the poor level of funding I mean that in my own area, the biomedical area, an individual scientist who applies to the Medical Research Council for a grant has an 80% chance of being rejected, so four out of five grants are rejected at this point in time. This is an incredible waste of time for everybody. These are people who have been appointed in great competition to do their jobs. People say it must be competitive to get grants, but you can look at it the other way around and for a person who has been appointed to a job to do research, it is not an unreasonable expectation that this person who has been appointed as a lecturer in a university actually can do the job that he/she is appointed to do. Increasingly, he or she will be spending an enormous amount of time on repeat grant applications and so on, so there is not enough money in the system in relation to the number of people who work in the system, so there is a clear mismatch there which is inefficient. That has very clear implications for the sustainability of future research, which is the remit as I understand it, of this particular inquiry, so in that sense I would say to your question is everything rosy, no it is not. There is a need for a substantial increase in science funding and, considering that it is a tiny, tiny proportion of what the Government has to spend overall, it seems that it would be quite clever actually to substantially increase the science base

Professor Diamond: Can I just take the opportunity to say that right across the research base I would agree with Professor Petersen's point about success rates. Success rates are incredibly low right across the research base and the research that is not being funded includes an awful lot of research that would be absolutely impeccably world class and which, in past times, might have been funded, it would have delivered world class research and would have other academic and non-academic impacts on the economic development and quality of life in this country, so there really is a lack of funding still, despite the great advances that have been made in the last 10 years.

Q689 Chairman: Should that extra funding only come from the Government or should it come from other sources?

Professor Petersen: It could probably come from a combination of sources, but as far as basic research is concerned one has to recognise that there is an absolute need for government funding, there is no other way. I still want to come back to the other part of the question, namely the research assessment exercise in relation to some of the points that Professor Diamond made. I do not quite see how a move to metrics will help with some of the problems that Professor Diamond highlighted-interdisciplinary research, education research, innovation and industry. All of these things will not be helped by metrics at all. In fact, it will be more difficult to assess them through metrics than it is in the present system, so I do not really understand that argument as an argument to move away from the present peer review system to a metrics-driven system. The present peer review system has much more inherent flexibility in terms of assessment and in taking up some of these points. We feel in the Royal Society that the best way would be a somewhat lighter touch than the present, but we must retain the subject-based panels and they can use certain quantitative indicators as a way of informing them, but the idea that you will be able to create a formula based on data in the public domain that could be used for the calculation of QR I think is basically flawed.

Chairman: You do know that the Chairman's role is to warm you up. Everyone has warmed up so, David, would you like to continue?

Q690 Mr Chaytor: You both defended the system of dual support but you have not said exactly what its strengths are or how it compares to the systems in some of our competitor countries, for example Switzerland. Do they have exactly the same system of dual support? What other models are there in Europe?

Professor Petersen: It is true that not every country has a dual support system and certainly the biggest player, the US, does not have a dual support system, but it is generally recognised by many people that this is perhaps one of the particular advantages of this country, that we do have a dual support system.

Q691 Mr Chaytor: What are these advantages?

Professor Petersen: You have got to have, whatever you call it, some way of having a certain degree of stability in the system. If you were to base yourself exclusively-and the US model comes closest to that kind of situation—on money from grant bodies, from the research councils or from charities, you would potentially be in a quite vulnerable situation in terms of short term changes, since grants are given for three years or for five years-most are given for three years in most of the areas—which is a very short time. Grants are lost, grants are gained, people need time to do research and that time in a sense has to be paid for by the main employer which, in our country, is essentially the universities, and the universities need to have money in order to do that. In a sense dual support does exist in a way, although in most of continental Europe they do not call it that, in the sense that the universities have a certain amount of money, but the difference between our system and most of the continental European university systems is that we have a clear separation between teaching funding and research funding. Most of the continental European universities do not have this sharp distinction, which indeed we did not have a number of years ago. As soon as you introduce this distinction between teaching funding and research funding then obviously you have to create a mechanism whereby your research time is being paid for by somebody, and that in a sense is what the dual support system does at the moment. I mean, most of the QR money is simply salaries for people who spend their time doing research, so if you were to propose as an extreme example to abolish it and say we do not need it any more, since we have full economic costing, I understand the argument behind that, why do we need it, but then of course there is an immense problem in the sense where do these salaries come from and can these salaries be provided in a sustainable form. It is a reflection of the special system we have had here in this country which has considerable advantages, I have to say. The complete separation of teaching and research funding gives a degree of transparency about where money goes and how it is accounted for, and it has actually made universities much more efficient than they were before. In the old days when I came to this country from Denmark and became head of department in Dundee first, most people who were not actually researchers could say "I am working on this and this and results will come in eventually and I do not want to do more teaching than person C who does a lot of research because my things are on the way." There was no assessment in that sense so everybody did more or less the same amount of teaching irrespective of whether they were very research-active or not. Now we have a system where it is quite transparent who is delivering in one area and who is delivering in another area, so we do need the dual support system in one form or the other, otherwise I simply do not see how research-intensive universities will be able to sustain themselves. It is a very substantial amount of money, it is between onethird and two-thirds of university funding that comes through QR, at the moment driven by the research assessment exercise. It is not a small amount of money and so it is quite important, and this is why it is important to think about the research assessment exercise, which actually drives it.

Q692 Mr Chaytor: Could I ask Professor Diamond specifically, is there a sense that it leads to fragmentation and have we ever been able to provide a unified approach to the development of research? Is the dual support system holding us back in that way?

Professor Diamond: I do not think it does. One thing that is absolutely inherent on a dual support system is that you do not have, if you like, silo-based funding, so if the Research Councils did not talk to the Funding Councils I think you would have potentially some problems, but the one thing it can assure you of is the Research Councils spend a lot of time talking to the Funding Councils and I can point to four or five examples at any time where there is joint activity because we believe it is necessary so to do. The other areas that are important for the dual support system are that in some way you have to have some kind of flexibility within the higher education system for things like seed corn funding to happen and for people to develop new ideas. That is what the QR allows. One area though, to return to something we have already discussed, which has in some areas been a negative aspect has been the extent to which the rewards mechanism by which you get QR funding has privileged and rewarded those places which appointed new staff because something is staff-based. If you appoint someone new then you get funding based on the output of that person and that, I believe, potentially has led to people being appointed rather than, for example, the more strategic approach of using the money to build a new team or something. Certainly, some researchers have argued to the ESRC that it is very difficult to get on the ladder in the first place, because until you have got some publications you cannot actually get higher and there is a real challenge to us in developing the new generation to ensure the dual support works. Dual support works in this country because the Funding Councils and the Research Councils work together and both believe in it.

Q693 Mr Chaytor: But if they work together so well, why do their respective reforms of the funding methodology appear to have been done in isolation? The Research Councils reform of its peer review method does not seem to have taken any account of the reforms to the RAE. Is that a fair criticism?

Professor Diamond: I do not think it is. They are doing different things in many ways so that the RAE looks backwards at work which has taken place, it is peer reviewed in a way by a group of learned people. The Research Councils look forward and try to pick the best opportunities, again using peer review, and the final report on the Research Councils' peer review exercise comes out in the next six or seven weeks or so, I am happy to talk about the results of that if you so wish to. That has involved consultation with the Funding Councils during its work in exactly the same way as the consultants to the review of the RAE and the HEFCE manager managing it are currently meeting all Research Councils and will be meeting the director of the Research Councils' peer review project in the next week or so.

Q694 Mr Chaytor: Given the extraordinarily high cost of the processing of applications through the Research Councils and the very high failure rate, do you think the review of your methodology will inevitably lead to a reduced share of funding going through the Research Councils?

Professor Diamond: It is a very good point and a very interesting point that you have raised there. Many people might disagree with your statement that the cost of the Research Councils' peer review was high; certainly I think many people would disagree that it was high relative to the RAE. Certainly one thing on which I would agree with you is that there is no way that you can compare the costs of peer review as found by the Research Councils with the costs of the RAE as currently publicised, it is apples and pears. It will be a very, very different question to compare the two and that piece of research, was there a need to do it, could be done, but it has not been done, so we do not have those data first of all.

Q695 Mr Chaytor: If I can just say, you are spending $\pounds 196$ million to allocate $\pounds 1$ billion, so your administrative costs are 20% of the total.

Professor Diamond: Let us just think through what that $\pounds 196$ million is. All except just under $\pounds 10$ million of that takes place in the higher education sector, so the actual direct administrative costs of the Research Councils are under $\pounds 10$ million per annum. The rest

of it, the great majority of the rest of it, is the cost of developing and preparing the proposals; in other words the time that academics have reported to us in a large survey that was done, that they spent, thinking about and working with their teams on, the new research that they are going to do. Let us just take a hypothetical example where we took all of this out and we simply said to a university there is some money, give it to team X to do some research, to do what they want. If you did that they would still have to spend that time, I would suggest, from my experience of a little under 25 years of research, thinking about and developing the proposal, so that has been built into the model. At the same time what we have done is looked at our processes through this peer review report and said are there areas where we could make life easier for researchers, could we increase the amount of money and the amount of time that we give research grants for, could we increase the use of outlines, could we think about resubmission. Could we streamline and simplify the final report process? We have reviewed all those and we are definitely going to streamline the final report process, we are reviewing across the councils at the moment the possibilities for a number of other areas including what we call consolidation-in other words enabling some groups to have longer or bigger grants. I suspect that all councils will take on some of those aspects where appropriate, and the expectation we have at the moment is that when we release the results of the report, as well as celebrating UK peer review—because the one thing that came to us from all our consultations, consultations with the Council for Science and Technology, consultation with the Funding Councils, consultation with all the higher education sector, was a real confidence in UK peer review as the best way of allocating competitive research funding and a real belief that the UK peer review system stands up extremely well against anywhere else in the world. However, at the same time we have identified efficiency savings and we will, through this report, be able to reduce somewhat that £190 million.

Q696 Mr Chaytor: Finally, would you expect then, following the changes you have described, that the success rate will increase from 28% or thereabouts, or is that still a major problem for you.

Professor Diamond: Many Research Councils, including my own, are below 20%.

Q697 Mr Chaytor: Do you see that as inefficient or does that give thinking time and preparation time for researchers?

Professor Diamond: It would be nice to increase success rates. The one thing that Research Councils can do a little bit about is the numerator of the success rate; there is not an enormous amount one can do necessarily about the denominator. I understand that people who have talked to you have said the one thing they would not like us to do—for example, I know that Alan Gilbert said this, reading your transcript—that they would not be in favour of universities having quotas. That came very strongly

across to us and we have taken that out of our options. I cannot say, therefore, that we will see an increase in success rates.

Q698 Chairman: When someone applies unsuccessfully that is part of the cost, the 80% of the effort in producing the projects and programmes. *Professor Petersen:* It is not quite a waste of time, one has to say.

Q699 Chairman: Obviously it is not a waste of time. *Professor Diamond:* It is not completely and one of the things that, as a senior research leader, one gets used to is sitting down with one's junior colleagues sometimes—it is a really sad experience for people to get a grant rejected—and saying how are we going to take this forward, let us look at the referee's comments, is there somewhere else we could get this funded, and if it is a very, very good idea then you have to work to try and get it funded, so it may not be completely wasted time. There is wasted time in then having to revise and send it somewhere else.

Professor Petersen: If I may make one point really in relation to the peer review, it is very, very difficult to apportion exactly the amount of time spent on peer review in different spheres, but what one has to realise is that peer review in all it forms means a very major amount of time spent by academics. In fact, probably, most of the peer review time is spent in the world of publication which is not accounted for by anybody but is a very significant amount of time for individual scientists; every time you submit a paper to a journal these days, mostly it comes back asking for revision and if you are unlucky and it has rejection you have to rewrite it for another journal et cetera. It is part of the whole scientific process and there are clearly overlapping spheres here in that a lot of the time spent dealing with peer review in the journal world is of course overlapping with the amount of time you are spending on peer review in the grant world, so a lot of the data that you have about how much time is spent on peer review for one particular type of activity if you added them all up probably would be more than 100% of an academic's time, I guess. The data we have in terms of what is actually spent on peer review-I would certainly think it is very difficult to get the right amount. One has to simply understand that peer review in all its different forms is an intrinsic part of the academic world.

Q700 Fiona Mactaggart: Professor Petersen, you said that you can name two advantages of the present system—and I am sure you can think of others—stability and transparency. It struck me that a more stable, more transparent and much cheaper system would be not to have Research Councils. Looking at the paper by the Higher Education Policy Institute, which put this thesis—just imagine that instead of using the Research Councils' peer review system one simply calculated the share of the total investment in research which each university had to come and they just issued that over the five year period between 2000 and 2005. They then worked out how the different Research Councils'

work changed it and they calculated that over that four year period operating peer review meant that 79 universities shared an extra £158 million redistributed from 61 universities who between them lost the same amount. If it costs £196 million a year to do peer review, that means that Research Councils UK spent £784 million on redistributing £158 million. Okay, it is a theoretical calculation but actually there is a point to it, is there not?

Professor Petersen: There may be a point to it but to my way of thinking it is somehow not quite addressing the central point. I think the central point is to create a system where people really think hard about what they want to do and where they are exposed to peer review criticism. You are focusing on the cost of it, but the process itself has actually an enormous amount of—

Q701 Fiona Mactaggart: But the taxpayer is paying for it.

Professor Petersen: It is not the waste that many people think, and this is why I make the point that peer review is an intrinsic part of the whole academic process, you simply cannot think it away, it has to be there, and if it is not there in relation to competition for Research Council funding it is there in relation to competition for getting papers published in the best journals, so you have to think through these things. These figures are very soft figures, quite frankly, because they are just based on what people report on the number of hours they do and as we know, quite frankly, we all have to do these time sheets in universities where you write down whatever you feel like because it really is almost meaningless. If you look at the overall figures³ you might say this is a stupid way of doing it, but when you look into the details it is actually quite an intelligent way of doing it. People are focusing very, very clearly on a particular task that they would like to solve and they are forced to present that in a form that can be understood by other people. It is exposed to criticism by the community, it is being refined and finally you do the work. It is a process that actually works extremely well. If you just distributed money without this kind of peer review process we would see over the next 25 to 30 years a dramatic decline in the standards of science done in this country. That would be my judgment.

Professor Diamond: Could I also just take the opportunity to remind you of the point that I did make, and that is that the cost to the Research Councils of the peer review system is under £10 million per annum and that if you wished to do the same holistic costing of the RAE process you would find a very, very large sum because the sorts of things that would have to be included would be the sorts of things that Professor Petersen has already described in terms of the peer review of publications, the time that is actually taken to get those publications together, so we really do need to be absolutely careful in comparing like with like if we are actually trying to make the sort of comparisons that were being made in the paper you described.

³ Note by witness: For time spent on writing grant proposals

Q702 Fiona Mactaggart: What Professor Petersen has said is that the data about how much time academics are spending doing things and so on is very soft, almost meaningless, and they write what they feel like. That actually rang all sorts of alarm bells in my head as someone whose responsibility is public accountability, to make sure that the taxpayer is being told the truth, does understand what is going on. It sounds to me as though you are saying we have this private little arrangement in universities where we make it up.

Professor Petersen: It is almost the other way around I think. What people do not realise is that there is intrinsic stupidity in the system. For example, we are only allowed, when we are making up our time, to work $37\frac{1}{2}$ hours per week and most academics I know work 70 hours per week. You simply are not allowed. When we have to send back to our university how many hours we spend on different things, the system simply does not allow you to say what is true, that you will spend 70 hours per week, so the whole system is not working properly but in terms of accountability I would say that you get fantastic value for money from academics actually because people work like mad for very, very poor salaries, so I would not worry too much about public accountability. People are excited about what they do and they work quite in excess. Maybe the only other category of people who work as hard are politicians actually, there is no other category.

Q703 Fiona Mactaggart: Do not misunderstand me, I was not trying to say that academics are lazy, what I was trying to say is that the public does not know the truth about what they do.

Professor Petersen: That is true at many different levels and the reason is simply that the systems are designed in such a way that they cannot be used properly. I gave you just one example, that you can only work so many hours when in fact most people work almost twice that many hours. The other thing that makes it genuinely difficult is, as I said, the overlapping activities. You can put down one particular activity under one heading but you could also have put it down under anther heading, so in a sense this sort of idea which I can understand to make things transparent and accountable comes into some kind of difficulty. Also, the exact separation of teaching and research is not straightforward. You talk to PhD students and you discuss results with them; is it teaching or is it research? They are overlapping activities. There are many, many intrinsic problems in these things and I understand that one would like to be able to get a very clear-cut answer to these various things, but in reality it is much, much more difficult. Trust is an important element of our system and one of the problems in the ordinary culture that we live in at the moment is that nobody is supposed to trust anybody else, and that is intrinsically a very, very big problem actually. Most academics work extremely hard and they do their very best under sometimes challenging circumstances, and these kinds of orders that are imposed upon them as to how many hours on this

activity and that activity, it is, in some cases very, very difficult to separate one activity from the other one; they are overlapping to a very large extent.

Q704 Fiona Mactaggart: Your point about trust brings me back to the first suggestion that a simpler mechanism for allocating resources might be cheaper and more effective, where you trusted the institutions on the basis of their record.

Professor Diamond: There is a huge degree of trust and that is the OR element, but one thing that you absolutely have to enable is the very best research to be funded wherever it is funded. That does not mean that you have a system whereby only one place is an institute for, shall we say, a particular type of science; therefore, if you are within an individual institution, trying to make decisions about whether to fund individual X who looks quite interesting but is a junior colleague working on an exciting new area against individual Y working in a completely different area, you probably do not have the skills in that institution to judge that. On the other hand, by it being possible for those people to go to competitive peer review, where they will get international quality peer reviewing, from both the best people in this country and the best people overseas, where their work will be tensioned against similar types of work from other institutions, then we have a really strong and extremely high class peer review system which enables us to fund the very best science in a competitive way. It is a competitive world given the budget constraints that we have, which enables the UK to continue to be at the very height of global science, and that is an essential element. I absolutely agree with what Professor Petersen has said that if you did not have that the system would carry on for five years. In 20 to 25 years-and I have no evidence for the statement I am about to make, clearly-I suspect that you would see a great reduction in the quality of UK science.

Chairman: Let us move on. Thank you for that and thank you for your kind remarks, Professor Petersen, about hard-working politicians. Helen.

Q705 Helen Jones: You are both scientists used to proceeding on the basis of evidence and proper research and you have told us what this change to a metrics-based system is supposed to do, but where is the evidence that it will actually do what it is setting out to do?

Professor Petersen: I do not think there can be evidence that it will do what it is setting out to do. One problem that scientists particularly are very familiar with is what you may call the paradox that if you want to measure something you are inevitably also influencing what you are measuring, and the metrics system is an extremely good example of that. At the moment it is undeniable that there is, broadly speaking, a certain correlation between what is perceived by peer review to be good quality research and citation rates—in a very crude way there is a certain degree of correlation of course and the people who are very highly cited are generally the people who also the community will regard as very good scientists. However, if we now suppose that we

are creating a new system for assessment of research quality, which will influence QR distribution based on the plans the Government has been proposing, based on quantitative indicators that are in the public domain, then of course for example citation rates which have been mentioned as one important parameter will be signposted to everybody as an important parameter that people have to think about. What many people who do not work in the field may not realise is that for most people, for the vast majority, even a lot of good people, the citation rates are not very high, so the absolute numbers are quite small. The young scientist who has been in the field for about five or six years may have something like 20 to 30 citations per year, very small numbers in absolute terms, some people of course who have been in the system for a long time and are recognised will have quite different numbers, but a large part of the system will have absolute small numbers. They can be very easily manipulated; suppose 10 scientists in different institutions decide that they will create a little mutual citation group and that they will cite each other's work more, then these small numbers can be changed quite dramatically, so numbers that perhaps at the moment would appear with many, many teaspoons of salt to be useful, could become completely useless in a couple of years because this system has been manipulated. This is the danger of taking a secondary parameter rather than having the peer review at the moment that is actually looking at trying to assess what is the quality of the work that has actually been produced. The other point-and I made that point in an opinion piece I was asked to write for The Times Higher Education Supplement which came out just before Christmas-is that citation rates have almost no predictive value, so if you are going to try to think about what will be the future it takes many, many years for citations to accumulate. I gave a specific example there of a close colleague of mine, Bert Sakmann from the Max Planck Institute in Germany, who is a Nobel Laureate; he made his breakthrough in 1980/81 and peer review instantly recognised that this was really big progress, but if you look at the citation rates for several years after that they were modest, respectable, nothing more than that; 15 years later they were spectacular but then he got a Nobel Prize and everybody could see anyway that he was great. This citation game, therefore, is something that will turn out to be quite frankly useless, and it is very, very dangerous that the Government has somehow, it seems to me, hitched itself to that wagon.

Professor Diamond: There are a number of issues that need to be made here. The first point the Research Councils would make is that there are very many different metrics that should be taken into account and one needs firstly, in a system, to identify exactly what it is that one is trying to reward and to recognise, and that was a point that I made earlier. Where I would agree with Professor Petersen is that simple citation rates will not, on their own, answer many of the questions that we would as Research Councils wish to reward; having said that they remain for some areas, certainly for the stem subjects, an area which is recognised as being useful—not alone but useful.

Q706 Helen Jones: Can I just stop you there because Professor Petersen says that they can be so easily manipulated, so how can you have something which is useful in assessing research if, as has just been quoted to us, someone who eventually got the Nobel Prize did not have a very high citation rate.

Professor Diamond: There is an enormous amount of data on, for example, time to citation rates or the speed of citation rates over time. There is some excellent work that has been done at the Science Policy Research Unit at the University of Sussex, for example, which looks at the time by different disciplines from publication to citation rates, and you see an increase and then it flattens out, and certainly there will be examples where I am sure they subsequently pick up. I do not know the extent to which a small group could get together and massively influence citation rates for a particular journal, but certainly I do know that the Higher Education Funding Council for England in taking forward this review of the research assessment exercise is working with some of the very best researchers on bibliometry in the world-I know that their consultants are those from the University of Leiden who are absolutely excellent-who will be advising them, I am sure, on all those issues, but I stress that I do not see citation rates as being the only index. Certainly, Research Councils' view is that citation rates would not be the only metric that we would recommend because they will not reward and recognise all the areas, and that is why one will need a basket of metrics, and one of the things you have to do is identify what it is you are trying to reward and to recognise and to provide a set of metrics which are universally accepted and which will do that. Let me also say that I have said very clearly right across the piece that the Research Councils believe that in addition to this basket of metrics which should inform any measure of quality, there will be the need for an element of peer review, light touch peer review, and certainly we believe that that is likely to be different in different disciplines. If I just give you an example, currently the citation rates which are widely used are based on one large database. In the 2001 Research Assessment Exercise, for the very great majority of subjects such as chemistry or physics-well over 90% I understand-of the outputs which were submitted to that exercise were included in the database. In other areas, particularly in the social sciences, the arts and humanities, of the outputs that were submitted a very much lower proportion were included in that international database because of the greater incidence of the use of things like monographs, which are not in the database as a output, inter-disciplinary research research publications which may not be in those outputs, and the fact that the database does not use some major UK journals. So there are very good reasons why one would not want to move solely to a measure of citation, but where you need to use the very best bibliometricians in the world to advise you on what the appropriate use of bibliometrics might be to inform the basis, but I stress that simple bibliometrics are not the only metric which should be used, one needs a basket of metrics based on first deciding what it is you are trying to reward.

Q707 Helen Jones: Can you just tell me what you mean by light touch peer review, where you think it might be useful and where it would not be useful? Professor Diamond: Sure. Let me give you an example of the area of policy. You may wish to try to find a mechanism which rewards research which has really had an impact on, shall we say, policy in some areas. It is actually quite difficult to say has this research impacted on a new Government bill or has it impacted on some kind of policy in a big way? That is the sort of thing that you might like some research experts to look at and take a view on. You may also want to recognise the fact that some journals have much higher impact factors, if that were to be used (and I do not know that it would) than other journals, so you might want to have people just overseeing the results that would come from a quantitative analysis of metrics, fine-tuning them in a transparent way. We could look at many, many examples of that. If one metric was to be research income, you would not want to disadvantage a group of entirely theoreticians, if you like, in the area of physics, who may not need as much research income to undertake their research. That is when you need the peer review to come in on top. What the Research Councils would argue is that you can simplify the bureaucracy of a quality assessment by including and informing your quality assessment through a basket of metrics but we do not believe you can get away with it completely.

Q708 Helen Jones: Can I ask Professor Petersen if he agrees with that argument, because it seems to me, Professor Diamond, you talked about transparency there but some of the things you cited—for instance, where the research had influenced policy—are very difficult to review transparently. We know from working here how many things go into making a parliamentary Bill, for instance. Is it possible to do those sorts of things?

Professor Petersen: It seems to me that Professor Diamond has given very good arguments for retention of the subject based panels and for peer review. We agree in the Royal Society that these quantitative indicators can be used to a certain extent by knowledgeable people in the areas where you can make sure that you compare like with like. The formula based approach which one senses is what the Government would like to produce, has enormous dangers and would be totally unable to deal with any of the problems that Professor Diamond quite rightly put forward. The problem is in terms of bibliometrics, which a lot of the discussion has focused on, because it is one of the few areas where you can get quantitative measures. For many years to come, it will be in a precarious state. Professor Diamond has already alluded to databases not being complete in many areas. Other things are in a very difficult state. For example, there are two categories of research articles. There are original articles that give new research findings and

there are review articles which generally speaking have much higher citation rates than original articles. If one bases any assessment on citation, that would be a temptation on behalf of individual scientists. They would write more review articles rather than do the original articles based on the grants that they have. In principle, the databases allow you to distinguish between review articles and original articles but all of us who have tried it out realise it does not work. It counts certain things in one category and it does not work in another category. There is no way a person who is not knowledgeable in that field will be able to make that distinction. The idea that somebody somewhere in a public database will do it does not work. People could be influenced by aggregates if a number of people decided to spend more time, for example, writing review articles rather than original articles. There are a lot of areas where we can go into the detail. I am not even sure that the bibliometrics people are the people who would necessarily know about it. The people who know about it are the scientists who work in that field who use these databases. I use them a great deal myself because I have to do a lot of assessments. I am very much aware of the really serious problems that underlie this approach. I would be somewhat critical of thinking that people who work in these various science policy units really know about these things. My feeling is that they may not know a lot about the deficiencies in the system.

Professor Diamond: You asked what evidence would be used and I think it is entirely right that what the Funding Councils have done is to take evidence from the very best bibliometricians on what can be done. That has to be tensioned by a real analysis across the stakeholders as to how that is appropriate. You have spoken to Professor Eastwood and I am sure he gave a much more lucid answer than I did. I do not think it is the intention that people, for example, bibliometricians, would simply do the allocation of funding. It is simply one piece of evidence that should be used in putting a basket of metrics together which would enable us to simplify the bureaucracy somewhat and get what we really want from a quality research base.

Q709 Helen Jones: I understand that although I am not convinced at the moment that any of this is simplifying bureaucracy. We have heard about problems with the present system, for instance, that it has bias against applied research; it does not reward interdisciplinary work and so on. Can you give the Committee your thoughts on where this new system will deal with those problems?

Professor Petersen: There is absolutely no reason why the new system should be better at dealing with this than the present system. There are a lot of arguments that it would be exactly the opposite. The present peer review system allows flexibility. In a sense, it is just a question of signposting to the peer reviewers what you would like them to look at and it can be done. If you have a formula based approach, you are in a much more difficult situation. It is intrinsic in that system that you cannot deal with a lot of areas that clearly are not so well defined and cannot be defined at the moment. That is the crux of the matter and I would urge the Committee to think very carefully about that. By dispensing with the subject based panels, you are entering into something very dangerous.

Professor Diamond: It is very difficult until the Funding Councils have concluded the results of a review, which is trying to identify the way forward and a basket of metrics which will enable us to simplify things. Then we can have a serious discussion about whether that has been achieved and whether we have achieved what we are trying to achieve. An enormous amount of evidence by the very best people is being taken to inform that debate. The Funding Council is working very hard to enable that debate to be taken forward. I personally would not want to prejudge in any way the results of that. The Research Councils will look very carefully at the results when they come out and will engage in a full discussion of the approach. We all know what we are trying to achieve, which is to reduce the bureaucracy and to reward a wider range of activities in a way that we believe has not been done thus far by the Research Assessment Exercise.

Q710 Chairman: It is six months since we had the written submissions from yourselves. Quite a lot has changed since then. Professor Diamond, you just mentioned a great deal of work and expertise. If any of that has changed, we would like to know about it and we would like to know if you have come across witnesses that we ought to interview. We live on good information so we need your help on that. It is six months since we announced this inquiry and quite a lot has happened since that time.

Professor Diamond: I have looked at the 23 people that you have met before us and I think you have covered the bases pretty well.

Professor Petersen: I would agree with that.

Q711 Stephen Williams: Would it be fair to say that whatever the system of an RAE, whether it is the existing system or a slightly different system for 2008, it distorts the behaviour of university departments and whatever the system they will work the system to get the best financial outcome?

Professor Diamond: It has to be the case that if you have a reward mechanism in place people will try to maximise the reward they get from it. That is human nature. That is what we should expect to happen. That is why I believe you need to be very clear about how you will reward and recognise different elements of a system that you wish to achieve.

Q712 Stephen Williams: Do you think the assessment system distorts behaviour in staffing deployment? I was talking to the head of a department in a Russell Group university recently and he said it was something like the football transfer market. When you are coming up to an RAE, you take in as many good staff as you can. You are willing to pay good salaries to get them. Once you are in the RAE period, you do not want

any new staff. You do not want to lose staff. You just want stability and you want to be assessed on that. Is that not perverse?

Professor Diamond: That is anecdotal evidence.

Q713 Stephen Williams: I have heard it from more than one place.

Professor Diamond: I have heard it in a number of places. What I have not seen is evidence which demonstrates the major impact that that is having on the community as a whole. Where it has been argued that there has been an impact is where people have not been encouraged to engage in high risk interdisciplinary research which an take time to develop. You simply do not get sociologists who sit down with a chemist to take forward a really exciting, new, cross-disciplinary area and expect research to happen in five minutes. It takes time and people have to invest a lot of time in something which may not come off. Those sorts of behaviours are not encouraged in a system which rewards simple disciplinary publications. In some areas people have worked very hard to focus on particular areas of a sub-discipline because they believe that will be rewarded properly. There is anecdotal evidence of that too. We have seen behaviour influenced, which has not been good for the economic development or the quality of life of the people of this country sometimes. That is why the Research Councils as a whole have argued that we need a system which properly rewards applied research, research related to professional practice, interdisciplinary research and research which really does have an economic development impact.

Professor Petersen: The dangers of the sort of transfer market that you refer to have been perhaps slightly exaggerated. I do not think one should say that it has necessarily been wholly negative. It is just another part of the competitive world, I guess. It is not necessarily such a bad thing that universities are forced to look after their best researchers and make sure that they do not go elsewhere. There are negative and positive points about the behaviour. Of course it is massively influenced by any kind of assessment system. In our submission we make that point very forcefully. The trick is to encourage the right kind of behaviour and that is where we have great worries about the new system that is based on the formula based, metrics driven approach. The present system, for all its faults, does signpost the essential thing to the scientists, namely to produce good science; whereas the new system will look at secondary parameters rather than primary ones. The change in behaviour that would happen if one were to switch to the new system would be much for the worst and I see no arguments anywhere that the kind of problems that Professor Diamond highlights, that the present RAE system does not reward, would in any way be helped by a new metrics driven approach. It is absolutely not the case.

Q714 Stephen Williams: Would it be fair to say that the evidence is anecdotal on the behavioural implications of an RAE at the moment because we do not know enough?

Professor Diamond: Exactly. I do not know of a real study which has looked at the impact that you describe. The one thing that is very clear is that the costs of the current RAE are immense and very rarely calculated.

Q715 Stephen Williams: Immense to the universities themselves?

Professor Diamond: Exactly so. Very many universities go through one or two dummy runs over a period of time. I do not know how many universities do that. I am told very often as I move around universities that we have just been through a dummy run on our research assessment exercise and we have brought in consultants to advise us on the position. If we were to include those in the costs of the RAE, you would see a very big increase in the overall costs. That is why trying to reduce the overall costs through a lighter touch approach and one informed by a basket of metrics is an extremely good and welcome approach.

Professor Petersen: The costs of the RAE have been somewhat exaggerated and again it relates to a point that I made before of overlapping activities. A lot of the work that goes on in universities in preparing for the RAE is work that would have to be done in any case because it is a question of how the university promotes its own research, how it selects those areas that are valuable or not. A lot of this is activity that at the moment comes under the RAE heading and people say it is terribly expensive; but if the RAE did not exist it would have to occur anyway in the university system. Secondly-and this is a paradox—everybody agrees that the present Research Assessment Exercise has considerably improved the UK's research performance. Professor Diamond himself referred to that. If we put these things together, it is not absolutely clear what the intellectual argument is for changing it radically into something that is totally different and is a secondary rather than a primary parameter.

Professor Diamond: If you wish to take out the sorts of things I have just said are the costs of the RAE, to go back to the points that David and Fiona made earlier. Therefore you have to say that the cost of peer review to the Research Councils is under £10 million a year, not the figure that we calculated, because the figure that we calculated was the holistic cost which included all the sorts of things that I mentioned to you, which Professor Petersen suggested we ought not to include. That is a really good example of the point I was trying to make. If you wish to compare like with like, you have to be very clear and careful about what it is that you are including in the costs.

Q716 Stephen Williams: Professor Petersen, I was struck by your mutual citation group. That rather implied to me that you think it would be easier for departments to distort behaviour, to get a favourable outcome under a metric system, than under the existing system which does have peer reviews. Is that a fair summary of what you are saying?

Professor Petersen: Yes, that is right. In one case you are telling people, "Show us your best papers. They will be read by your peers and experts and they will judge whether they are really important, new and true", the three classical criteria for research excellence. That has to be the gold standard. If you are replacing that with a lot of secondary things, plainly you are not going to the heart of the matter any more. These quality parameters can be distorted. They will certainly influence behaviour. There is no way they could not influence behaviour. We do not know in which direction. We still have to be very careful. The present RAE, for all its faults—and everybody agrees on this—has substantially improved the UK's research performance.

Q717 Stephen Williams: I guess that means that perhaps the Royal Society as well would lament the loss of peer review on stem subjects. Do you think it is too late to reargue the case that peer review should be retained?

Professor Petersen: This is an interesting reflection of how things work in society: when we made our original submission to the DfES consultation on the future of the Research Assessment Exercise, we took the strong view that peer review is essential to the process and most other organisations agreed with us. Then the Government announced that they were not going to do it that way. They were going to use a metric based approach and some organisations immediately shifted and said, "Fine. Of course this is a good idea." We do not see any reason why we should change our opinion. This is the truth as we see it and we have to continue to argue that. I still hope that there is enough common sense in the system that one will not throw out the subject based panels which have been the keystone of assessment and which are the only ones that can assess this basket of metrics. We all agree that you can use metrics to a certain extent, to inform peer review, but you cannot just put it into a formula and expect this to work.

Q718 Chairman: In a slightly throw away line you said, "the Research Assessment Exercise, for all its faults . . .". Have you articulated where you would get rid of all those faults and still retain the essential RAE package?

Professor Petersen: In our written submission, we make the point that it has become over-cumbersome over the years. It started out by being a much more manageable exercise. Because of complaints about this and that and then you introduced a new element, gradually it was built up and became a very complex exercise. There might be something to be said for going back to the original model which was much simpler. In essence, what has taken all the time in the university system is to write the narratives and one could dispense with those narratives to a very large extent and just look at the best papers because that is what matters. "What have you produced in that time?" It is, as Professor Diamond started out by saying, a review of what has been achieved. That is what we need to look at. This waste is in the time the universities are spending, on trying to refine those narratives in that they might marginally improve your assessment a little bit, although in reality it is the output that is judged. These are the faults but, at its heart, there is something intrinsically right about the way it works because it says—and all academics know this—"Show me your best papers. I will read your four best papers and I will make my judgment about what you have done".

Professor Diamond: If you do that, you would not have the opportunity to have any proper review of the impact on policy in government, business, local authorities, education and schools. You would not have any proper assessment of, for example, the development of interdisciplinary research. You would not be making that rewarded or recognised, so there are very many areas which would not be rewarded by a simple look at four publications. If everything was to be done on that, you would be rewarding one part of the system but not what the Research Councils would argue are the wider elements of what you should be trying to reward, particularly having, where appropriate, research having an impact on the economic development and quality of life of the people who pay for it.

Professor Petersen: These are exactly the areas that are most difficult to deal with on a metrics based approach.

Q719 Jeff Ennis: One of the pieces of evidence we have received is a paper from a gentleman called Tom Sastry entitled A Dangerous Economy: The wider implications of the proposed reforms to the UK's Research Councils' peer review system. One of the conclusions that Mr Sastry comes to is: "If the de facto roles of the Funding Councils and the Research Councils continue to converge, it will be increasingly difficult for the Research Councils, as the more expensive arm of dual support, to justify their role in funding research in universities. The Research Councils must either find a better means of reducing costs which does not undermine the distinctiveness of their role and it is not immediately apparent how they might do this; or focus upon doing things which the Funding Councils cannot do. The latter course implies that the Research Councils should focus upon strategic themes which reflect genuine political and public priorities, rather than replicate the purpose of the Funding Councils." Do you concur with that conclusion, Professor Diamond?

Professor Diamond: I might find a few areas in the quote that you have just come out with that I might not quite agree with. If I recollect the overall piece that you are referring to, it does take as its starting point that the cost is £190 million. That is a holistic cost. We need to sit down and compare apples with apples, not apples with pears if we are going to take about costs. I might argue that if we are going to take Professor Petersen's suggestion and take a lot of things out, the cost of the Research Councils' peer review is really not that great in terms of direct administrative cost.⁴ The one thing that I would add to that is the absolute, overwhelming response that

⁴ Note by witness: i.e. less than £10 million

we received to our consultation with every higher education institution and every major stakeholder, that UK peer review is amongst the best-some people say the best-in the world and it is the right way to allocate competitive research funding. I have tried already to give some examples of why you would want to do that in basic research as well, right across the piece in other areas. I am happy to revisit some of those areas but fundamentally you will not have an institute of a particular type of sociology in one place. You will want to have people from across the piece and internationally looking at competitive funding and I believe basic and directed research need to be funded externally, independently and in a quality way by the Research Councils. I think we provide an enormous service to the research base in this country for a very small direct cost. Indeed, it is one that we work very hard to drive down the whole time. Secondly, I think you have to recognise what the Research Councils do in funding. One thing that they do is to fund a response mode, basic curiosity driven research and that is entirely right and proper. The second things that the Research Councils do is, where the market is failing through a really proper analysis of key areas, particularly some new areas, particularly areas where the Research Councils have to work together-

Q720 Jeff Ennis: Mr Sastry is suggesting that.

Professor Diamond: I am agreeing with Mr Sastry that one needs to do that but I also would completely disagree that one does not need to do that basic research as well and to have a really tensioned, competitive approach to funding where there is a budget constraint and where international quality peer review is the basis for doing that. To do it in any other way would not be an appropriate mechanism, I would submit. We do need a national competition.

Q721 Jeff Ennis: Professor Petersen, have you any thoughts on Mr Sastry's conclusions?

Professor Petersen: In this respect I agree very much with Professor Diamond. On the whole, one has to be careful not to be hung up too much by these high costs of peer review because they are very notional.

Q722 Chairman: You started off by saying there was not enough money going into research. Fiona Mactaggart said to you that you want to make sure that as much of the resource gets through to the researcher rather than to the administration of the process.

Professor Petersen: We have to understand that these figures we are now talking about are notional. This is not money that is taken out of the Research Councils' budget. These are figures based on assessing how much time people spend on these things, so it is a bit different. The real problem is not this costing. The real problem is that there is not enough money in the system. There are a lot of good researchers who are not getting the funding that they need and therefore cannot do the job that they are hired to do. That is the real problem in the system, the insufficient amount of money that is in the Research Council system and also in the whole university system. We have to emphasise here that this is where we are at this moment in time in a worse situation than many other competitor countries.

Q723 Chairman: Would you double it? Treble it? How much more do we need?

Professor Petersen: In my particular area where roughly speaking four out of five applications are being rejected, I would suggest that there is a need for a doubling of it in order to have a system that will work properly and allow the people who are internationally competitive to work properly. This has something to do with the future sustainability of research. I do not think the UK's present position is sustainable in the present situation. I think we will be overtaken by other countries in the Far East and many of our European competitors, if you take into account their size, are doing quite a bit better.

Professor Diamond: The administrative costs within the Research Councils are under £10 million per annum.

Q724 Stephen Williams: When you are assessing a project that comes to you, what is uppermost in your mind? Where is the balance? Is it the quality of the proposal or the fact that you are going through an exercise of financial rationing as well on behalf of the government effectively?

Professor Diamond: The only thing that the commissioning panels look at is the scientific quality of the research that comes in front of them.

Q725 Stephen Williams: Presumably they know they cannot give the green light to every proposal that comes forward because you would run out of money?

Professor Diamond: When you go into a research funding round on any commissioning panel, remember that the commissioning panels are made up primarily of academics but typically also with what we call a user representative from one of the stakeholders. They have a very clear view that the decisions that they are making will leave a number of proposals which would result in high, world class science being taken unfunded. All they can do is their very best. All members of commissioning panels work astonishingly hard. I personally was a member of a number of commissioning panels in my previous life. One works incredibly hard, with immense conscientiousness in order to ensure that the ranking of grants that you end up with is the very best that you can. Then, sadly, a line has to be drawn below which people are rejected. At the margins, that line is a very difficult line to draw. Discussions can often take hours around the end ranking because you know that somebody is going to really have some bad luck.

Professor Petersen: Something that virtually all academics would agree on is that if success rates fall to very low levels the assessment also becomes endangered. If you have very low success rates, the precision of choosing one project over another is not as good as it could be. In addition to the fact that there will be a lot of very good research that is unfunded, there will also be a degree of rightful

frustration in the academic community about why this project was chosen and the other one was not. I take the example of Switzerland because it is in many ways a very strong science country. Success rates for the Swiss National Research Foundation are something around 40%. They have quite different types of success rates from what we have and they have a very strong research system which is functioning and attracting some of the best people from the UK to go and work there.

Q726 Chairman: You said earlier that there had been a substantial increase in research funding over a period of time. There are academics who wanted to canonise Lord Sainsbury because of his contribution to being seen to have made a great difference, being not only the Science Minister for a very long period of time but someone who took that science research budget very seriously. There must be a better feeling about this.

Professor Petersen: That is recognised. I think it is important for this Committee to fully understand that there is a slight discrepancy—maybe more than a slight discrepancy—between the view from the top and the view at the coal face where the scientists are working and applying for grants. In my own area, the success rates for applications to the MRC have fallen in the last five years. What they see is increasing difficulties in getting the funding that they need to do the work that they are hired to do. Politicians at your level see that there has been an enormous increase in the amount of spend and that is good. All credit for that but one should not be too surprised that a lot of people who are working at the coal face are not quite so grateful because what they see is that it is getting more and more difficult.

Q727 Jeff Ennis: Was the need to reform the RAE cost driven or due to its inherent weaknesses and flaws?

Professor Petersen: I suspect that part of the fault lies in the academic community. Academics have been worrying about the RAE, all the work that is going on et cetera. That probably has gradually led to a feeling that it is too much. A lot of academics did that in the sort of environment where they thought maybe they could just get rid of it and go back to the good old days where you did not have all these audits et cetera. They did not realise that that is not exactly what is going to happen. Something else will come instead of it. Now a lot of people are regretting that they made all these complaints about the RAE because now they see that what is probably likely to be measured will be something that is much less attractive than the original model. I suspect that that is one element of it.

Q728 Jeff Ennis: It is a bit like 10 years of a Labour Government.

Professor Diamond: The Research Councils have been very clear for a period of time that the Research Assessment Exercise did not reward applied research, interdisciplinary research, research related to professional practice and research which was really having an economic impact or an impact on the quality of life of the people of this country. These are rewards that we absolutely have to develop into the higher education culture. It has to be seen by someone at a junior level that they can invest time in doing those sorts of things and that that is going to be rewarded over time in their promotability within the universities. That simply was not being done by the Research Assessment Exercise and all those are reasons, I would submit, for a review and a refreshment of the way in which we identify quality in allocating research funding across the whole dual support system.

Q729 Mr Chaytor: Do you think that the focus on the metrics peer review debate has distracted attention from some of the more fundamental issues about the question of concentration of research and the link between teaching and learning or the link between research and business as against pure research? Do you think what we are missing is a more fundamental review of the bigger issues in the future of British research to make British university research sustainable and we have been focusing on the micro issues too much and not enough on the macro issues?

Professor Diamond: When you say "we", do you mean your Committee?

Q730 Mr Chaytor: In the royal "we" sense, I am speaking for the nation.

Professor Diamond: Speaking for the Research Councils, we would not feel that the world had just taken over by a review of the RAE and peer review. We have taken those as extremely important parts of the research base and it was right and proper to review both of them. At the same time, we absolutely have to take forward a really proper step change in the way that we engage with what, in Research Council speak, is called knowledge transfer. That is the whole way in which the research base impacts on business, on government, not only in the linear way that people think of it where a light comes on in a scientist's head and five years later there is a new product on the shelf of a supermarket or whatever; but in a whole range of ways, some of which are interactive, some of which involve people transfer, some of which have a long time to have an impact. We really have to properly measure and engage in a culture which enables that to happen. That has been going on as a really major focus for the Research Councils working with the higher education sector very much over the last couple of years or so. It is an area that the UK was rather better at than sometimes it believed. It has been very easy to say, "We are not very good at this" when you can string out very many examples of where we have been good at it, but we also acknowledge it is an area where we have to get better, particularly in some of the newer areas of the economy. That has been a really major focus over the last little while for the Research Councils. We as a nation have been really focusing on that area and not simply focusing on the areas that you describe. Also, there has been a recognition that we have an academic community which, in some areas, is greying very rapidly, where there has been a real need to have some strategic inputs into a higher education base in order over the future that we maintain the health of disciplines. That was a real focus of the allocations to Research Councils in 2004 under that spending review. It is something that we have been taking forward very much over the last few years. Annually, it is my task on the Research Based Funders' Forum to bring to that an annual report on the health of disciplines and what is being done. I can report to you that an enormous amount of work has been going on jointly between the Funding Councils and the Research Councils to ensure that we do have impact on a number of strategic areas that we see as being in need of tender loving care; or we will see a decline in the research base in this country. I do not think we have been focusing totally on those areas. Many other things have been going on.

Q731 Mr Chaytor: Professor Petersen, in the Royal Society's submission to the Committee it talks both about the absolute need for international competitiveness in research but also the intrinsic value of maintaining the interdependency between teaching and research. Surely at the end of the day government and the Funding Councils are going to have to decide whether they want to concentrate research in those institutions that are internationally competitive or whether they want to disseminate it across all of our universities and maintain the link between teaching and learning. Do you not envisage a time in the very near future when some universities will simply have to become teaching only universities in order to divert sufficient funds to the leading research intensive universities to maintain international competitiveness?

Professor Petersen: We obviously have to separate a little bit the university world because the university is a very wide spectrum of institutions. There are already now a lot of universities that are essentially teaching universities. Most of the research that is funded by Research Councils is going on in the Russell Group universities. There is no doubt about that. This is in the public domain. Since we are talking about research funding, I guess we can restrict the discussion to the Russell Group universities because there is an enormous amount of research. I am conscious of the fact that there are centres of excellence elsewhere but the bulk of the research is carried out in the Russell Group universities. Here there are different views. There are some very strong universities in the golden triangle who have the view that all the research funding should go to them. They maintain the argument that only in this way can the UK have real world class universities. That is not the Royal Society's position. The Royal Society has always been looking at the individual scientists. We have pointed out many times that even though there is a certain concentration of research funding in the golden triangle, there are top rated departments in many other universities and we would miss out greatly if we said no, we just want to have three universities, Oxford, Cambridge and Imperial, and we do not want to do it in any other way. Again, if I may use

the example of Switzerland which is a small country, by all standards they always come out on top. It is not the case in Switzerland that there is one elite institution. The ETH is a great institution but the new EPFL in Lausanne is by many standards as good. Zurich University is a great university but so is Bern and Geneva. When you look internationally, there is no particular intellectual argument that says that we can only sustain our excellence if we just choose two universities. We would lose out enormously. They are top rated departments in many different places. I speak as a person who for many years was head of physiology in Liverpool which was the top rated department in this country, higher rated than Oxford and Cambridge in exercise after exercise. It is a very dangerous argument sometimes put out by people who have a self-interest in these matters that all research funding needs to be concentrated in certain universities. It is one of the good things about the way the Research Assessment Exercise has been done. It has not taken a view on whether a university is good or not. Instead it is saying, "Let us show the research results from various places and we will fund those areas that are high quality." The Royal Society position is that we fund excellence wherever it is to be found.

Q732 Chairman: You did give evidence to the last higher education inquiry. You will remember the evidence of Sir Richard Sykes on this point when he wanted a handful of research rich universities, all of which would be in London and the south east.

Professor Diamond: If we look at 2005-06, 50% of Research Council funding goes to 10 universities. The other side of the coin is that the Research Councils fund in 155 higher education institutions. We fund competitively there. That means there are people doing incredible research right across the base and different places are focusing on different things. For example, the example often given in this case is Dundee Abertay which has world leading work on computer games and areas around that. We must fund great research wherever we find it. We must allow universities and higher education institutions to have the flexibility to focus on particular areas, often respecting particular local skills and markets. For example, I know that the University of Bournemouth has a real focus on computer graphics which reflects a cluster of industry around there. Whether that cluster has come because Bournemouth University is good at it or Bournemouth University is good at it because that cluster exists I do not know but we must have a position where we fund great research wherever we find it. We have already had a big discussion thus far about the difficulties of getting funding and I can assure you therefore that we do have that diversity of institution. Certainly while there are some huge universities across the research board, there is absolute excellence to be found in every institution.

Q733 Fiona Mactaggart: Professor Diamond, earlier you were critical of Stephen's anecdotes. I am going to tell you another anecdote.

Professor Diamond: I was not critical.

Q734 Fiona Mactaggart: When I was in higher education, as someone who was very focused on teaching, I felt that as the Research Assessment Exercise was coming down the road people like me were locked away in cupboards if we could or forced to research if we could not, while people in the management of the institution concentrated on the real business of the institution which was research. Is that an uncommon experience or do you think it has been more widely felt?

Professor Diamond: The reason I am being careful in what I say is that we are speaking anecdotally. I cannot speak for every university. I have worked in universities and I am now a leader of a Research Council. It is very clear to me that students demand and deserve the highest quality teaching. That should be done by the people who are best at doing it and there is an enormous amount of excitement and energy given to students by the cross over between research and teaching. Personally, I believe passionately that no one should put the word "professor" in front of their name unless they are prepared to profess their subject right across the board. Here you can also find anecdotal evidence in the United States that, as we move into a culture where students are paying fees for university, they will expect to see the very best and biggest names teaching in institutions but only if that teaching is really excellent. I believe very strongly that we have to have that cross over but that also we need to reward teaching excellence in universities. I believe there is a real need to have posts of professors of teaching excellence, where their work has not simply impacted on their own students but on the teaching of their subject more generally. It is incredibly important that universities, in looking at promotion for their staff, have lines of promotability for individual staff which reflect the diversity of a university's mission. The university's mission will always be a major mission of teaching and that means that you have to have absolute excellence and reward those who do it in universities, as well as research, as well as the other areas such as knowledge transfer. That is why you absolutely need to have that broader culture. Do I see that happening in universities? I have to be absolutely honest with you. Anecdotally again, I have seen a sea change over the last few years in many universities when I have had the privilege in this job to go and talk to Vice Chancellors right across the piece who have told me that they are trying very hard to change the culture in their institution to ensure that those sorts of things are rewarded.

Professor Petersen: That is a very important area. One has some difficulties in really assessing the situation. A lot of the evidence that is around is anecdotal. You will hear many people say that the increasing emphasis on research assessment has been to the detriment of teaching. This is something that is commonly stated. I am not quite sure that it is right. My own personal feeling is that the increasing workload on academics which means that they work these many, many hours we have

already alluded to, probably in the research led universities means that a lot of the extra time people are putting in has been put in on the research side. Maybe that means that a lot of people see that looming larger but I do not think that has meant that people are spending less time on their teaching or preparing their teaching. In many universities, including my own, the pressure that is generated on the academic world has meant that people have thought very carefully about how to do their teaching in the best and most efficient way. There is a great deal of emphasis on high quality teaching. The general view that the Royal Society has is that teaching is extremely important. We are talking about educating the next generation of scientists. We believe that teaching in a research led environment is, in a general sense, a good thing. When I think back to my own time as an undergraduate, I was enormously inspired by being taught by people who did research and who gave me that enthusiasm for it. I would like to think that is something that is also happening now. Serious people do want to teach very well and to put a lot of emphasis on the next generation as extremely important. The quality of teaching is really important. In my own field, one of the main results of our research ultimately is to produce better textbooks. That is one particular goal to think about. We want the knowledge of the people who are going to take over after us to be better than our knowledge. The two things should and must go hand in hand. We have to make sure that happens. Professor Diamond: The writing of a textbook would not be something that would be rewarded entirely by a Research Assessment Exercise unless you tried to say that that was a good thing and reward it properly. That is one of the areas we believe you need to do more in.

Q735 Fiona Mactaggart: That is partly what I am interested in. What is research inspired teaching? Are people out there really clear about what it is? It is a push to get more research inspired teaching. Is there a risk that we will not have research inspired teaching but we will have a kind of apartheid of teachers and researchers who occasionally talk to each other?

Professor Petersen: We must avoid that at all costs. I absolutely agree. It has been a traditional strength of this country and it could be and should be a continuing strength that we keep those two things together. It is a delicate balancing act because there are such enormous pressures on time but it is a really important goal. It is something, I agree, that has not been assessed generally speaking in the best possible way. It is absolutely not clear to me at all how a metrics driven approach will help in any way with regard to that. We could think about ways in which one could build it into the system and that has nothing to do with the method, whether it is a peer review system or a metrics driven system. It would be more easily brought into a peer review system, quite frankly.

Q736 Chairman: Do they stress the relationship between research and teaching in the Swiss example you have referred to?

Professor Petersen: I do not think it is fundamentally different in the good research led universities that I personally would know. In all the conversations I have with good scientists at scientific conferences, people are not talking dismissively about teaching. This is a misconception that has been raised by some people, that people who are doing research are not interested in teaching and so on. It has not been my experience. When I talk to colleagues, mostly at scientific conferences internationally, people are enthusiastic about their teaching. They fully understand its great importance and they want to do their very best.

Q737 Fiona Mactaggart: You said that it has not been assessed. In earlier exchanges one of the things that we have recognised is that things that are not assessed or funded do not get properly looked after. There has been some kind of push to directly fund research informed learning. Has that changed anything or has it just papered over it all?

Professor Diamond: I am the wrong person to ask that question. I would hope that it had.

Q738 Fiona Mactaggart: Are you the right person to ask to describe what research informed learning looks like?

Professor Diamond: It is something that I have given lectures about so I ought to be able to answer to some extent. It is not a simple answer that I would give you in one sentence. You need to be reflecting the very best research practice, the very best recent research knowledge. Neither of those needs to be done by a great researcher but in the whole learning experience being able to undertake one's project in a laboratory with very good people is an extremely positive experience. The whole link between great research and how your teaching develops over time has to be something that is brought together in a positive way. The one thing I would not say is that you always need great researchers to do research led teaching. That is really important. You can see examples of brilliant teachers who are doing research led teaching in a brilliant way. What you do need is a really holistic view of the learning experience and the way in which students are at university, not only if you like to learn a set of vocational skills but to broaden their understanding of the way in which knowledge is generated and develops so that when they go out into the wider world, into whatever careers they subsequently take on, they understand that much broader knowledge. If we can engender that, then we have engaged in research based teaching.

Professor Petersen: In my own field which is laboratory based science, one example of it would be that students can undertake projects working with research equipment in a research environment where other people are doing real, cutting edge research. By doing that and seeing the example of other people, by interacting with some of the people who do experiments, you will get a direct feeling and understanding of how the scientific process works. This is something that will preferentially occur in an environment where there is a substantial amount of research funding, where there are a lot of researchers around. That would be one example of research informed learning.

Q739 Stephen Williams: Can I return briefly to the dismal science of metrics? The Department says that it is going to be a single, over-arching framework within which a differentiated approach is possible for groups of disciplines. I would take that to mean that arts and humanities will continue to have peer review and stem subjects and everyone else will get metrics, unfortunately from your perspective. Will that make it harder for departments to cooperate on different areas of research? For instance, archaeology is clearly a mix of history and perhaps physics as well.

Professor Petersen: There will be some problems in those areas and that has been a concern of the Royal Society. Mathematics are a clear example, mostly labelled together with science. It cannot be assessed in the same way. The future, for example, of biology is very much based on quantitative approaches and there will be a need for mathematicians to work very closely with biologists. Of course, a lot will depend on the details which we still do not understand but there certainly are dangers when different subjects that have to work closely together are assessed in what appears to be, under the current proposals, fundamentally different ways. It will cause considerable problems and we are very worried about that.

Professor Diamond: I take the point you have made that the assessment or the reward mechanism will influence behaviour but if we want research to take place across the entire piece we simply have to engender a culture whereby people feel relaxed, able and rewarded to spend the time that it takes to undertake that research. It is not absolutely clear to me, because I do not know what the details of these systems will look like, how having a slightly different system in different areas will impact on that. That is something we will have to look at when people have come out with it and certainly I hope that they do take that into account. At the end of the day we have to have opportunities for people to work across boundaries in some of the key areas that Research Councils UK are saying are important for directed research. They are cutting across three or four Research Councils. There has been a magnificent programme the Research Councils have funded in recent years on the rural environment and land use. That has involved, in a really exciting way, biologists working with environmental scientists, working with social scientists, really to impact on policy and activities in the rural areas of this country and indeed beyond. We simply have to have an environment for science-by "science" I mean research-across the entire base in this country which enables people to work together. We need to be aware that the metrics should not impact on what individual scientists are doing. That is the whole thrust of Research Councils UK's input in this area.

Q740 Stephen Williams: The question we have not raised at all in this metrics mix is the quality indicator. What assessment have you both made of how that quality indicator will work? When the Committee was in Australia in November last year, we heard from the chief scientist about their impact assessment on the impact of research. Do you have any worries or concerns about impact or a quality indicator?

Professor Petersen: Impact is very difficult. One of the basic problems is that it takes a very long time from a basic discovery until you can see what the impact is. When Einstein published his famous papers in 1905 it was not easy to assess at that point what the eventual impact would be. Eventually, it was colossal as we see every day when we fly around the world and so on. We have GPS-Global Positioning Systems. It was impossible at that point to assess the impact, so one has to be very careful. We are not against impact assessment but in very many areas of fundamental research it is not a very easy task to evaluate in the relatively short term. We have to support a considerable amount of basic research because our past experience shows us that very often 10, 20, 30 years later it leads to some fantastic development. To make an assessment within a five year period is often exceedingly difficult and quite impossible. You could jump to the completely wrong conclusion, saying, "This is not very important," so it is a very difficult area.

Professor Diamond: Stephen, are you referring to academic impact or non-academic impact, because both of them are incredibly important? The bottom line is you need brilliant science in order to have either academic or non-academic impact. The measure of quality in the first place—the academic peer review of the selection-has to be good. Having said that, you then need properly to be able to measure and reward both academic impact and nonacademic impact. I get very nervous about the use of simple impact factors because different disciplines have different impact factors. You need therefore to have a disciplinary approach to do that on the academic side. On the non-academic side, there is an enormous amount of work going on to really understand how to measure non-academic impact and I think that is something that we really need to work on over the next little while.

Q741 Jeff Ennis: We are obviously facing a future of increased international competition in research. How much can that be nullified or countered by increasing international cooperation?

Professor Diamond: I think international cooperation is incredibly important. We have looked at the indicators of collaboration between the UK and the US. If you look at the citation indices, you find that where US researchers collaborate with UK researchers they get higher citation rates than if they do not and *vice versa* for the UK. We must remove the barriers to international collaboration. Some of those are something that is called double jeopardy. People are aware of double jeopardy. I will not explain what it is. We are working very hard across the Research

Councils to remove double jeopardy. My own Research Council now has 14 different agreements⁵ with different international organisations whereby we jointly peer review and take decisions. In this country someone working in Oxford with a team between Oxford and Liverpool can simply come to one Research Council. If that person in Oxford is working with someone in Mannheim, they need simply to be able to go to one Research Council. Research Councils UK are working extremely hard to enable that to happen. Research Councils UK are also working extremely hard to engage with some of the emerging scientific areas such as China, India and some of the other areas. Indeed, we are opening offices in the next year in China, in the next month or so and, later on, in India. We are also opening an office in Washington really to be able to enable UK research to take place. The EU is a critical area for us and we are working very hard there too. The UK Research Councils have had an office in Brussels for many years and it is important that we impact on science policy. The other international area that is deeply important is infrastructure. For many years the UK has contributed to CERN, the huge particle physics laboratory in Geneva. Those sorts of infrastructure are not simply in that area now. We go right across the piece. I just might mention to you two things, for example, the National Environment Research Council with its ocean going vessels that researchers from many countries work on in a very sensible way; or even in social science, where the European social survey has been undertaken over the last few years. 20 countries in Europe are undertaking a similar social survey at exactly the same time. That has been led from the UK. Roger Jowell won the Descartes Prize for Science, one of the foremost European science prizes for that work. The only way we are going to maintain our expertise is by ensuring that we continue to work to attract great scientists to this country. We have to have the facilities for them. We have to remove barriers to international collaboration. We have to have access to facilities and we work through our political processes and Research Councils to impact on the international scientific agenda.

Professor Petersen: International collaboration is incredibly important. There are opportunities and I think we have to take them where we can but there are also threats in that sense because it is a global market for scientists. It means that outstanding scientists can move around. We are also going to see some major changes in the higher education sector. My own university has now built a university in collaboration with a Chinese university near Shanghai and we may see in the future globalised universities with campuses around the world, which will again create a different kind of international competition. The scenery is changing very rapidly but different research circumstances in different universities will, in different parts of the world, create the kind of transfer market we talked about before internationally. From this point of view, it is very important that we have a sustainable research base here that is sufficiently attractive to keep good people here.

⁵ 11 signed and three under negotiation

Q742 Chairman: The Committee is going to China in June to have a look at what is going on there.

Professor Diamond: I trust the Committee will find time to visit our office.

Q743 Chairman: We are already planning to. Professor Diamond, you never commented on Professor Petersen's remark that he would like to see a doubling of the research budget. How big would you like to see it?

Professor Diamond: I am not going to give you a number. I am simply very clear in my mind that there is an enormous amount of world class science unfunded in this country. While the increasing money has been very welcome, we remain relatively lowly funded in world terms, particularly for

volume. All Research Councils could spend significantly more money than they have on volume research that would be spent incredibly wisely and which would have real, measurable impacts on the economic development and the quality of life for this country.

Q744 Chairman: You would not turn down a doubling?

Professor Diamond: I would not turn down a doubling.

Chairman: It has been a pleasure having two experienced and knowledgeable people in front of this Committee and also two that are not afraid to disagree when they had to. Sitting here, watching some of the body language of the two of you was quite interesting. Thank you very much.

Wednesday 4 July 2007

Members present

Mr Barry Sheerman, in the Chair

Mr Douglas Carswell Mr David Chaytor Mr Gordon Marsden Fiona Mactaggart Stephen Williams

Memorandum submitted by Professor Alison Richard, Vice-Chancellor, the University of Cambridge

This written evidence is submitted in support of oral evidence to be given on the 4th July, 2007. The focus, as requested, is on the internationalisation of higher education. I bring to this debate the perspective of someone who has worked in the US higher education system for more than 30 years, latterly as Provost of Yale, and since 2003 as Vice-Chancellor of Cambridge.

1. CAMBRIDGE

1.1 The University of Cambridge is a British university with global reach. Its Mission Statement is: "to contribute to society through the pursuit of education, learning, and research at the highest international levels of excellence."

1.2 Students from over 120 different countries make up almost one in five of the student population. Cambridge has just under 12,000 undergraduates of which 15% are from outside the UK. It has almost 6,000 postgraduates of which more than 50% are non-UK.

1.3 A number of high profile scholarship schemes support our international students, particularly those provided through the Cambridge Gates Scholarship Programme, and the Commonwealth, European and Overseas Trusts. Half of all international students receive some level of financial support from the University: in 2005–06, the total expenditure of the Cambridge Trusts on student awards amounted to just under £15 million. International joint funding schemes are in place with institutions in Australia, China, India, Singapore, and the US.

1.4 A quarter of the University's 1,600 academic staff are from outside the UK. If contract research staff are included, this percentage rises to 40%.

1.5 The activities of individual staff, Faculties, Departments and Colleges have created an extensive network of links with overseas universities and other organizations in most countries of the world. Cambridge University Press has offices in 40 countries and 65% of its author base is outside the UK. Cambridge Assessment, a department of the University that develops and delivers training and educational assessment, is active in 160 countries. In China, for example, Cambridge Assessment is a preferred partner of Beijing Municipal Government in the "Beijing Speaks English" programme, in preparation for the 2008 Olympic Games.

1.6 Cambridge also has a growing number of institutional partnerships with overseas institutions, primarily in East Asia and the US, and participates in a small number of European and international university alliances.

1.7 One indication of the University's international research standing is provided by the results of the Research Assessment Exercise. In the 2001 RAE, 95% of submissions were graded at 5* or 5.

1.8 This strong research base helps push Cambridge to the top of international league tables. For example, Shanghai Jiao Tong University's Academic Ranking of World Universities 2006 placed Cambridge second globally, after Harvard.

2. INTERNATIONALISATION-A UK/US PERSPECTIVE

2.1 In 2004–05 two University working parties considered Cambridge's international position. One looked at international student recruitment, selection and support, the other at international academic relations. In the light of their findings and my own experiences I have four observations.

2.2 Quality: Efforts must focus on maintaining high quality throughout the healthily diverse UK university system, which has a deservedly high reputation. Just six countries host 67% of the world's foreign or mobile students: 23% in the US, followed by 12% in the UK.

2.3 Pricing: The pricing of University courses must be internationally competitive. Particularly in postgraduate research courses, international competition for talent is intense, and is driving increased investment in the financial support of students.

2.4 Partnerships: International partnerships are an important dimension of the emerging global network of universities. They facilitate a healthy exchange of students and staff, and encourage the scaled-up international research collaborations increasingly needed to confront global challenges. They also provide a way for UK universities to help build critically needed capacity in the developing world.

2.5 Positioning: There is good reason to be proud of the performance and contributions of UK universities. We must get better at saying so and explaining why if we are to expect the world's most able students to continue to choose the UK for their studies.

3. The Strategic Importance of Internationalisation

3.1 The international activities of the University of Cambridge are vital to its continued excellence in education and research, and they add a new dimension to the ways in which Cambridge contributes to UK society and beyond.

3.2 The international activities of the UK university system contribute importantly to the UK economy. Equally or more important, a direct or indirect consequence of these activities is that they increase the impact, influence and alliances of the UK around the world.

3.3 The world will benefit greatly from a global network of universities, competing and collaborating together in education and research. The UK is a hub of excellence in this emerging network.

July 2007

Memorandum submitted by Professor Georg Winckler, President of the European University Association (EUA), Rector of the University of Vienna

1. INTERNATIONAL COMPETITION

The outcomes in the various university rankings (THES, Shanghai, Newsweek) are not identical, but similar. There is an extremely high concentration of the very best universities in the US. Only top UK universities are able to compete globally. Yet among the top 200, just counting entries in the ranking tables, Europe is on a par with the US.

Examining the ranking of individual researchers in subject areas (eg mathematics, molecular biology; ISImost highly cited researchers), the outcome is at first glance surprising: Among the top 20 most highly cited researchers, Europe seems to be nearly on a par with the US; the gap between Europe and the US widens, however, when it comes to the top 200 researchers. It seems that US top universities excel not so much by employing the few very top stars, but by engaging the bulk of the top 100 respectively top 200 researchers per field. Obviously, European universities lack critical mass at the top.

2. NEW ENTRANTS

Given the fact that especially Asia is increasingly recognizing the importance of research and higher education for economic development (Siannesi-Van Reenen 2003), we can expect the developing world to invest ever more in higher education and research, and hence in universities (eg India plans to increase the number of universities from about 300 to 1500 in 2015). This might cause European universities to lose further ground, not because of a widening gap to US universities, but through intensified competition induced by additional competitors outside North America and Europe.

Improved performance by universities due to reforms should not be expected quickly, as Australian examples demonstrate (Gamage-Miniberg 2003). Since the top 20 most highly cited researchers in various fields work in Europe, the fastest strategy to catch up consists in building critical mass around strong research of top individuals and providing there the appropriate infrastructure.

3. DIVERSIFICATION OF MISSIONS AND PROFILES: THE US HIGHER EDUCATION SYSTEM AS A MODEL

Neither the traditional systems in France and Germany nor in Britain, but the US "hybrid" system (traditional college education with competitive PhD programs on top) proved to be highly successful in the 20th century: it allowed a massive expansion of student numbers ("massification") and a research intensification within the 200–300 research universities, and thus a diversification of missions and profiles. In the words of D. Ward: "The US system is elitist at the top and democratic at the base."

This diversification was driven by autonomous public/private universities with (nearly) no planning at the federal level but with mobility of students and staff, and with the establishment of federal grant or research institutions (NSF, NIH). States do a lot of planning at their level (eg California, Wisconsin), but due to the mobility of people and due to federal funding there is a fierce "system competition" among states.

4. PRESSURES WILL INCREASE: THE GLOBALISED KNOWLEDGE SOCIETY

The emergence of the knowledge society will see increasing participation rates, and much more life long learning (from "elite" to "mass" education). In this context universities need to care more about the employability of their graduates. Research intensification will require that a comprehensive research university disposes of at least 1 bio. € annually. Since the relative burden on the tax payer will be reduced, new sources of revenues have to be found, influencing university strategies and academic values. Tuition fees will go along with growing student consumerism.

Globalisation of higher education and research is driven by the increased internationalisation of the economies and by technological changes. New forms of global universities will emerge: open universities, virtual universities, meta universities (MIT OpenCourseWare Initiative 1999, Ch. Vest: "A transcendental, accessible, empowering, dynamic, communally constructed framework of open materials and platforms . . . "). Projects such as the Google Books Library Project (since Dec 2004) will through the worldwide interconnectedness reach more than 1 billion people. Given these new vast opportunities of informal learning, higher education institutions will be increasingly confronted with the task of validating and branding knowledge.

The negative demographic trends in Europe will increase the pressures for European institutions to compete globally.

5. MODERNISATION OF THE UNIVERSITY SYSTEM

Strengthen the European dimension: Europe needs more common reference points in higher education and research. Europe needs the European Higher Education Area and the European Research Area in order to benefit from scale effects and from her diversity. 20 years of ERASMUS (and the Bologna Process as one consequence) and the strong beginning of the ERC demonstrate that public goods, organised and financed at the European level, have set new horizons; Bologna has become a "European trademark".

Measures to be taken:

- (a) broaden access on a more equitable basis.
- (b) reach out to more research excellence.
- (c) break down the geographical and intersectoral barriers surrounding universities in Europe, increase cooperation and competition among universities in Europe.
- (d) provide the appropriate skills and competences for the labour market.
- (e) give young, well performing early stage researchers better chances to work independently.
- (f) create genuine autonomy and accountability for universities; foster an institutional quality culture.
- (g) reduce the funding gap so that 2% of GDP will be spent on higher education by 2015 (besides 3% GDP spent on R&D); make funding more effective, more performance oriented.

July 2007

Witnesses: **Professor Alison Richard**, Vice Chancellor, University of Cambridge, and **Professor Georg Winckler**, Rector of the University of Vienna and President of the European University Association (EUA), gave evidence.

Q745 Chairman: Can I welcome Professor Alison Richard and Professor Georg Winckler to our proceedings and say that we are very grateful for them taking the time to come before the Committee. We can make Professor Richard if we had to; we cannot, Professor Winckler, make you, as you are not a British citizen, but, of course, we are always very pleased to see Professor Richard and I think she is quite happy to be here. I hope you are, Alison, anyway!

Professor Richard: Indeed.

Q746 Chairman: As I was saying outside, this is a very important inquiry for us. We have been to Australia, we have been to China, we have taken quite a lot of evidence on the sustainable university and the future of higher education in a global context, and so we seek to learn. I am going to ask

Professor Richard and Professor Winckler to say a few words before the questions start. Professor Richard.

Professor Richard: Thank you very much, Chairman. I was Provost of Yale University in the United States before returning to Cambridge as Vice Chancellor in 2003, and then, in 2004 2005, two university working groups viewed and made recommendations for Cambridge's international strategy, looking both at the experience of individual students and scholars but also at the university's institutional relationships internationally, and my brief remarks this morning are based on both those working groups' findings and also on my own experience. The starting point is that English is increasingly the language of not just business and science but also education. The US has the largest and strongest, though not without its own problems, university system in which English is the first language, and the UK's university system is much smaller but, in my estimation, punches far above its weight and outperforms every other nation except the US. For example, just six countries host twothirds of students studying abroad. The UK ranks second only to the US in popularity. We are also the only country other than the US to have universities. Cambridge and Oxford, in the top ten in the world according to the Shanghai Jiao Tong World League Table—one must take league tables with a pinch of salt, I think, but there is some signal amidst the noise—but the competition is intensifying. I believe that our position globally is, as it were, ours to lose. What will it take to keep the UK system as a global centre of excellence, respected and admired around the world? I would like to make four points to answer that question: (1) we must stay focused on quality, not on volume; (2) we must price the education we offer competitively, particularly at the post graduate level where international competition for talent is intensifying; (3) at the national level policy-making must remain joined up and sensitive to the knock on effects for student recruitment of policy decisions in other areas. I would just like to say. I think it is pretty well joined up and quite sensitive at this point. We must hold on to that. (4) We must consolidate the UK's role as a major hub in the emerging global network of universities. It is emerging fast. I think we can do that through international partnerships and alliances and also, if I may say so, through better marketing. Why is all of this important? Speaking locally, parochially, for Cambridge it is absolutely a matter of keeping the university among the handful of universities recognised as the best in the world. For the nation, universities extend the UK's influence around the world, in addition to being a foreign currency earner, through the students we educate and through the impact of our research. Finally, I believe it is healthy, helpful and actually critical for there to be several centres of excellence in the world. The UK is one and it is of global importance, not just of national importance, that we remain one. Thank you.

Q747 Chairman: Thank you, Professor Richard. Professor Winckler.

Professor Winckler: Perhaps to introduce myself, I would like to indicate two experiences I have. The first one: I have been Rector of the University of Vienna since 1999, and was chairing not only the Austrian Rectors' Conference but also the reform process of the Austrian university system. There was a complete revamping in 2002, granting autonomy and also granting financial autonomy and other things. What is also important to indicate is that the University of Vienna was the flagship university of the old Austrian/Hungarian empire, as you perhaps might remember, with many Nobel Prizes and so on. There is a strategy to make the University of Vienna again the hub of central European initiatives and I think we are successfully doing so. There is strong economic growth in the region, especially in Eastern Europe. Universities are reorganising themselves. You will see a change in the landscape in Central Europe soon to come. Central Europe, including

Germany, will then exploit new chances of collaboration, because this area has been hit during the past decades by national and other political fragmentations and did not exploit the potential it has. We need to derive our strength also from cultural diversity. So it is important to see that English is a very important language, but it is not the only language. My second experience: I have been President of the European University Association since 2005, a little bit more than two years, and have been engaged now in various discussions about the modernisation of universities. I was a member of the expert group of the European Commission which led to its document, in May 2006, of the modernisation agenda for universities. That document came actually out of the so-called Hampton Court follow-up, triggered by Tony Blair's famous speech during a meeting of the European Council at Hampton Court in October 2005. I also participate in the discussions of reshaping the European research area. I am also engaged in various national university reform projects. I recently participated in the Finnish discussion. Finland will very likely change its university system soon in order to gain strength. So, there are a lot of things going on. Let me say some words on issues which you can also see in my written document.¹ The first point is the ranking of universities. When you look at the various lists you will see that the top universities are in the United States. Only UK universities are able to compete globally. I think this has to be stressed. Yet, if you just count entries in the list of the top 200, you will see that there are as many European universities as there are in the US. So it is important for Europe to have a strategy for excellence in order to regain top positions. The situation becomes more dramatic, if you look, for example, at the ISI lists of the most highly cited researchers. According to this list of the most highly cited researchers (and I may give you the example of mathematics), out of the 300 most highly cited mathematicians in the world, 200 are associated or affiliated with US institutions, Europe has 19 in France (still very strong), 18 in the United Kingdom and only seven in Germany. Obviously, there has been a dramatic change since the time before World War II. What Europe really needs is to have more people at the top in the various scientific fields. But if you only look at the very top stars, you will see that actually there are quite a few Europeans in the top 20. Europe has Nobel Prize winners. So, an important strategy would be to build critical mass around the very top researchers. The ERC (European Research Council) has the strategy to strengthen top research eg by advanced researchers grants. I cited mathematics because mathematics is not driven by costly infrastructure. So the financial burden of advancing mathematics is not of much importance. And I cited mathematics because its advancement is not based on native languages. I do not want to talk about new entrants in the field of research. But, it is very clear that India, or more generally, Asia, will see many new entrants—they

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invest highly. If you look at the research as a percentage of GDP, China would already rank among the top 12 in the European Union. They are really investing a lot. India wants to increase the number of universities from 300 now to 1,500 in 2015. Alison Richard has already talked about the US system. I think what is clear to say is that neither the French system, with the écoles spéciales, grandes écoles and its university system, nor the German system with the Humboldtian type of universities, and, I would add even the British system, could not meet the challenges of the 20th century. It was the American "hybrid" system, having a traditional college education at the base and having, on top of that, a PhD education, which proved to be very successful in the 20th century. It allowed 200-300 universities to be very research intensive. It is also perhaps important to stress that in the US there is nearly no planning at the federal level; however, there is a lot of planning at the state level. At the federal level you support the mobility of staff and students by various funding schemes, you encounter also important federal institutions like the National Science Foundation, with a huge financial volume. now US\$ 6 billion a year, which will double in the next years to come. The European Research Council will only have one billion euros a year. The National Institutes of Health in the US disperses US\$ 28 billion. All in all, the US has strong funding agencies and only a few general regulations. There, and this is important to stress, is not only a competition amongst universities but you get also a system competition amongst the states. This double competition makes the US system so healthy. I do not want to talk about the global pressures to increase for universities, about participation rates, lifelong learning and other things in which Europe should do more. If you look into the modernisation agenda of the European Commission you will see that these issues constitute big challenges: Europe needs to increase participation rates and strengthen lifelong learning; the latter is very important in an ageing society. Globalisation in higher education will see new forms of universities.² But let me just say, what we really need in Europe is modernisation of the university system. I am putting my best efforts at the European level to make the universities move out of the shadows of national ministerial bureaucracies, become strong, that there is more funding for the universities. We have to invest more and we have to invest better in the universities. That is perhaps enough from me.

Q748 Chairman: That is an excellent start. As you both may have seen, the first part of the inquiry was looking at the Bologna Process and we wanted to have a look at Bologna in a hurry because the Bologna meeting was in London and we wanted to get it out before then. In the context of what you have both said, can I switch to Alison Richard and say, from what Professor Winckler has just said, do you see that necessity for Cambridge to work with other research rich universities across Europe? A lot

of the evidence that we have had does concentrate on the United States, does concentrate the emerging economies of China and India and less, you said, about co-operation and communication and partnership of universities across Europe. What is your view on that, Professor Richard?

Professor Richard: I think that Professor Winckler has spoken powerfully and eloquently to the transformations that are rapidly getting underway in Continental Europe. I think the fact of the matter is that it is widely recognised that, through a combination of state oversight, under funding, a different philosophy about access to university education, the greatness of the European universities has declined, and there is every indicator at the institution level that that has been the case. In Germany, in Austria, even in France now-President Sarkozy has been speaking out about this at the level of the EU, President Barroso also spoke out about this-I think we will see quite rapid change going forward. That in turn will drive greater co-operation and Cambridge academics will cooperate and collaborate where they see interesting scholars with whom to collaborate. We already have, for example, a shared Masters' programme in law with the University of Paris VI. We exchange students. They spend half of their legal training in Paris and half of it in Cambridge. I suspect that we will see more of that at the training level going forward, and the research collaboration, I think we will see much more of that as the EIT gets underway, if it does get underway, as national centres embedded in existing national universities, which I think is now the model, which is a much more promising model than the earlier notion of establishing MIT in Europe. I am pretty optimistic about what is going on in Europe.

Q749 Chairman: What you are saying, in a sense, is it is the American model, partly the UK model, where there has been much more autonomy for institutions and the more successful model. We said in our Bologna Report that that was a worry we had. There was a history of centralisation or central government control of HE in many European countries. I think Professor Winckler said in the 20th century the American model was successful. Is the American model still the proven model that we should be emulating?

Professor Richard: The Spellings Report in 2006 flagged up some real concerns in the American model. I think one of the strengths of the American model is, indeed, its diversity, and it is interesting that, if you look at the top 50 universities in the Shanghai Jiao Tong League Table, 30 of them are in the US, 18 of them are state universities, 17 of them private universities, so all the strength is not in the private universities, there is great strength in the state system, and those budgets derive from the state, so it is possible to have substantial state investment but considerable autonomy. The US have been very successful in that regard, but as the state budgets come under increasing pressure, the great California system has been really squeezed by the squeezing of state budgets, and those universities

² Note by witness: ie open universities, meta universities

are scrambling to diversify and strengthen their revenue systems. I think the most disturbing statistic coming out of the Spellings Report as far I am concerned is the steady decline in completion rates of degrees in the US. That is an indicator of something amiss, that students, for one reason or another—financial constraints or the sense of whether they are getting value out of the system are dropping out. The UK, in contrast, has very healthy completion rates. I tend to view the US system still, as I said, as the finest system in the world, but it is not without problems.

Professor Winckler: First of all, I would not underestimate the resilience of the American system. because one of the outcomes of the Spellings Commission and the discussion afterwards was that the United States are going to double the money for the National Science Foundation, and there has also been a discussion whether, perhaps, there has been too much concentration of funding on molecular biology and medicine as an outcome of the concerns of within an ageing society and whether the United States should now invest more into physics, into material sciences and so on. So there have been very lively debates in the US. There will be a report coming out in 2008 demonstrating that the United States can act quickly. This is the reason why I do not think that the American system will get into trouble. There is a high degree of resilience in the American system. There is also a lot of systems competition: one of the reasons why California now starts to spend more on its prestigious universities is because there is competition coming from within the US. So, California wants to have the best university system and does not want to be outperformed by Wisconsin or Minnesota.

Q750 Chairman: Is it just more money that we need? When we previously looked at this I remember Professor Richard Sykes put so much emphasis on a handful of universities, I can remember saying, "Do you mean a handful? Five?" He said, "Yes." Our report then said that we believed there should be a research rich university in every region of this country, and certainly I personally still believe we were right in that recommendation, but whichever view you take, in order to make UK and European universities more co-operation? Is it more money from government? Is it more money from the private sector? What is it?

Professor Richard: We know that, relative to the US, there is a whole percentage point less of GDP invested in the university system in the UK. I believe there is still a funding shortfall, an investment shortfall. Where should that investment come from? Not all from government. It needs to come from the beneficiaries of the system. I believe that means society, for which one can say public sector investment. I think the private sector benefits and needs to invest more and those who individually benefit in one way or the other, I think it is reasonable that they too should contribute. So, a greater investment is part of it, but my observation also, and I think it speaks to something you were

saying, Professor Winckler, is that perhaps because it is such a big country compared to the UK, the US is in the midst of this competition amongst universities, amongst states; there is, nonetheless, a much greater comfort with the idea of diversity within the university system, that different universities and different colleges are fulfilling different specific missions within the university system and they celebrate their strengths. What I see happening in the UK is you have an array of universities doing rather different things and many of them doing it very well; then you spin it through 90 degrees, you rank order everybody and then you are suddenly saying: Cambridge is up here and Anglia Ruskin, which is in the city of Cambridge, somehow ranks much lower than Cambridge. Well, actually, Anglia Ruskin does things that Cambridge University cannot do and does not do and vice versa, and we have got to get more comfortable with the idea of ourselves as an eco-system is the way I think of it. I think that is happening. I think that the development of more serious CMU, the Russell Group, The 94 Group. This is a reflection, not of a disintegration of the system, but actually a healthy recognition of the diverse roles we play within that system. The US is much better at that than the UK is, I believe.

Q751 Chairman: We have got to have more investment in higher education. That is the truth, is it not?

Professor Richard: Yes.

Q752 Chairman: You have given us, may I say, Alison, the Dearing mantra, which I think most of us would agree with, but in real money, where should the money come from now? How urgent is this? How urgent is the necessity for Europe and the UK to invest substantially more? Professor Stephen Schwartz was in town this week and mentioned this new, is it, five billion dollar endowment that the Australians have put in, and another five billion is promised for next year, really as a resource for higher education research. What are the things we should be doing and how urgent is it?

Professor Winckler: Let me come back to your first question. Whereas the United States has about 200-300 research intensive universities, the EU has about 1,000 universities granting PhDs and doing research, and all of them have actually not got sufficient money. To run a good research university nowadays, in order to exploit economies of scale and scope, you need to have at least 1,000 good researchers and you need to have at least one billion euros a year as an annual budget. How many European universities do it? There are quite many, but, as was indicated, perhaps in Europe it would be sufficient to have, I now guess, 500 research universities. If you compare that with the United States, this would be the equivalent figure, not 1,000. So, there should be more diversification. Yet, the important point is that this diversification should not be ordered from above, from the top, but that should be the outcome of an evolutionary process. To get this process underway, you need to give more

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money to institutions which engage in competitive funding like, say, the ERC, which is an equivalent institution to the National Science Foundation. The ERC guarantees that the money will be spent on a competitive basis and will be spent in the right direction. This is what I wanted to say. Do not give the money to all of them, but try to organise an evolutionary process driven by competitive funding to which universities should come up.

Professor Richard: For my part, I think that the UK actually manages its research investments very well in that respect, the Research Councils. There is a real hand-off and weak---. Cambridge competes, we compete for the research funding that we receive, we compete successfully, and there is a concentration of research investment in this country, but it is done through healthy competition, and sometimes we lose, and that is healthy too, because a world-class university cannot live in a kind of university desert. Cambridge's strength is, in part, a consequence of the strength of the entire system and we are constantly being challenged from across the system. Professor Winckler: Briefly, first of all, I would like to compliment the British system because you have these competitive funding schemes with respect to research. Many other countries in Europe are trying to emulate that. The second point is that I think we need to do it also in a wider framework. We have to do it at the European level. This is the reason why I am very much advocating the competitive funding schemes of the European Research Council.

Chairman: Thank you for those introductory answers. Stephen.

Q753 Stephen Williams: Perhaps I could start with Professor Richard with some questions about the global competition that Britain is facing over the next decade but also the collaboration opportunities that there are out there as well. I guess the sheer demographics suggest that China and India are going to overtake certainly us and maybe the United States at some point in the next decade. Aside from volume terms though, when do you think they will overtake us in terms of quality? I hear what you say about rankings, but in terms of the research output from China and India, when do you think that is going to surpass Britain, Europe and the United States?

Professor Richard: I have no crystal ball. The seriousness of the investment that is going on in both those countries to build those systems is incontrovertible.

Professor Winckler: I think you do not have to look at that generally, you have to look at that in specific fields. There was a very good study in a journal called *Research Policy*, at the beginning of 2006, in order to indicate how strong China has become in the field of nano-technologies and, respectively nano-sciences, doubling its world share within two years, from 5% to 10%, Hong Kong universities included. So, what I would say is that there are various fields in which Chinese universities will become very strong.

Professor Richard: Yes, but I would say that those specificities do not make for a great university system that is educating citizens of the future, leaders of the future in a broadly educated way, which is a rather different question, which I think will take a little longer than developing specific fields.

Q754 Stephen Williams: Are you effectively saying that Chinese and Indian universities have taken a more utilitarian approach to education; they are educating people with a view to economic advantage, whereas our system has other objectives? Professor Richard: I think, as far as I can see, we have got maybe a decade to consolidate and to position this system to retain its competitive edge, and I think a lot about how do you compete? Having come from 30 years in a very big country of such geopolitical importance, how does this very small island keep its significance in the world? And I come back every time to saying, we have to operate at the very high end of quality, and the risk that I see to the UK system is that the under funding of our educational activities historically, less so in increased investment, but to the degree that it is under funded, the temptation will be to go for volume rather than go for quality. You bring in overseas students at premium fees. They are not necessarily the best students, because the best students will be going to institutions that will give them financial support, and then they do not get the experience that they had anticipated paying those premium fees and you suddenly get into a downward spiral. That is not happening, but that would be the worry if there is not sufficient investment.

Q755 Stephen Williams: What do you think the UK's response should be to this challenge or opportunity, depending how you want to look at it? Is it in terms of thinking: "Can we consolidate? Can we compete?", or is the future in collaboration, just accepting that we are not going to be able to compete on equal terms in volume or finance so we had better just accept that and collaborate and build collaborative arrangements now?

Professor Richard: My view is that it is both. As I look at it, certainly from the point of view of Cambridge, we are competing for talent, there is no question about it, we are competing globally, but smart competition is often co-operation: because actually academics will send their brightest graduating students to their colleagues at other universities, they will point them in that direction, so Cambridge's strategy is to build bilateral partnerships around the world with selected partners and also to participate in a small number of international alliances. We are part of LERU, which is a European based group, we are part of an international alliance of ten research universities around the world, and building those bridges allows both students, staff and ideas to flow more freely, and that is good for us, good for our partner institutions.

Q756 Stephen Williams: Do you think the UK is doing enough of that? You speak about what Cambridge is doing, but do you think the rest of the UK higher education sector is following your example to the extent that we should?

Professor Richard: Yes, indeed, I think that we are seeing this right the way across the board. There is a very interesting book that came out recently about what makes Silicon Valley hum, called The New Argonauts, and it talks not about brain drain or brain gain but brain circulation. It is a slightly weird concept, brain circulation, but it is pointing out that people now are increasingly flowing across national boundaries in the course of their lives and spending considerable periods of time in one place or another. The UK needs to be a great destination in that circulation of brains, and that is only partly about money; it is also about being a great place to live and work. We recruit from the United States to Cambridge and it is not because we can beat out other US universities in terms of salary, though we are doing better than we were, but people really like the environment, and we should not lose track of that.

Q757 Stephen Williams: On that question of salary, we used to hear a lot about the brain drain, particularly in my own subject, history, to the United States. Do you think that is reversing? Do we offer attractive enough salaries to get the best brains in the world to Britain?

Professor Richard: I do not keep score. If I did, at the senior level I think that for Cambridge we certainly come out quits, and possibly ahead. I worry more about the junior level and the movement of postdocs, particularly graduate students. We under fund graduate students. I think the UK has been slow coming to the recognition that there you are not just competing with other universities, you are competing with an increasingly interesting private sector. If you are a really bright 21-year-old and you have just got your undergraduate degree, what might you do with your life? Going on and doing a PhD is not necessarily what you might do. In the US, if you go into a first rank US university now to do a PhD you get a letter of admission that says, "And we are giving you full tuition and a stipend of \$20,000 a year for the next five years." We have got to load more funding into graduate student education in this country if we are to continue to attract the most outstanding students.

Professor Winckler: I would like to add two points. The first point is that the European University Association has been very hard working in reshaping PhD education in Europe. That is the reason why this topic is now included in the various Bologna ministerial declarations. The EUA has organised workshops in order to outline how important institutional strategies are in this field. In former times PhD education was too much left to individual professors and the institutions did not really care. What we need is that the institutions care. It is the grant and stipend system which should be part of an institutional policy. We should have institutional quality management. We should try to

get the right cohorts with so-called structured PhD programmes, and so on. The second point is, and this is one of the reasons why Continental Europe fell behind, that research institutions did not grant sufficient independence to early stage researchers. It is not only the issue of the money they get, but it is the question of independence of their research. We need to grant independence to the early stage researchers so that they can conduct their own studies.

Q758 Chairman: Professor Winckler, they need independence, but they actually need some guarantee that there is a career. *Professor Winckler:* That is right.

Q759 Chairman: I do not know about the rest of Europe, but in the UK too many of our young staff are on short-term contracts, they do not know how long they are going to be in that, and many of them are in their thirties before they get any assurance that they have got a career. That surely must put off some of the brightest who are coming into our universities from being retained?

Professor Winckler: This will be part of the discussion we are going to have in October during the EU Presidency of Portugal. There will be a big meeting on the relaunching of the European research area, and one of the important points is to brighten the career perspectives of young researchers. They should, however, not find their career perspective within their own institution, they should have a career perspective also to move to industry or to other institutions in other countries in order also to have brain circulation which we need.

Q760 Stephen Williams: Just asking questions on the international student market, there are about four billion pounds worth of fee contributions to UK universities in terms of the spending power, even more to invisible exports effectively. Do you think the focus has been perhaps a bit wrong, seeing international students as cash cows for the higher education sector rather than the academic possibilities on offer both to those students and to our own home-grown students? Do you think the emphasis has been too much on the money and not the academic experience?

Professor Richard: Let me make a general point in terms of the cash cow concept. By our estimation, at the undergraduate level the short fall between the revenues dedicated for undergraduate education and the actual cost of that education is actually not appreciably different for overseas students than for home-grown or EU students. Simply there is no case for suggesting that they are cash cows.

Q761 Stephen Williams: Is that Cambridge's cost of teaching students or across the entire sector?

Professor Richard: I just wanted to say that for the record. As far as Cambridge is concerned, we offer one of the finest educations in the world and it is an expensive education to offer and it involves loading in some aspect of cost of our collections—our libraries, our research infrastructure, our facilities

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and so forth, the capital investments. All of that gets loaded into that number. I do want to emphasise that there is no incentive for us to think of overseas students as a cash cow, but, as I said earlier, and I think it is a risk to our system. Insofar as the educational activities of universities are under funded, it will be tempting use the unregulated market of international students as a cash cow.

Q762 Stephen Williams: I accept that for Cambridge it might be marginal, the contribution you might get from international students, but for some universities that is probably not the case. Do you think there is a danger that the UK grant might be damaged if overseas students feel they are not getting value for money, particularly when they can compare, once they do circulate and mix with their own students, that they are paying three thousand pounds and they may be paying fourteen thousand plus?

Professor Richard: Yes. I think it is a problem.

Q763 Stephen Williams: The final question, to finish off this section in terms of our own students. One of the experiences that we picked up in China, and we are coming on to that later, is that too few students from this country study abroad compared to the students who are coming from other countries to study here. Do you think we are doing enough to educate British students to be globally aware, to be aware of the opportunities in higher education that are available to them abroad?

Professor Richard: I do not know whether you are thinking about undergraduate or postgraduates students, but at the undergraduate level, taking that first, first of all, I think you are right, there are not the same level of overseas junior year abroad. The US in particular places enormous emphasis on getting students out of the US and studying elsewhere, but that is in part because the US is so big, but if you look at the percentage of students in the UK who have spent time in Continental Europe, for example, for one reason or another, it is a train ride away and my observation is that the UK is more kind of unthinkingly international than the US is by a long shot. So, the US is having to be much more strategic about it and its educational objectives; I think we need to get a bit more strategic about it than we have. I do not think it is good enough to do it in an unthinking way, and it is one of the reasons to have these partnership programmes, so you can open up summer exchange programmes. We have the exchange programme with MIT, which is enormously successful and interesting, not just for the students but for the faculty who teach them. There is a whole pedagogical innovation activity that has been driven by Cambridge academics, finding qualities in the MIT students they do not see in their own students, and vice versa. So there can be great value in student exchange beyond simply to the students themselves. So, the short answer, yes, we should do more. At the graduate level, I think the real concern there for the US and for the UK is the 20, 25 year trend of declining involvement in PhD programmes that we have seen in both countries, such that in engineering programmes and economics it is very difficult to find a UK national in some of these programmes now. Does that matter? At some level one could say not much. I think, though, it does matter for two reasons. I do not think it is good for the UK not to be producing any of its own academics who are British academics, and also what does it say about the perception of universities and an academic career if none of our young people in the UK, or a very small number, are interested in dedicating their lives to research and education, research and teaching?

Q764 Stephen Williams: Just to clarify what you were saying there, you are saying that there are not enough UK students studying at PhD level in this country.

Professor Richard: I am saying it is a concern. How many is enough? I just say that for the last 25 years there has been a declining enrolment, and the reasons for that are complex. That trend is not unique to the UK; it is also the case in the US, and it is a source of worry there as well.

Q765 Chairman: And the rest of Europe, Professor Winckler?

Professor Winckler: This is just not true for the rest of Europe, because many students in Continental Europe use Erasmus programmes of various kinds in order to get the global awareness you are talking about. One of the reasons of mobility is, of course, to improve their skills in English. If you look, for example, to Continental Europe, Spanish students, Italian students and now, for example Polish or Czech students, are really using the opportunities to study abroad, not only in Europe. They also like to go to Australia, they like to go to the United States, and so on. So I think that has increased in Continental Europe.

Q766 Chairman: What about the question of European students staying on and becoming PhD students. Is there a declining number in Europe?

Professor Winckler: No, PhD studies will be increasing too. We have to be careful when looking at the statistics, because we still have in Continental Europe a huge amount of what I would call old PhD studies where you can get your PhD quite easily without doing much research. But there is the brain drain with respect to PhD to the United States, either PhD or post-doc, and this is one of our challenges and this is one of our reasons to revamp the university systems.

Q767 Fiona Mactaggart: I just wanted to ask a question, Professor Richard, following on from what you said about the value of partnership, the importance of postgraduate students. When we were in China I met a British chemist who was working in a Chinese university who was jointly supervising PhD students with a French university, and the supervision was shared between the two universities. He was actually very enthusiastic about the kind of intellectual stimulation for him and for the students in that. He said it seems to be quite impossible to do

that with British universities. I wondered if you knew of any examples of it and if you could tell the Committee why it is not possible for British universities to have this kind of exchange within a programme, sharing supervision of postgraduate students between universities. Is it cost?

Professor Richard: It is not impossible and we do it. We have a joint postgraduate programme with NIH in Washington where students spend two years there, two years in Cambridge. We have just launched such a programme with the National University of Singapore. We also have a very innovative Masters level programme in Chinese studies immersed in particular academic areaspolitical science, economics and law-with Peking University, where students spend time at Cambridge, go out to Peking, come back to Cambridge. I think it is a very interesting model and it helps to establish all kinds of partnerships. The teachers get to work together. As I said, we have this joint Maîtrise with Paris, we have a joint law programme now with Harvard. It is happening more and more. I should just say, these things all take time and effort and staff commitment to make them work, and, as I look at Cambridge, we do not have the resources to put the infrastructure in to support some of these activities as well as one might, and you could pose the question, because you asked the question, how could government invest more? Should there be dedicated funding to support international partnership? Part of me says, yes, and part of me says we have too much ring-fenced funding already, and I am not a fan of ring-fenced funding, it is just endless jumping through hoops. If we could have a broader consensus about what was important and where we were trying to travel as a national system, then I think it is better to leave universities to make their own decisions about how to make the investments that they make.

Q768 Mr Chaytor: Could I ask Professor Richard, what specifically do you think the United States is doing to rise to the challenge of growth in India and China that we could learn from?

Professor Richard: It is a good question. Professor Winckler is absolutely right that there is no federal strategy in the US. It is very interesting. The Spellings Report is the first effort. One can say that you can go all the way back to Vannevar Bush's report, the classic report of 1946, that basically envisaged what the higher education system of the United States should be about and made a decision to make the country's major investment in R&D channelled through universities, graduate students to be a part of that effort, support for graduate students. Since 1946 there really has been silence, in some sense, on the federal front and I think there is now a growing concern that the system, while still second to none, has these problems. What can we learn? I think there are specific things that we can learn. We can learn that philanthropy is great, you can tap philanthropy, and we are trying to do that now. At Cambridge we are being very successful. If you do not ask, people do not give, but if you ask in a serious way and you make your case well, the

English do not have a gene for meanness, is my observation, and we are getting a lot of enthusiasm and interest in the institution that goes far beyond simply philanthropy, and that is what is not well understood here. The relationship with your alumni community is a relationship with the best, brightest ambassadors you could have. They write about you, they talk about you, they connect you to the real world, they give you advice, they interact with the institution in all kinds of ways. We can learn that from the US system, and we need to. That is one really good thing to learn. The other, I believe, which I feel very committed to, is to think about undergraduate education. The forecast of undergraduate education and making it needs blind and needs based, and certainly for a university like Cambridge, as we strive to reach out to all sectors of societies from low-income families right the way across the spectrum, having such a policy in place is absolutely essential. So, in terms of federal policy, I see none right now. In terms of particular practices and aspects that have made that system strong, there I think there are interesting things to look at.

Q769 Chairman: Professor Winckler, do you have a view on that?

Professor Winckler: I would simply say, the typical reaction of the federal institutions is that they, if they see a problem like that, just double the budget of the National Science Foundation. If they do it, they do it quickly, guaranteeing an effect.

Q770 Mr Chaytor: So, you are both saying that the financing is the key thing, either rapid investment in the National Science Foundation or the tapping of philanthropists and the establishment of endowments from alumni, but is there nothing structural about the system in the United States that has an advantage over ours and will enable them to continue to compete with China and India?

Professor Richard: Part of the differences—. Again, it is going back to what you were saying. The system in the States has grown up out of history, so you have the private universities, you have a state system where they have to argue with the state legislator to get their budget, so it is not as if there are not constraints on the budget, but it is at the level of the state.

Professor Winckler: Let me just complement that. Look at the State of California. If they think that they might be losing, then there is a proposal to invest more in the university system. There is a reaction at the state level. At the federal level there is only just more funding.

Professor Richard: Can I make one more point. I said earlier, much earlier, that one of the things I appreciate about the US system is this kind of celebration of the diversity of the system and the niche players within that system from a community college that is really proud of what it is doing in the same city as Berkeley and Stanford and so forth. By the same token, there is a diversity of financial underpinnings that support this system. So, the private universities are able to mobilise their own resources. The state universities still cap the cost of

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an undergraduate education in order to keep it affordable. The states make investments. The costs of some of those systems are not as high, because of what they are particularly doing. We do not see still here that kind of diversity. There is a kind of onesize-fits-all mindset to some degree here.

Professor Winckler: If Stanford University sees a problem it will mobilise its alumni and it will receive one billion dollars.

Q771 Mr Chaytor: The fact that British universities have not until recently mobilised their alumni the same way, you say, is a weakness and this has to be a way forward?

Professor Winckler: I do not know how it is in the United Kingdom. One of the problems in the European Union, in the continental part of the European Union, is that they do not have any well-working alumni organisations, and usually the alumni do not identify themselves with their universities because they basically say, "This is part of the state. I pay taxes, and that is sufficient."

Professor Richard: I think that the good news in the UK is that that was very much the mindset, but the transition to a different way of viewing things is happening as we speak. It is happening at lightening speed, and I think that the new commitment for the Government to come up with matching funds to support philanthropy, however that plays out, these are all good things. I would like to see the tax laws further simplified and taken further in this country, because I think there is, in fact, huge goodwill and, of course, huge wealth in this country that could be tapped to the support of the higher education system. One of the strange things about the UK is that the philanthropy that there is is very differently directed—it is not directed at higher education in this country-quite strikingly differently, whereas in the US it is strongly directed at higher education as well as absolutely at a higher level.

Professor Winckler: Allow for institutional autonomy so that you get a certain kind of identity, and then the alumni will like to come back. For example, I studied at Princeton University. I gave more money to Princeton University than to the University of Vienna because there is an identity created around the University of Princeton.

Q772 Mr Chaytor: But in terms of the balance of funding between alumni undergraduates and postgraduates, the states and general taxation, how do you see that shifting? In terms of Cambridge specifically, for example, within the next ten years what do you think the balance will be in Cambridge's revenue income between funding from general taxation and private funding?

Professor Richard: For Cambridge, our strategy is to try to diversify even as we strengthen our financial underpinnings. I think we can do it, I think it is essential for our financial strength, and that will be essential to support our academic endeavours. It would be my hope and my expectation---. Returning here to the UK, part of what brought me back was obviously a great university, but also a sense that things were really changing in this country and that

there was a rapidly growing appreciation of the value of the university system. So I would anticipate and hope that, though every government has massive demands upon it from every corner, of course, that higher education would be viewed still as a major priority for this country's investments because the knowledge economy is something of a cliché but it is real for all that.

Q773 Mr Chaytor: But as a guideline then, what should be the proportion of the revenue from the state for your university, or similar research in terms of universities in the next decade?

Professor Richard: If you look at our budget right now, a third of our operating budget-this is in broad, straight terms-comes from Research Council funding. That is public money. It is peer reviewed, we compete for it, we do well at that. That is a third of the operating budget-Research Council money and the charities, the big charities. A third of our budget comes from a combination of fees, endowment income and other sorts of income and then a third of it comes from the QR block grant and our HEFCE teaching grant put together. I would like to see us grow these other sources of our fee income and our endowment income and, to some degree, our other sources of income to grow out of our dependence on government and to enable government to reallocate funding elsewhere, because the whole system needs it.

Q774 Mr Chaytor: So after 2009, what do you think the typical undergraduate course fee at Cambridge will be?

Professor Richard: I do not know. I think we have to wait—

Q775 Mr Chaytor: What would you like it to be? *Professor Richard:* I do not want to pre-judge the outcome of that question. I hope you know me.

Q776 Mr Chaytor: The answer to your previous question is assuming there will be an increase in course fees from undergraduates as well as postgraduates.

Professor Richard: One way or other, whether it comes from the students themselves and their families or whether it come from overseas, I do not know what the solution will be. I do not want to get there yet, because I actually subscribe very deeply to the stipulation in the 2004 Higher Education Bill that there should be a review of what has happened over the intervening five years with the introduction of £3,000 fees, because I have no question in my mind that from Cambridge's point of view, and this is a Cambridge view, for Cambridge to become, as it were, a finishing school for the children of the well to do, there would be two sets of victims there: those who were not coming to Cambridge because they felt they could not afford it, but Cambridge would also be a victim of that. It would be lesser place. You would lose the soul of the place if that happened, so we cannot allow that to happen. I do not believe it will, because we have a bursary system in place that should make it more easy for students from lowincome households to come to Cambridge, but I think we have to wait until we get to 2009, see what the review is but we have to bear in mind that if we want to have an education of this quality it needs more support than it now has.

Professor Winckler: Let me say, first, that per student Europe is lacking about 10,000 euros annually; so actually universities need more money. If you compare that with the United States, there is more public money with respect to GDP spent on universities than in Europe. In the United States 1.2 to 1.3 % of GDP is given to the universities as public money; in Europe it is only 1.0%. If you then take on top of that the private contribution, then you come up in the United States to nearly three per cent per GDP, whereas in Europe universities actually have only very few private monies, around 0.2 or 0.3 % of GDP. So we really lack a lot of money. The question is how to close the gap. One point is tuition fees. I have now been part of various discussions about whether to raise tuition fees. There is a debate in Sweden; there is a debate in Denmark. I have been participating in that debate in Poland and so on. Many issues come up. Let me just present three important lines of thought. The first one is that you have to look at the tax system. To state it very bluntly, the flatter the taxes, the higher should be the tuition fees. So, if you have a tax system, for example, like in Denmark where you have very high marginal tax rates in the income taxation, with a very progressive scheme, then you should not go for tuition fees because you should allow some regressive effects within the tax system. The second point is that you have to look at the level of premium you earn on tertiary education in the labour market. One of the important points in the Spellings Commission was that they had the feeling that tuition fees have gone up too high, given the kind of premium you can earn in the labour market and given equity considerations.

Q777 Chairman: Where is this? In which country?

Professor Winckler: In the United States, the Spellings Commission. But take the case, for example, in Sweden. When you complete your tertiary education you can only raise your income marginally for reasons of equity within the society, but then you should not charge tuition fees. When raising tuition fees the question is what kind of premium is paid in the labour market. If you take the study by The Economist, "Brain Business" of September 2005, for example, in Britain you have a high premium on tertiary education, and that could be perhaps a reason to introduce tuition fees. The third important point, and this is a lesson which needs to be learnt from the United States, is if you allow, for example, Cambridge to charge higher tuition fees, then establish, let me say, a federal grant system on stipends and grants, otherwise you discriminate against the poor. When discussing tuition fees do not look at that issue in an isolated way.

Professor Richard: If you were asking about the lessons from the federal system, the one piece of federal intervention in the states has been the Pell Grants, but the Pell Grants have been under some attack budgetarily.

Professor Winckler: I was alluding to that.

Chairman: That is all very useful stuff. Gordon.

Mr Marsden: Thank you, Chairman. I would like to probe a bit further, if I may, on this question of collaboration and brain circulation, which, incidentally, was a concept we came across in our visit to China.

Chairman: We need more of it in Parliament.

Mr Marsden: We need more of it in Parliament. Some people who have two brains, of course, find it difficult!

Chairman: That has been circulating! Sorry, that was an in-joke.

Q778 Mr Marsden: Professor Winckler, can I start with you and say that Professor Roderick Floud, who you I am sure know, said at *The Guardian* Higher Education Summit earlier this year that UK universities need to be collaborating with other major players in the European higher education area in order to be in the running for major research programmes and compete in big science. Is that something you would agree with?

Professor Winckler: Let me first say that there are many programmes, be it the framework programmes or other schemes where actually European universities, especially continental European collaborate universities closely. Sometimes. I must admit, there is too much collaboration in Europe and there should be more competition. What we need to find is the right balance between collaboration and competition. That is one of the reasons why EUA, for example, has supported that with respect to the grants given by the European Research Council collaboration is not a criterion to choose on. The important point is only quality. So what we would like to see is that quality is the important point. But I agree with you that if I look at collaboration among continental European universities this has become very intensive, yes.

Q779 Mr Marsden: One of the reasons I ask that question-and it was something that we discussed when we had our Select Committee inquiry on the Bologna Process-if you actually look at the track record in terms of producing results, in my judgment anyway, of certainly the European Union over the last 10-20 years in science projects, technology projects it has not actually been that brilliant. We have had quite a heated debate here in Parliament as to the UK's position in support of the Galileo navigation system, which does not seem to be going very far, and there has been widespread criticism of the European space programme, and these are things which have been largely done on a collaborative basis, pushed by commissioners and the by EU Commission. Is this part of the problem, that it is too top-down?

Professor Winckler: If you look at Bologna and Erasmus, for example the University is Vienna is collaborating-I cannot even say the precise number-with 300 European universities. The University of Vienna is one of the top 10 or 20 universities with respect to the Erasmus because we really engage in that. We see a big chance also in rebuilding Central Europe by using Erasmus. But the really top universities are Spanish universities; and now I think the Czech universities are catching up immensely. So here you will find networks of collaboration. The most important outcome is that we get students who have lived for at least one term in other country, speak another language, have a certain cultural diversity, are globally aware and things like that. We speak already in Europe of the Erasmus generation because that programme is changing the mindset.

Q780 Mr Marsden: That I understand very well, Professor, although I have a couple of questions about Erasmus which I will ask you and Alison in a minute. Let me return to the central point I put to you. One of the problems has been, certainly in terms of the UK's perception, that European collaboration on some of these major projects at R&D and at university level has been clunky, has been top-down from the European Commission, and compared to the Americans and elsewhere has not really produced a great deal. Is that a fair assessment or not?

Professor Winckler: Actually there has been a change already in the 1990s, that the Erasmus Programme, for example, should be backed by an institutional strategy. The University of Vienna is quite free in choosing its partner. Of course we get certain stipends and so on and we have to meet certain requirements, but I do not think that this is really top-down.

Q781 Mr Marsden: Professor Richard, would you like to come in?

Professor Richard: I would just like to pursue this point that you are making and also implying. There is barely a day of the week where there is not somebody knocking on my door wanting a partnership with Cambridge-there is a feeding frenzy going on in the world at the moment, gathering up brands, as it were. But actually universities do not collaborate-a university is an abstraction-it is the people who collaborate, and if the academics do not want to do it you end up with these paper collaborations, at worst with an enormous amount of money being invested. This is not to comment particularly on the European question, but I think it is a real issue. Certainly I cannot and do not commit Cambridge to collaborations because it is all about where the academic find paths of shared interest. Can you open up opportunities to facilitate those shared interests? Yes. Why would you, what is the interest in doing that? I think there are various interests in doing that. You are right to put the caution in about top-down. **Q782 Mr Marsden:** Through you, Chairman, can I ask both of you about the issue of brain circulation and particularly as regards British students and in the context of Europe because, Professor Winckler, you have just talked about Erasmus and you talked earlier about how it had been very beneficial in getting continental and European students to travel and to study elsewhere, but unfortunately the evidence is that it has not been very beneficial in terms of getting large numbers of British students to travel and to study elsewhere within continental Europe, and I wondered if you had any idea as to why that might be so?

Professor Winckler: First of all, if I remember the statistics well—and there were actually very good statistics because we just celebrated, in early May, 20 years of Erasmus—the United Kingdom in that respect is average or just a little bit above average; it is not, let me say, one of the countries where the students really are very mobile, but it is not also at the lower end.

Q783 Mr Marsden: You think we should not be worried that there are not enough British students going to study in Europe?

Professor Winckler: Let me put one point—and perhaps it may not be the right place here, at the British Parliament—that it is to a certain extent an advantage to speak English as a native language, but there are also disadvantages. For example, my mother tongue is German but I lived and worked for more than one year in France, because it was very clear for me that you need to learn other languages to be really aware of other cultures.

Q784 Mr Marsden: Professor Richard, can I take you up on that issue as well because you referred earlier, and I think the phrased you used was "unthinking"—and unthinking is perhaps the wrong word, but not a structured process of involvement by British students in continental Europe, but just something that happened. But is not one of the problems, partly, first of all the language issue to which Professor Winckler has alluded, but is it not perhaps two things. First of all, when British students go on a structured basis to continental universities they do not always want to go for a whole year and that we need more flexible programmes. Secondly, is there not also an issue in terms of credit transfer, that we do not have a fully fledged credit transfer system within the UK and we certainly have a highly problematic credit transfer system between the UK and other European universities?

Professor Richard: Correct.

Professor Winckler: Correct.

Chairman: You agree with that? You have agreement there, Gordon!

Q785 Mr Marsden: Can I finally ask both of you about Bologna and about the Bologna Process and particularly about the recent London Summit, because obviously Professor Winckler you have put a lot of emphasis on institutional autonomy and clearly the EUA is pushing that. This might be rather unfair

but if one characterised the Bologna Process as a tension between a centralised approach, wittingly or unwittingly pursued by the European Commission and the desire for universities in Europe to have autonomy and to use the Bologna Process for that, who is winning under that?

Professor Winckler: Let me say that in 1999 when the Bologna Process started-if you read the first communiqué-the universities and students were not participating. The first communiqué was just saying that the universities are expected to take over what has been decided. So it started as a very centralised ministerial approach, I agree with you, but that has to be seen in the tradition, let me say, of the French or German university system where everything came from above, from the top. The French system is a very centralised system. So somehow this setting was taken over by the Bologna Process in 1999. Since then the Bologna Process has changed a lot. If you look, for example, how EUA has been active in the field of reshaping PhD education in Europe, I have the feeling that now governments take over what institutions develop. So I have the feeling that we are moving within the Bologna Process to a more decentralised system. This decentralisation will become stronger and stronger because now it is important to implement Bologna within the institutions, and that, of course, makes the institutions stronger. Then, of course, we see that with increasing internationalisation, national systems are not very competitive any more and that is the reason why President Sarkozy is now talking about the university reform a la carte, but that maybe is still to be seen.

Q786 Mr Marsden: Professor Richard, very briefly, do you regard Bologna as a help or a hindrance in terms of your strategic objectives that you have stated today in terms of internationalising Cambridge and getting Cambridge students more internationalised? *Professor Richard:* As a matter principle I think how could one be opposed to that because it should make it easier to flow. If it gets implemented as a top-down imposition it will be a nightmare. The devil will be in the detail.

Q787 Mr Marsden: Are we mastering the detail?

Professor Richard: I was very pleased that you took on the Bologna Process because if we had had a concern it is that the UK Government in general, that the UK has not engaged sufficiently in ensuring that the Bologna Process had the flexibility to it and somehow recognised the need for the autonomy of institutions. I am actually cautiously more optimistic than I was a year or so ago when it started to look to me as if it was going to a very centralised top-down system, but it has moved a long way and to the better.

Q788 Chairman: We had some very interesting reaction to the report on Bologna—most of it positive, although I believe I was attacked by a Dutch professor for something; but by and large we had a positive response. I feel embarrassed, Professor Richard and Professor Winckler, that this is the end of the session now because we could ask you a lot more questions and we have learnt a great deal. Is there anything that you feel you have not had the chance to say to the Committee this morning on this important topic?

Professor Richard: Only about another three hours of conversation!

Q789 Chairman: Maybe more succinct than that! *Professor Richard:* The important thing is it is so great that this country has a government with serious people sitting asking serious questions about this. That is the only thing I want to say; I think it is just terrific and very interesting.

Q790 Chairman: The more compliments the better! *Professor Richard:* As you can see I very much like these discussions and I very much appreciate that politicians are interested in how the knowledge societies emerge and what kinds of implications that has for the universities. Let me just say, we need strong universities otherwise we will not meet the challenges of the future, and the universities need to be autonomous with institutional strategies. So as you have in the world of business where firms strive to development we need to have the universities which drive the development in the knowledge societies. **Chairman:** That is a very good note on which to finish. Thank you for visiting us, Professor Richard and Professor Winckler.

Memorandum submitted by Tim Gore, Director of Education, The British Council, India

EXECUTIVE SUMMARY

This memorandum summarises the Indo-UK education and research relationship.

The relationship is rapidly improving. The Prime Minister's Initiative helped reposition UK education as first or second choice for young Indians and the introduction of the UK India Education and Research Initiative (UKIERI) has much strengthened our position as partner of choice and is well on its way to doubling the level of education and research interaction.

The competitive environment is challenging and we need to continue to develop the mechanisms we have in place such as PMI and UKIERI to build the UK's status as preferred partner–a relationship that many Indians see as a natural choice despite recent US and Australian inroads.

INTRODUCTION

1. The United Kingdom has a strong and respected position in India and Indian education and research links. The relationship has evolved from a post-colonial legacy, to capacity building and development, through commercial opportunism to a more balanced and strategic relationship with India rapidly becoming a partner of choice for UK universities.

MARKET BACKGROUND

2. India is changing rapidly. The economy grew in 2006 at over 8%, and is projected to continue at 8% plus every year for the next 5 to 10 years. Growth is strongest in services (notably IT) and manufacturing as India becomes a thriving knowledge economy with a large, mature research and higher education base.

3. With a population of 1.1 billion and growing steadily, India will overtake China's population in the 2030s. By 2010 India will have a middle class of 450 million. It's a young country with 54% of the population under 25: by 2050 there will be 900 million Indians of working age. As the world ages, India will provide a growing percentage of the global workforce from the 2020s onwards. More and more of this population is migrating towards the main cities ; by 2020 India will have 6 of the 10 largest urban conglomerations in the world.

4. India is well described as a country of contrasts. It has spawned world-class institutions such as the Indian Institutes of Technology (IITs) but is struggling to achieve the millennium development goal of universal primary education. It is emerging strongly as a destination for medical tourism while millions have poor access to basic healthcare. While 85% of households in Delhi own television sets, 84% of households in Bihar have no electricity.

5. Foremost amongst the many challenges the country faces to sustain projected levels of growth is that of education. Demand for higher education is booming and the government of India is committed to extending access, but provision remains variable and quality options are limited. We see major opportunity for the UK, building on the success of UKIERI, in this area.

6. English language skills underpin business growth, particularly in the BPO (Business Process Outsourcing) sector, and we are seeing huge growth in both corporate demand and parental demand for English-medium secondary education. English is widely seen as poorly taught, and only a limited percentage of Indians speak English proficiently, and this represents a substantial limiting factor inhibiting economic growth.

7. India knows her strength, and expects to have a voice in international affairs in consequence. Many countries are upping their engagement with this India, and seeking to have some influence over how this voice will develop. The US describes India as a strategic partner, and has invested strategically over many decades to be seen as a leading education destination, a committed player in scientific collaboration and in English language support, and a model of contemporary culture. Australia is a major competitor in international education.

8. Links with the UK are strong. Trade is growing fast from a relatively low base. 500,000 Indians visited Britain last year, and 400,000 Britons visited India. Diaspora links are significant; some 2% of the British population is of Indian origin (1.3 million), and they own over 4% of British GDP. This year over 20,000 Indian students are studying in the UK, more than ever before.

9. Survey data shows that the UK is widely seen as reliable and trustworthy, with strong traditions and a proud history, but not always as of immediate relevance in the present or as the beacons of contemporary culture we aspire to being. In higher education, for example, the UK is seen to have neglected a historical position of strength and in some circles is considered to be only interested in India as an education market. This is also partially true in other areas including science, where the older generation of Indian scientists have strong UK connections but the younger generation looks mainly elsewhere.

10. Many of these challenges present opportunities for greater international engagement. Demand is booming for study overseas, and, while the issue is highly politicised, foreign education providers must in some form or other be part of the solution in extending tertiary provision. Emerging quality assurance issues offer a great platform for international cooperation. India's energy demands will double by 2020, but so will its appetite for closer collaboration on renewable energy sources, access to energy, clean energy technology, and climate change. Growing awareness of and interest in the vibrancy of India is widely predicted to feed through into a booming creative economy.

11. UK stakeholders and partner institutions are queuing to be part of the action. This circumstance presents great opportunities but also the risk of others attempting to drive and shape our agenda.

12. The British Council has a significant role to play in contributing to the achievement of the UK's International Priorities

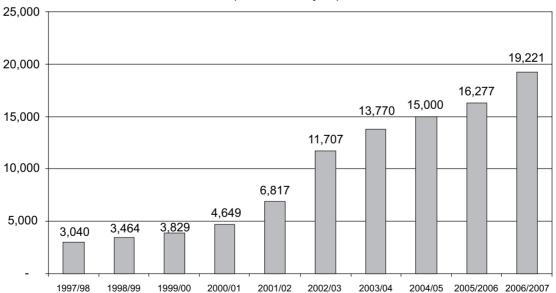
EDUCATIONAL RELATIONS

13. For the decades immediately after independence the UK education system continued to exert a strong influence–successive foreign ministers were educated at Oxford or LSE and the university model was a UK one. However, as India emerged from the aftermath of its Cold War positioning the United States took full advantage and attracted a great number of young Indians away from the UK. The number of students going to UK stood at only 3,040 in 1997.

14. In parallel, although the UK had helped in institution building prior to independence and later as the Indian Institutes of Technology were established this strategic involvement faded over the years and again was largely replaced by US and European influences. The 90s ecomomic liberalisation in India saw a rapidly expanding middle class with aspirations for education and advancement. The top tier Indian institutions were admitting a fraction of the aspirants (IITs take around 1% of the 200,000 annual applicants). An increasing gap between supply and demand opened up and increasing numbers of young Indians went overseas for their education. In parallel, a large number of private colleges sprung up aiming largely at the professional areas of management, engineering, pharmacy and computer sciences.

15. However, for this generation of young students, the UK was not necessarily the first choice. Prior to the Prime Minister's Initiative, research in India and around the world commissioned by the British Council (Through Other Eyes) revealed a view of UK through young people's ideas as faded and unappealing. The US was by now a well-trodden route with the cluster of successful engineers and entrepreneurs at Silicon Valley serving as role models for the outgoing students. At the same time, Australia moved aggressively into the market and continues to be the "smartest" competitor for outgoing students attracting way above the proportion of students relative to the size of its higher education system. Australia is appealing on several dimensions–price, lifestyle and above all immigration possibilities. The US continues to dominate the market but up to now has had a chaotic disorganised approach to marketing.

16. The Prime Minister's Initiative (PMI), the first phase of which was launched in 1999, changed the equation and the UK rapidly grew its market share and overall number of students from around 4,000 at the time to 23,000 in 2007. Our annual number of visas issued is comparable with the US and Australia and far above other competitors. The Initiative has invested in building a consistent and fresh image of UK education which has helped refresh the UK as a "trendy" destination. This has also been helped by the popularity of UK as a Bollywood setting and other initiatives to refresh UK's image. This year NDTV will run a reality TV show around UK education.



Indian Student Visa Numbers- to the UK (For academic year)

17. The British Council now operates a partnership model with the higher education sector in UK and the India "country partnership" has 130 member institutions (ie those with a strong interest in the market). The British Council is running two major (80 institutions represented) touring exhibitions and four sector-specific missions around the key cities in India this year.

18. The number of students going to UK (as measured by visa issues) is 19,221 for 2006–7. We estimate that there are at least 23,000 students studying in UK this year including those in their second or third year of study. The USA by comparison issued 24,622 visas. Total enrollments for Indian students for the same period were 76,503. The Australians issued less visas (around 13,000) but have around 29,000 students enrolled.

TRANSNATIONAL EDUCATION

19. Meanwhile, the higher education sector in UK has been developing its approach to internationalisation. Most universities have a considerable proportion of non-British faculty and students. Most are recognising that internationalisation means far more than this and are recognising the need to develop global reach. India is in the top three countries on most university internationalisation strategies. A 2006 study by Professor Bhushan of the Indian National University for Educational Planning and Administration (NUEPA) estimated that the US and UK had around the same number of teaching collaborations (60–70 each) and those two were far ahead of the other competitor countries. Current estimates are for around 80 collaborations (we have verified 24 partnerships in north India and are surveying the other regions). We estimate that these partnerships cater to around 4,000 Indian students taking degrees in India as well as a much larger number of degrees taken partly in India.

20. In fact, the UK is very well positioned in this type of collaboration. UK institutions have initiated a tremendous range of collaborations from fashion and design to clinical research. They are becoming adept at developing effective partnerships and navigating the uncertain waters of the regulatory and legislative environment. The UK is the only country that has fully accredited collaborative programmes operating in India (under the All India Council for Technical Education–AICTE). The UK's support for AICTE in its application for membership of the Washington Accord was vital to building goodwill.

21. The British Council is now organising a series of sector specific missions to India. The most recent, a computer sciences mission to Bangalore and Hyderabad, was led by Derek Wyatt and was featured in the *House Magazine*.

22. The Indian Government is currently preparing a Foreign Education Providers' Bill which will regulate transnational education. This is a longstanding process which has generated much controversy. As the current bill stands there are various areas of concern that could pose significant barriers to collaboration particularly around the need for a corpus fund; fee level controls and subsidised places for disadvantaged groups. We, along with other members of the international education providers in India are in dialogue with the Ministry about this. When the bill is tabled in Parliament, we are requesting that there be an opportunity for consultation with partner countries.

THE UK INDIA EDUCATION AND RESEARCH INITIATIVE

23. The UK India Education and Research Initiative (UKIERI) has its origins in the 2004 India UK Round Table meeting and a follow-up report by the British Council–India-UK Strategic Partnership–A Review of Academic and Educational Links.

24. The main aim was to bring a significant positive change to the Indo-UK education and research relationship. Its main principles are excellence; mutuality; and sustainability. The initiative has done much to rebuild trust in the relationship and has now secured the Indian Department of Science and Technology and the Ministry of Human Resources Development as funding and operational partners.

25. UKIERI received and evaluated 1,607 proposals across all strands (calling on 900 specialists to achieve this); created 190 new Indo-UK links and disbursed £4 million. It secured active participation and respect from the Indian Government and ran 25 events of which 5 were very high profile.

26. The Initiative has achieved all its major objectives for the first year and has exceeded some targets. Overall level of Indo-UK education and research interaction has almost doubled this year–well on the way to delivering the "step change" that was intended–schools activity has doubled from around 110 links to 220; higher education and research links have increased by 57% from around 70 to 110; conferences and workshops have increased Indo-UK senior faculty interactions enormously; PhD scholarships and fellowships are new to the relationship on such a scale; and the 388 higher education and research proposals are strong evidence of burgeoning relationships.

UKIERI is widely recognised, in the words of Lord Rees, President of the Royal Society, as a "trust brand". It is seen as a very positive addition to the group of bodies who are in the business of increasing the quantity and quality of UK-India Science and Innovation links, as in for example, the "UK-India Science and Innovation Links" report produced by Fresh Minds, February 2007.

At this year's meeting of the UK/India Round Table there was widespread recognition in papers and discussion that UKIERI had made very real progress and a very important contribution to enhancing UK/India relations, in particular with respect to education and research. The group resolved that UKIERI should continue to be actively pursued and supported. The initiative's focus on mutuality of benefit, and its balance of programmes were widely endorsed.

The Foreign Affairs' Committee very recent report on South Asia concluded, in one of only two references to the work of the British Council, that "the establishment of the UK India Education and Research Initiative is very important for the UK to maintain a strong position in the higher education market and we recommend that the Government continue to work to strengthen the promotion of bilateral educational links."

Gordon Brown, in announcing the major awards in Delhi in January, quoted his belief that "UKIERI has created an excitement in universities, and institutions and schools and colleges. I think all of us know and the British Council plays a part in making this happen in every part of the world that education enriches lives"

27. The Initiative has rebuilt bridges into the most significant institutions in India as this table demonstrates:

Indian Institution	Number Funded	SA/Ma/Del
AAIMS	1	Standard
Centre for Cellular and Molecular Biology	1	Major
Cochin University Of Sciences And Technology	1	Standard
CSDS,New Delhi	1	Standard
Harish Chandra Research Institute, Uttar Pradesh	1	Standard
IGIB, New Delhi	1	Standard
IIM Bangalore	1	Standard
IIS Bangalore	6	2 MA, 4 SA
IIT Guwahati	1	Standard
IIT Kanpur	1	Major
IIT Mumbai	1	Standard
IIT Chennai	1	Standard
IIT New Delhi	5	1 MA, 4 SA
Indian Institute for Tropical Meteorology	1	Major
Indian Institute Of Chemical Technology, Hyderabad	1	Standard
Indian Agriculture Research Institute, New Delhi	1	Standard
Jadavpur University,Kolkata	1	Standard
JNU, New Delhi	1	Standard
Delhi University	1	Standard
National Chemical Laboratory, Maharashtra	1	Standard
National Institute Of Oceanography, Goa	1	Standard
MS Ramaiah School of Advanced Studies	1	Delivery
Institute for International Management and Technology	1	Delivery
DY Patil Institute for Biotechnology and Bioinformatics	1	Delivery
National Institute of Fashion Technology	1	Delivery
Institute of Clinical Research	1	Delivery
TERI School of Advanced Studies	1	Delivery
Jadavpur University	1	Delivery
Total	38	

INDIAN INSTITUTIONS AWARDED MAJOR, STANDARD OR DELIVERY AWARDS

28. One crucial area of development is the development of strategic links with publicly funded universities in India such as Delhi University. Most of the existing Indo-UK strategic alliances are with private institutions–these are more flexible and quicker than public institutions but we should not ignore the importance of the best national universities.

29. Another important aspect of UKIERI is its involvement in educational policy. The initiative has hosted 4 major conferences and a large number of smaller events. These explore aspects of importance to UK and India and have allowed us to develop closer relationships with the key regulators and government bodies. They also bring large numbers of influential educationalists together, which in itself is leading to more collaborations.

RESEARCH COLLABORATION

30. The extent of research collaboration can be measured in many ways but the majority of links are researcher to researcher links which may go unnoticed even by the host universities. The extent of this informal collaboration is probably best measured by joint papers. More substantial institutional research and academic collaborations are those that result from the strategic engagement of universities in India, an increasing trend, or from external funding such as UKIERI. We estimate around 70 such substantial links but are reviewing these linkages at the moment.

31. The UK is still a significant collaborator with India but its relative position is in slow decline. Between 1996 and 2003 the UK's share of scientific co-authored papers fell from 10.2% to 8.2%. The US remained the main collaborator with India but its share also fell from 34.9% to 28.2%. By contrast the German position held up but the biggest rise was in publications co-authored with Japan, China and South Korea. With the exception of Oxford, Cambridge and Imperial College, the Indian scientists we spoke to regarded few UK

universities as international leaders, with little to set them apart from their European competitors. A minority described the UK as the place to go to study the most difficult problems, what one professor called a "Nobel prize winning type of science".—India: the uneven innovator. Kirsten Bound, Atlas of Ideas, Demos 2007.

Director, Indian Institute of Science, May 2007:

"Until the UKIERI Initiative was launched there was no mechanism for collaboration, you will notice that we have many more collaborations with French universities and this is because the French had a long presence as far as the scientific missions were concerned in Delhi they were funding projects jointly between Indian and French universities so there's a longer history of, it is sort of ironic that the countries with which the least formal collaborations have taken place are the UK and the United States—this is where we have the largest number of informal collaborations. There is a need to have a government programme signed and in place before the formal collaborations can take place–I think we have that now. ..We now have a formal relationship with the University of Manchester and we are hoping to have a fairly strong collaboration with the Imperial College".

31. Part of the "invisibility" of UK links may be our reluctance to sign formal MoUs. While it is true that many MoUs do not become active collaborations, they are a mechanism that is well understood in India as witnessed by the quotation from the all important Indian Institute of Science IISc.

"Collaborations with the UK are about friendship, collaborations with the US are about business".—India: the uneven innovator. Kirsten Bound, Atlas of Ideas, Demos 2007.

"What we are today is due to the British legacy-that is the system that we are still carrying forward the education is almost the same there are hardly any changes, I think there could be a lot of synergy, you could leverage that"—Colonel Ramachandran, Regional Director, Nasscom-the voice of the IT industry in India.

CAMPUS ACTIVITY

32. Currently, campus presence in India by foreign providers is extremely limited. Most foreign providers have opted for partnership with local institutions. For example, Nottingham Trent delivers its degrees in fashion and textile design through a local partner Pearl Academy in Delhi.

33. A private sector company-the Modi Group-has set up a small branch of Western International University in Delhi. It is regarded as "illegal" by the regulatory authorities.

34. Georgia Institute of Technology is in an advanced stage of preparations for establishing a campus in Andra Pradesh State.

35. At least two Australian universities are interested in establishing a campus–Woolangong and Macquarrie.

36. At least two UK universities are also interested in establishing a campus. We are also actively reviewing the possibility of a multi-instution management academy and a substantial computer sciences partnership.

37. The current feeling is to wait and see what happens with the Foreign Education Providers' Bill. However, the opposite may be true. Approaching India with a high level and attractive model, especially if we can gain prime ministerial support, could help shape legislation or may be able to command its own legislation giving autonomous status.

CONCLUSION AND RECOMMENDATIONS

The United Kingdom is making very good progress in all areas of the educational partnership from a significant low in the mid to late nineties. The competitive environment is challenging and needs continued investment through existing mechanisms.

Recommendations

1. Continue to invest in the Indo-UK education and research initiative through mechanisms such as PMI and UKIERI and building on the success of the British Council's administration of these programmes.

2. Actively pursue transnational education, campus and campus partnership models in India.

3. Take any opportunities of high level interaction to stress the need for dialogue on Foreign Education Providers' Bill.

4. Encourage the higher education sector to think strategically about India concentrating on both short term student recruitment but also longer term partnerships in teaching and research. Targeted scholarships and partial funding models should be part of the mix.

5. Encourage more flows of UK students and faculty to India for short or longer term exchanges and placements to counter the "one-way stream" image and increase institutional interaction.

Witnesses: **Professor Lan Xue**, Vice President of the Development Research Academy for the 21st Century, Tsinghua University, China and **Mr Tim Gore**, Director of Education for the British Council, India, and head of the UK India Education and Research Initiative, gave evidence.

O791 Chairman: Professor Xue and Tim Gore, can I welcome you to this session of the Committee's session of the Committee's work on higher education, and to say, Professor Xue, that we have just come back from a visit to China, to Hong Kong, Shanghai and Beijing and not only were we well received and visited a large number of universities but we were well received in the sense that we felt that there was no holding back of any information that we wanted and that we had some extremely valuable discussions with people at a senior level, both politically and administratively and in terms of all those universities and the university administrations. So I must compliment the people who cooperated in that visit. Tim Gore, of course your most relevant recent experience is India, so we are going to try in a short time to learn a little more about both China and India. I gave the last two witnesses the chance to say a short introduction about what they thought the main issues were. Professor Xue, would you like to start?

Professor Xue: I would start by saying that first of all I really appreciate the opportunity to be invited to discuss the international aspect of higher education, in which we are all extremely interested. Today's evidence is based on my own experience in the US and in China, particularly in public policy and management. I went back to China to teach in Tsinghua University in 1996, after five years of teaching experience at George Washington University in the US. As part of my research I have studied the reform of China's higher education system and also the role of Chinese universities and China's innovation systems, which is also complemented by my own experiences in managing a public policy school in China, particularly the international collaborations with other universities. I think that given the previous discussions is so interesting, let me start with a puzzle. By 2005 there were 94 universities in China which had won 64 joint educational programmes with overseas institutions. Guess which five countries or regions are on top? I was a bit surprised that the UK is not in this five; it is actually Australia, US, Hong Kong, China, Canada and France.

Q792 Chairman: Yes, we picked that up when we visited.

Professor Xue: Okay, so you picked that up.

Q793 Chairman: Yes, but what we also picked up, Professor, was the fact that as we were in China ten million students had sat their university entrance exams in June.

Professor Xue: That is right.

Q794 Chairman: Only five million were going to get in but five million new undergraduates were going to start studying this coming September, which is a very large number. But then when we looked at the tiny percentage that 60,000 students coming to the UK represents at 0.25 % it puts it in perspective.

Professor Xue: Yes, indeed.

Q795 Chairman: In terms of the previous discussion we had with the two professors who were here earlier, did that picture of both competition and collaboration make sense to you? Did you feel comfortable about that analysis that was coming back from them in terms of how they view international competition and cooperation?

Professor Xue: Certainly I do see the competition among higher education institutions in terms of attracting the best students, in terms of attracting the research funding and so on, but personally I do not see that as a competition between countries. In a way I see universities as treasures of humankind, so I think the best universities in the UK, US, China or India, they are and always will be the best part of the civilization that we can enjoy. So in this sense I view the growth of the higher education around the globe, and the competitions among higher education institutions, as a healthy part of the human development. That is the first thing. The second thing, we can see that the competitions among the universities have really intensified in the last decade or so, particularly crossing national borders. Clearly different countries have different modes of competition and of collaboration and the figures I cited seem to indicate that different institutions in different countries have picked up different ways of collaboration or competition. I think the UK's universities have been aiming at attracting students to come to the UK with less emphasis on developing collaborative programmes.

Q796 Chairman: You think we should concentrate on the latter rather than the former?

Professor Xue: I think there should be a balance.

Q797 Chairman: A better balance?

Professor Xue: I think there should be a balance between attracting students coming to the UK but also I think developing partnerships through joint programmes and so on are also needed. I was really surprised that the UK is not in the top five, given the language advantage and also given the great reputation of the UK universities.

Q798 Chairman: Why do you think we are not in the top five?

Professor Xue: I think maybe that is the choice of the UK universities; they have not been, I guess, as active in pursuing a partnership with the Chinese universities—at least that is what that data seems to be indicating. Also I think that maybe many of the collaborations in the UK and China are collaborations based on the old traditional channels of collaborations, but maybe there are many new channels, possibilities that the UK universities have not experimented with, but other countries have been able to.

Q799 Chairman: I have been holding back Tim Gore. Tim, would you like to say a few words?

Mr Gore: Thank you very much, Mr Chairman. My role in India as Director of Education within the British Council is really a representative of the UK higher education sector as well as the education sector in general, in India, and I do this through various partnerships and agreements with the sector. One of them is the Education UK Agreement that we have with the higher education sector, and we have 130 India partners, so 130 higher education institutions who have a very keen interest in working with India. My other role is as India Project Manager for the UK India Education and Research Initiative, which is quite a unique partnership of 13 funding organisations and both the UK Government and the Indian Government are involved. Also the private sector; we have four corporate champions—BP, Shell, GlaxoSmithKline and BA Systems, who support the initiative. So that is quite a unique initiative. India in many ways is a natural partner for the UK, and senior Indians say this very often, through the language and through a shared education system. However, our relationship has gone through various phases over the years. Clearly in post-independence we had a lingering role-many of the politicians in India had gone to Oxford or LSE and so on-and then we moved into a capacity development where we helped them create new institutions, such as IIT Delhi, but there was a sense of drift at that time and that moved into a more commercial relationship when we started recruiting students more vigorously, and it is only most recently that we have moved as a sector to a much more strategic relationship, looking at longer-term partnerships and multidimensional partnerships with India, and I think that is really important and we should build on that.

Q800 Chairman: So how do you compare what Lan has just told us, in terms of where do you think is the preferred destination for Indian students who are going abroad to study?

Mr Gore: Sorry, the question is?

Q801 Chairman: He pointed out that in terms of the top five destinations he gave the UK was not one of those top five. That would not be the case in India, would it?

Mr Gore: No, not at all.

Professor Xue: Excuse me, let me make myself clear: the kind of programmes I was talking about were the joint programmes. In terms of destination for students going abroad the UK is not doing badly—I think it is more of the joint programmes between foreign institutions and Chinese institutions. There the UK is not in the top five, but in terms of destination of foreign studies I think the UK ranks probably either second or third.

Q802 Chairman: I am glad I got that on the record; I misinterpreted that.

Mr Gore: In both respects the UK is in the top five but it is a very competitive environment. In terms of student flows to the UK they have quintupled over the last eight or nine years from a position where we had about 4000 Indian students in the late 1990s,

and we now have about 23,000 young Indians studying in the UK, which is a tremendous increase. The Australians and the Americans probably have more Indian students in their country at this time; the Australians have about 29,000, the Americans have about 79.000. But the annual flows are comparable; the Australians get about 15,000 students going over every year-they just stay longer; and the Americans get about 25,000 every year; whereas the UK is getting at the moment about 20,000. So the annual flows are comparable. What tends to happen is the vast majority of Indian students stay for one year in the UK and stay for either two or three years in the US and Australia. The motivations are slightly different in that immigration is a big incentive, or has been a big incentive in Australia and the US and much less so in the UK. In terms of partnership, a study done last year by the National University of Planning and Administration in Education put the US and the UK pretty much on a par in terms of educational partnerships, having about 60-odd partnerships each. The UK is actually probably in a slightly better position than the US and much better than any of the other competitor countries in terms of transnational education, i.e. the projection of crossborder education for UK education, in that we have some of our programmes completely accredited by the All India Council for Technical Education, which no other country has achieved.

Q803 Chairman: What is the quality control on all of this because, Professor, we found in China that people said what they wanted was a high quality partnership, a high quality relationship and they were very keen, and it was emphasised to us many times that they were very interested in strengthening and developing but the quality had to be there. Firstly, how do we make sure that those are high quality and how do we monitor that? How do you monitor it from the Chinese side?

Professor Xue: From the Chinese side in terms of the joint programmes between Chinese institutions and UK institutions?

Q804 Chairman: Yes.

Professor Xue: In general I think the current partnerships are indeed very high quality ones, so I think that there is still great potential in developing those partnerships. I think there is a phenomenon that from both sides there are probably many requests in developing partnerships with the best universities, so in the best universities, the very top ones, it is a big crowded. But in both countries there is a very strong second tier or second best universities that they have not paid enough attention to, so I think there may be great potential for developing partnerships. In terms of the quality issue there is some concern but again this is just starting. In the past I think the Chinese public has had a strong interest in sending their kids to undergraduate programmes in the UK, Australia and so on, but this relates to the problem that has been mentioned previously, the cash-cow problem. In some countries, there are specific institutions developed just for the new market in Asia. In some of these programmes, the quality control is not very well maintained, so there are cases of failed institutions because of the financial quality control, and other problems. That sent a very bad message back to China, which actually hurt the reputation of the whole country. That is the kind of message that one should pay attention to.

Q805 Fiona Mactaggart: I am very interested in what you say, Professor Xue, about the fact that Britain is not in the top five for research partnerships because if you look at where we ought to want to be, look at what China is doing at the moment, since 1999 investment in R&D has gone up by 20% a year, it is very ambitious and it wants to be in the top five countries in the world for international citations and patents, then we ought to be in there. What is the barrier, why are we not in there?

Professor Xue: I can only venture a guess. Again, we are talking about a specific mode of international collaborations. Here I am talking about the joint programmes. Those joint programmes can have joint degrees of all kinds. Indeed, the UK is not there but in terms of the students coming to the UK indeed UK is still on the top. So I think probably for the UK universities they are satisfied with the fact that a lot of students are coming to the UK but they are not necessarily interested in spending the effort to develop that partnership, and indeed that actually takes time. The other thing I think also it may be that in those partnerships, particularly with the US, many graduate students who went to the US and studied and then went back to China, like myself. So naturally we had that linkage with the US institutions, so it was natural to talk with your colleagues and then to start the partnership. For the UK I think maybe the number of graduate students-again, this is my guess-who get doctoral degrees and go back to China is not large enough since the UK does not have institutionalised support for graduate students. So probably many of the students coming to the UK from China are for undergraduate studies or for the one year Master Degree programme—I have a cousin who came here for one year and then went to the US. So in that sense that network is not strong enough to develop that partnership. It may be there is a need for some facilitation to help the institutions which have an interest in developing such partnerships and which may not have enough resources to do so.

Q806 Fiona Mactaggart: If we were to have more postgraduate student programmes here for Chinese students and actually put some energy into recruiting them, and maybe having a structure a bit like the Higher Education India Partnerships that we have heard about from Mr Gore, which was designed to structure some of those, do you think that would make a difference?

Professor Xue: That could be. Again, if you look at the current existing joint programmes I mentioned, it is very diversified. One example is that in our Tsinghua University, in the engineering school, we have a joint programme with a German university,

Archer TH. They have a student exchange programme so that some of the Chinese students would study two years in China and two years in Germany and vice versa, and when they graduate they get both degrees from both universities. So there are programmes like that. The Shanghai Jiao Tong University has a joint programme with the University of Michigan in mechanical engineering. Again, there was an exchange of students and faculty. They also offer joint degrees and also have joint research programmes. I can also cite that Stanford University now has a programme/campus in Peking University. So there are various kinds of collaborations. I have to say that UK universities do have joint programmes, and one of the great examples is Nottingham University, which developed a partnership in Ningbo with a college-

Q807 Fiona Mactaggart: We went to visit.

Professor Xue: That is a great example. But that particular collaboration is an example hard to follow. I have just seen a report on the collaboration and certainly financially both sides have invested quite a bit, which is not sustainable for other cases.

Q808 Fiona Mactaggart: But surely the rewards are substantial for investment, particularly in terms of postgraduate studies if China is being this ambitious, that intellectually and arguably economically the rewards will be substantial for the UK; do you think so?

Professor Xue: I think that would have to be defined by the particular institutions that are involved. I do not think this collaboration, as we have seen, is similar to those joint programmes between Chinese Universities and those in Australia, US and other countries. I think maybe there could be some support from the national government but most importantly such programmes have to fit the interests of those institutions involved. So probably they have to see something that they ought to invest in in the future.

Q809 Fiona Mactaggart: The other thing that interested me a lot in China is that we were all told that the kind of pedagogy being deployed in higher education in China is beginning to change from a rather formal textbook type to something closer to a UK investigative, collaborative, learning kind of approach. I was not sure that that is what I saw and I would like to ask you, Professor Xue, whether that was an ambition, a reality, a spin? Is pedagogy in China changing?

Professor Xue: I think it is very hard to say that the pedagogy is now changing in China in every institution. China now has close to 2000 universities and I would have to say that for the top universities the pedagogy has been changing for quite a long time, and I think many of the university professors, a very high percentage of them, are actually from overseas, who did graduate studies overseas and then went back. So they naturally introduce what they learned from overseas and brought that back. So I would say that in those universities things have been changing very fast, but at the same time there

are other universities that are less well equipped with the good faculties and they may still teach based on the old pedagogy. So it is very hard to generalise. But one thing is sure, that China has been changing very fast and many of the universities are in a constant mode of innovation and change, so they are willing to learn from other countries. So that is why you can see that in terms of the openness to the outside collaboration with overseas universities, China is probably one of the most open countries developing countries. So that is the mentality we have developed over the past 20 years, I think.

Q810 Fiona Mactaggart: I was very struck by how much it had changed in the 25, 30 years since I was last there. What do you think the consequences of a more questioning, discursive kind of pedagogy is going to be on the whole of the education system and society in China? Do you think it is going to create other changes?

Professor Xue: Certainly I think the higher education system is really producing the new generation of people who are known to be the leaders in every part of the society. So I think when they are trained to be more exploratory and investigative and they are more open minded that will produce positive change to their society; so I think that certainly will be beneficial.

Fiona Mactaggart: I am glad you think it positive, so do I.

Q811 Mr Marsden: Professor Xue, can we pursue this issue of quality and how you get quality assured. When we were in China and indeed in briefings we had previously we were told about the impact of the assessment of British courses, British institutions in China by our Quality Assurance Agency which had been carried out. We were also told that there are inevitable sensitivities within China about overseas quality assurance coming and looking at a range of institutions in China. So given that we share your desire to have quality assurance, both between a Chinese partner and any British partner, what is the best balance to be struck for having a structured framework for quality assurance of British HE involvement in China?

Professor Xue: You mean for British programmes in China?

Q812 Mr Marsden: Yes.

Professor Xue: For British programmes in China, first of all, they are subject to the regulations on the joint programmes in China. I think the Ministry of Education has a regulation published in 2003 regarding international collaboration and joint programmes. It is those institutions engaged in those programmes that really have to evaluate the quality of their partners. So I think that is probably the most important one. Also I think there are government agencies that are monitoring and receiving feedback about joint programmes, and I think that is the second defence. But ultimately it will depend on the feedback of those students, whether they are receiving the quality education or not.

Q813 Mr Marsden: My colleague Fiona Mactaggart has been asking you your opinions on pedagogy. One of the things that was very interesting when we were in Beijing at the Ministry of Education—and indeed was said elsewhere—is that there is enormous emphasis on the potential to expand HE into Central and Western China as part of the economic development of those areas, and that long-established universities like your own University of Tsinghua were very important partners in that process. Is there anything specifically that UK universities, with their traditions of excellence in pedagogy and vocational education can do to assist that process?

Professor Xue: I agree that there are great potentials in those areas. As I mentioned, there is great diversity in terms of the higher education institutions in China, and in general I think that the western universities are less equipped with different resources, but actually they are great institutions in those regions. Traditionally they have not had enough resources to engage in the kind of international collaborations that they really wanted to, and I think there could be great potential for the institutions to engage in. So I would say that it would be best if there were some structured programmes that could be developed.

Q814 Mr Marsden: So you would welcome a structured approach from perhaps a consortium of British universities who have strengths in that area to engage with China?

Professor Xue: The other thing is that those universities also have their own strength areas, so I think it is those collaborations that will also produce benefits for the UK universities and that would sustain. So if it is purely on an aid basis I think those relationships will not sustain. The key is, how do you identify the strengths in those western universities and how do you match that with the UK universities? If we can engage in an effort to build such partnerships, the potential would be tremendous.

Q815 Mr Marsden: Could I ask you a final question about the experience of Chinese students coming to the UK, because obviously we are concerned to maintain excellence for that and there are issues, as you heard from the previous session, about are we getting the best students from China? But whatever quality students we are getting from China what can be said is that those Chinese students who are coming are either themselves paying a significant sum of money or, alternatively, they are receiving bursaries or scholarships, so it is obviously important that they get the best student experience. We have had a report which has been given to the British Council in the last few weeks by the Research Director at the Glasgow University Media Unit, Greg Philo, about the experience or about interviews with Chinese students in Britain, where they say that actually they feel a bit frustrated because they do not always feel that they get the best advice about coming here. He is actually suggesting that there should be a much more open basis, maybe a website, on which Chinese and, for that matter, other international students should be able to comment on their experiences. Do you think that is a way forward or not?

Professor Xue: I think certainly that would be one way. Let me give you my impression from my own experience of having been in higher institutions in China for over ten years. I have many friends and colleagues who have studied in the UK and I think in general for those people who completed their doctorate degree in the UK they all had great a experience. They felt they had learnt a great deal and that they were extremely useful and they brought back their skills and were trying to use them in whatever professions they are in. So I think that impression is very strong. The second impression I have in terms of the students studying in the UK in the Master Degree programmes is the experiences vary. Some feel that after completing their Master Degree-and often it is relatively short-they are not learning the kinds of things that would be very practical for them—a bit too theoretical and so on. The third impression I get from the students who are applying to the UK universities, they sometimes felt there was not structured information about funding. I think many of the students applying for doctorate degree programmes very much appreciate the US way that there is structured information about whether you get a scholarship, a fellowship or whatever, and so there is a package. But this is not well structured in the UK. So there is a structural difference in supporting graduate students between the UK and US systems, and that is the impression I get.

Q816 Chairman: We have a new Prime Minister, you probably know, and new Prime Ministers like to make initiatives. Do you think that this is the time for a major initiative here with the relationship between the UK and China in terms of an ambitious programme of cooperation? Would you favour something that really raised the profile of, on an equal basis, a new injection of both energy of resources into partnership with Chinese institutions? Professor Xue: I think indeed this is a great time to engage in and really raise the profile of the collaboration in higher education with China. I think one thing that the new Prime Minister could do, in addition to what we have discussed, is to support students from the UK to China. In recent years the Chinese universities have begun to develop new international programmes where they are welcoming students from overseas. Using one example from our own school, we have just started a new programme, a master degree programme in international development, starting this September. We really welcome students from other countries to come, and the Government is also providing some support, but it is very limited. So that is the first thing I would like to propose because I think we need a new generation of Joseph Needham (who has been the greatest western scholar in the history of Chinese science-that is from the UK and that is many years ago). We do not have that kind of scholar now and we need to produce those sorts of scholars.

Chairman: That is very interesting. Can we switch now to India because we are neglecting you a bit, Tim, so we are going to redress that situation.

Q817 Mr Chaytor: Tim, are the objectives of the UK-Indian Research Initiative on track?

Mr Gore: Absolutely, yes. UKIERI established about 190 linkages last year, 2006/07, across the whole educational range. We met all the objectives that were set us by the joint partners. About 30 of those were research partnerships, seven collaborations of higher education teaching and 100 school links, so quite a lot of activity. In addition to that we have done a lot of work at the policy level which is very, very important in the relationship.

Q818 Mr Chaytor: But you have certain objectives to achieve by 2010, like new collaborative research projects, and you are confident that the 2010 aims will be achieved as well?

Mr Gore: Yes, we will achieve those.

O819 Mr Chaytor: What strikes me as interesting is the message we had from Professor Richard and Professor Winckler was that the way forward for universities to thrive was greater autonomy, increased funding; and in the United States, which arguably has the most successful system at the moment, there was no federal policy to direct the activities of the universities, but here, with this UK-Indian project, we have a very top-down approach with very specific performance indicators to achieve. So how do you reconcile that kind of almost command economy approach in terms of our relations with India with the lesson from the United States, that it is the autonomy of universities to do their own thing and to build their own partnerships? *Mr Gore:* That is a very good question. Of course, our system is a very bottom-up funding system, Research Councils and so on. The Indian system is not and to bridge the gap between that you need some sort of framework and I think one of the areas where we have possibly fallen down in the past is not recognising that sufficiently. In fact there is a market economy within this top-down approach and we run competitive bidding; and I think the evidence is that there is a tremendous amount of interest in research and collaborative partnerships. We took in about 400-plus higher education proposals and we only selected 10% of them, and that was on a competitive basis. So clearly there are two things: there is the topdown targets that we set and there is also a tremendous interest in that coming bottom-up from the UK and Indian sectors.

Q820 Mr Chaytor: What is the role of private industry and business in the partnership? I understand that a number of different companies are now actively involved. How important are they to the overall success of the objectives?

Mr Gore: I think they are crucial. I think it is very, very important that the initiative should be seen as wide ranging, not just a governmental initiative. We have both governments involved but we also have the discipline of having multinationals involved, big corporations. They of course bring tremendous expertise themselves in areas that the relationship is very important, for example energy security, climate security—these areas, BP, Shell, plus of course GSK in an area of research is very important for the Indo-UK relationships.

Q821 Chairman: They are the big players though. We picked up in China, for example, a lot of enthusiasm for partnership on environmental projects because of the environmental challenges, and that again seemed natural. Is that not the case in India that we could get some of the smaller companies? That is a part of participation wherever we go. It is all right for the Shells and the BA Systems and so on, but what about the thousands of other companies that do not have that clout? Do you help them?

Mr Gore: In terms of our partnerships we have to have a limited number of funding partners because otherwise the stakeholder objectives get too complex. However, there is a mechanism for involving smaller corporate entities and that is through the bidding mechanism. It gives an advantage to a bidder if they have a corporate sponsor because it indicates sustainability, market realism, and so on. So there are a lot of companies involved with the institutional collaborations. They are not partners to the initiatives but they are partners to projects within the initiatives.

Q822 Mr Chaytor: How does what the UK is doing in India compare to what the United States is doing? *Mr Gore:* The United States is doing very well in India, but it is a very fragmented approach. The US do not have, as far as I can see, an overarching strategy for their approach to India. They bring in very, very high powered delegations and they come in and bring in presidents of universities and politicians and make a big impact and do a lot of things as a result of that. But it is fragmented and their whole marketing of US education does not have a single brand or any attempt to convey the diversity and variety of the American offering. So they are successful despite, I think, a coherent approach to partnership in the market.

Q823 Mr Chaytor: What do you think is the general perception of the status of the UK university education amongst Indian parents, particularly that huge, growing Indian middle class who may be looking at sending their sons and daughters abroad for their education?

Mr Gore: It has changed enormously over the years. It was that the UK was the country of choice because of historical ties and so on, but that declined considerably, and with the growth of the Diaspora in the US and the success of the Indians in Silicone Valley America really moved up and became, if you like, the trendy destination. A country of destination

for overseas students is very much word of mouth more than anything else and the US really built that. However, since we launched the Prime Minister's initiative we have countered that quite successfully and built up the numbers considerably and also changed the opinion of what the UK is—it was seen perhaps a decade ago as rather dusty and uninteresting, but that has certainly change for a variety of reasons, partly because of the strong interest in Bollywood in the UK, and so that projects a more interesting perspective. But there are lots of things we have done to try and change perceptions.

Q824 Mr Chaytor: Should British universities be anticipating or planning for an increase in the potential number of Indian students coming to the UK of the kind that we have seen in Chinese students over the last ten years?

Mr Gore: We have seen a tremendous increase. As I said, the numbers have quintupled in the last eight years. Most universities have an internationalisation strategy now and what they want is a balance of students. The economic argument has declined slightly, the cash cow argument has declined because of the fees. Professor Richard made the point that there is not that much of a difference between what the UK will get from the direct fee from the student with the HEFKI top up to what an international student would pay.

Q825 Chairman: All the evidence we have had, it says we do not want average students, we want the best.

Mr Gore: Absolutely.

Q826 Chairman: And we do not just want undergraduates we want postgraduates and people to stay on and do their PhDs—that was very clear from the earlier evidence. How do we move up in that direction? How do we attract the best students from China and India and how do we get them to stay and be post graduates and stay with us? How do we do that?

Mr Gore: By partnerships, not with pure marketing; there has to be brand presence of the UK universities. I am very reassured that Professor Richard is coming for two weeks in the New year to really make sure that Cambridge has a presence there and a lot of universities are doing these same. They have to be recognised, they have to do things, they have to engage, they have to give talks, they have to engage in high level activities, and that will build the interest. At the PhD level—and I think Professor Xue also mentioned the unstructured nature of support for the top people coming to the UK—we do not do it well.

Q827 Chairman: We do not only want the rich Chinese and Indians. I come from a generation when I was in the LSE where we had a lot of poor students from China and India and we celebrated that. Of course, we like to see bright young people from poorer backgrounds from our own constituencies,

but we would also like mechanisms to attract bright people from less privileged backgrounds from China and India. Is that possible?

Mr Gore: I think the US structure financing is better for top students. It is not that they necessarily provide for free scholarships for everybody, but they give them a promise of work in the university context or whatever, and that is all arranged before the student comes. We are much less structured about that.

Professor Xue: In China in a similar way, again the student would make a decision about where to go based on the funding stituation, particularly the top students. They often get many offers and if an offer has a very structured, stable funding separately they would choose those universities.

Q828 Chairman: For a full package?

Professor Xue: A full package in terms of the tuition and also the stipend. But also the Chinese Government just started a programme of supporting top Chinese graduate students coming out to universities in other countries to form a partnership with other universities and actually supporting their living expenses. So that is a structured programme that I think the UK universities can really take advantage of. This is a very large-scale programme and I think it is going to be quite a few years so there again I can see great potential. The other thing is the post-doc programmes. Again, in the US, particularly in some natural science areas they are very structured programmes that when people get their PhDs they will get into those post-doc programmes to study. Again, this gets to the question of whether that can be structured in the UK so that when people finish their doctorate degrees they can continue studies for a period of time.

Q829 Mr Chaytor: Which are the British universities that are most successful in establishing research partnerships and in recruiting undergraduates and postgraduates from India?

Mr Gore: There is tremendous diversity of interest in India. On the one hand there are universities that have pure research partnerships and on the other hand there are a group of universities that have collaborative delivery programmes, so they design and deliver programmes strategically together, and there are those universities that have a mixed economy in the middle. To my mind the mixed economy works very well because they cross fertilise each other. Research, as Professor Richard pointed out, is in some ways an isolated experience of individuals within a university, and so sometimes a lot of research happens without relating to the strategic intent of the university as itself, whereas collaborative programmes are almost always strategic and becoming more so, and they can cross fertilise each other because the relationship depends on different parts of the institutions talking to each other, and then you get the flows of people moving backwards and forwards at different levels because there is that familiarity with the institutions.

Q830 Mr Chaytor: Without asking for a league table could you mention one or two particularly interesting examples?

Mr Gore: Taking different approaches, the University of Huddersfield has a recognised and accredited programme in hospitality management, which has a partner, which is the Institute of Hotel and Tourism in India and they are sponsored by the Tata Group of the Taj Hotels, which is an excellent set of hotels, and that is an excellent programme. There has been a lot of investment and it is accredited, it is a joint partnership and seen strategically by the partners as belonging to both countries, and I think that is a good approach.

Chairman: You know that I am the Member of Parliament for Huddersfield!

Stephen Williams: It ticks all the right boxes! Quit while you are ahead!

Q831 Mr Chaytor: One final thing if we are coming to a conclusion. What interested me also was the relationship between universities in India and China and particularly the views of the respective governments in India and China about the future development of the HE sector because here we have two countries with enormously growing populations, enormously growing HE sectors. Is the view in India and in China that universities are good for the whole of humankind and should be shared and collaboration is the way forward, or is there a view that the universities in the two countries are absolutely key to India's and China's future economic growth and particularly the closing of this enormous gap in wealth and opportunity that has opened up in both of these countries in recent years? Professor Xue: First of all, I think the universities have always been considered as extremely important in China's economic growth, in training people and in providing research support and so on-that has always been the case. The additional elements in China's development in higher education is that, first of all, culturally I think the Chinese people have this drive for making sure their kids receive the best education. That is very, very strong in us-no matter where you go in China. That is why there is always that fierce competition in higher education, in getting into the best institution in the country. So that social need for university degrees, no matter whether it is for economic income or other reasons, they just want that university degree. I think that strong social demand is one of the underlying currents for the development of higher education. The other thing, after 1998, when China had this programme called the World Class University Programme, supporting the best universities, I think that element was also introduced not only just for the economic growth of China but also making some contribution in basic science which also should be part of the Chinese obligation and contribution to the world as a major country.

Q832 Chairman: A brief word from you Tim; we are running out of time.

Mr Gore: In such a vibrant as democracy you can imagine that both points of view are held and they are, and very aggressively. The government is a coalition government and there is a lot of interest in liberalisation of education but also concern that that will lead to elitism and work against education as a public good. Particularly relevant here there is a big concern in India that opening up to foreign influences could work towards elitism and commercialisation of education and that is something with which we work very closely with the government and with the stakeholders in India, to try and reassure them that we are not interested in a purely commercial relationship and that we can, also

through widening participation programmes and so on, reach out and help India achieve both those goals.

Chairman: Professor Xue and Tim Gore we have had an excellent rapport with you. Can I congratulate you, Professor, that when you made your first remarks you said that higher education is about solving the world's problems and I think we all realise that in this age of climate change and world poverty that it is scholars and researchers worldwide producing something for humankind that is absolutely essential. But there is competition within that and it is healthy competition. Can I thank you both for your evidence and hope that we have a continuing relationship with both of you. Thank you.

Written evidence

Memorandum submitted by the Department for Education and Skills (DfES)

INTRODUCTION

- 1. This paper sets out the Government's views on the matters raised by the Select Committee. It covers:
 - the Government's view on the key principles that should lie behind the shape and structure of higher education in this country;
 - an assessment of the strengths of our higher education system, and of the current funding system; and
 - an assessment of the priority areas for further development of higher education.

PRINCIPLES

2. In our 2003 White Paper The Future of Higher Education we said:

"Higher education is a great national asset. Its contribution to the economic and social well-being of the nation is of vital importance. Its research pushes back the frontiers of human knowledge and is the foundation of human progress. Its teaching educates and skills the nation for a knowledge-dominated age. It gives graduates both personal and intellectual fulfilment. Working with business, it powers the economy, and its graduates are crucial to the public services. And wide access to higher education makes for a more enlightened and socially just society".—(*The Future of Higher Education*, p14).

3. This remains a valid statement not only of the central importance of higher education to the well-being of our society, but also of the different ways in which the contribution of higher education is made. The Committee has said that it will look at "questions of first principle" in higher education, including the fundamental question of what should be the role of universities. The Government's clear view is that there can be no one single role for our higher education institutions (HEIs), or for the higher education sector as a whole. Higher education serves a number of diverse and distinct purposes, and it is important that policy should not focus on one to the exclusion of others.

4. We need to nurture a higher education system which:

- undertakes world class pure research that pushes back the frontiers of knowledge and understanding;
- collaborates with businesses at national, regional and local level to support successful innovation, deployment of technologies and entrepreneurship; and equips the public and voluntary sectors for the challenges of tomorrow; and
- helps society recognise and find solutions to the great problems of the twenty first century: climate change; shortages of national resources; migration; the ageing population; dizzying changes in technology.

5. We need, too, a higher education system that teaches an increasingly diverse group of learners in different ways and for different purposes. What has traditionally been the core group of HE learners, those leaving school or college with good qualifications at age 18, will remain important. But we need a higher education system that builds further on recent successes to reach out to increasingly diverse groups of students—students who differ from each other and from the traditional conception of a student in all kinds of ways:

- by socioeconomic background; and also by gender, ethnicity and disability;
- by age;
- by level of study, ranging from certificates through to doctorate level;
- by relationship to employer, with an increasingly important role for work-based learners studying
 options designed in partnership with employers and aimed at boosting skills directly relevant to
 employment; and
- by mode of study—catering for those who choose to commit full time and those who are fitting their higher education studies around busy work and domestic programmes.

6. We have a very diverse range of institutions—diverse in terms of such indicators as size; the split between undergraduate and postgraduate student; the proportion of students recruited from overseas; relative sizes of part-time and full-time provision; the amount of income taken from research; and the proportions of income drawn from funding councils.

7. There is also an impressive diversity in student mix and subjects studied, and again the hard evidence bears out such impressions:

- 56% of undergraduate enrolments in English HEIs on 2004–05 were aged 21 and above; 32% were aged 25 and above; 23% were aged 31 and above;
- part-time undergraduate enrolments rose by 12% between 2000–01 and 2004–05; in 2004–05 they represented 27% of total undergraduate enrolments; and
- there has been progress since 1997 in increasing the proportion of people from disadvantaged backgrounds entering HE. Between 1997–98 and 2004–05 there has been an increase in the numbers of full-time first degree entrants to HEIs from state schools (81.0% to 85.9%) and from low participation areas (11.4% to 13.1%). The overall BME participation rate of 18.4% for 2004–05 compares favourably with the overall 11.2% of the general working population from minority ethnic backgrounds and 14.9% of the under 30s age group of the working population.

8. In order to shore up and extend the diversity of mission that increasingly exists in our higher education system, we need to see diversity in the way society measures excellence and celebrates success; and diversity in the funding streams that are available to higher education. It is also important that institutions are able to take risks and to innovate, rather than deliver services to a template. That is why the 2003 White Paper placed institutional autonomy along with diversity of mission at the heart of the Government's strategy for higher education. Institutional autonomy and diversity of mission are, indeed, connected. If institutions are autonomous and able to set direction on the basis of what they can excel at and what their customers demand, then they are more likely to develop distinctive missions, innovate and take risks. The role for Government then becomes to set the right legal and funding frameworks that allow the energy of successful institutions to be harnessed.

THE PERFORMANCE OF HIGHER EDUCATION

9. Here, there is a good story to tell. Higher education in this country is a success. In research, we punch well above our weight in the international ring. Universities deliver a high quality of teaching. Employers value the abilities that graduates bring to the workplace, and show this in the wages they pay. The global reputation of the UK as a place to come and study is high.

- 10. Key indicators of this success are:
 - Research quality is high and improving. Over the last 20 years, the proportion of active researchers working in departments which achieve the highest excellence ratings in the Research Assessment Exercise (RAE) has risen steadily. The last such exercise, in 2001, revealed that over half were employed in departments which gained 5 or 5* ratings. An independent study undertaken in 2006 identified the UK as the second strongest research base in the world, behind only the US. In terms of outputs the UK leads in terms of papers published and citations per researcher. The widely-respected Shanghai Jiao Tong academic ranking of world universities for 2006 showed two UK universities in the top ten, the only non-US institutions to figure. The same index shows five UK universities in the top fifty, more than the rest of Europe put together. Although league tables of this sort attract many caveats and criticisms these results are a clear reflection of the esteem in which UK university research is held internationally.
 - Student satisfaction levels are high. The National Student Survey for 2005 showed that that 81% of students were satisfied overall with their courses. The most recent MORI/Unite student experience survey (2006) showed that 90% of students are very or fairly satisfied with the quality of teaching. The Class of 99 study indicated that just 3.5% of graduates would, with hindsight, have chosen not to enter higher education; and also that around 85% of graduates are in jobs using their university-acquired skills, four years after leaving university.
 - Student retention performance is good, even though an expanding student base and reaching out to non-traditional students has brought pressures. The drop-out rate is one of the lowest in the OECD. Non-completion rates in tertiary education in UK are under 20% (around 16–17%) compared with around 35% in the US and over 40% in France.¹
 - Returns to graduates remain strong. The rate of return to a degree for a student is very high in the UK by international standards, comfortably above the OECD average and the US.² Recent survey evidence suggests average starting salaries for graduate-level vacancies of around £18,000 pa, and on average, graduates earn around 20–25% more than similar non-graduates.³ Over the working life, we believe that the average graduate premium remains comfortably over £100,000 in today's valuation, compared to what a similar individual would have earned if they just had A levels.⁴ We estimate that an average student will earn around £4 back in higher pay—in today's values—for each £1 they have invested or foregone in their higher education⁵.

¹ OECD, Education at a glance, 2005.

 $^{^2}$ Ibid.

³ Analysis of vacancies in *Graduate Prospects* in the year to April 2005.

⁴ Internal DfES analysis of the Labour Force Survey.

⁵ Internal DfES analysis.

- Employer satisfaction is demonstrated in these wages premiums, and also in attitude surveys. 81% of employer recruiting graduates thought them very well or well prepared for work, compared with 60% of employers recruiting 16-year-old school leavers, and 69% of those recruiting 17 or 18-year-old school leavers.⁶ Where employers were able to isolate the impact graduates had on the business, they commonly mentioned that graduates were more likely to:⁷
 - challenge how things are done;
 - assimilate things quicker;
 - be flexible;
 - come at things from a different perspective;
 - are problem solvers;
 - bring new ideas and energy; and
 - use their initiative and act without waiting for instruction.
- International market performance is strong. The UK is second only to the US as a destination for overseas students, and overseas (non-EU) student numbers rose by 84% in the five years to 2004–05. Within this overall picture there is a welcome degree of specialisation: thirteen institutions have more than 5,000 students from outside the UK. Trans-national education—the delivery of British qualifications outside the UK—is becoming more important. The British Council has estimated that over 200,000 students are studying UK HE qualifications abroad (2004–05).

THE FUNDING SYSTEM

11. Public expenditure on higher education increased by 23% in real terms from 1997-98 to 2005-06 with total funding per planned student increasing by five percent over the same period. While significant, the overall increase was lower than in other sectors of education. This reflects the government's policy to share higher education costs fairly between the state, parents and graduates given the clear evidence that the latter benefit financially from their higher education. The introduction of variable fees from 2006 will bring much needed additional revenue to higher education. Government expenditure on loans for variable fees will enable institutions to charge up to £3,000 per year without deterring entrants to higher education on financial grounds. Under steady state conditions, the additional income from variable fees is expected to be around £1.35 billion per annum.

12. We consider that the structure of government funding is broadly sound. The role of the Higher Education Funding Council for England (HEFCE) as a buffer body between Government and institutions as set out in the Further and Higher Education Act 1992 provides institutions with the right degree of security from political intervention in the curriculum or in research, and so enshrines the academic freedom that is a core value for a modern civilised society. The Council funds higher education in accordance with the policy and priorities that are decided by Ministers, and these are summarised and updated in the annual grant letter issued by the Secretary of State. The Council's strategic plan and its key performance targets are approved by the Secretary of State.

13. The Council allocates the greater proportion of funding to institutions via a block grant system. The process for determining the amount of block grant each institution should receive models how an institution might spend the resources allocated, but there is no requirement that actual spend should fit this model. Institutions can determine how best to use the resources available to support their missions and fit their services to meet user needs. Block grant is supplemented by special funding streams that allow funding outside of the block grant to be directed to achieving specific policy objectives. This allows explicit interventions through public funding to achieve public policy outcomes that would not otherwise be met. The fact that a particular outcome or activity is important does not of itself provide a justification for a dedicated funding stream. A large number of special funding streams creates confusion about priorities and an undue accounting burden.

14. The importance of higher education in equipping key public sector workforces is properly reflected in the funding system. Funding of medical and dental education and research is distributed through a partnership between HEFCE and the NHS. HEFCE-allocated funds underpin teaching and research in university medical schools, while NHS funds support the clinical facilities needed to carry out these activities in hospitals and other parts of the health service. Funding for students in health-related subjects such a nursing and midwifery generally comes from the NHS. The Training and Development Agency for Schools (TDA) provides funding for education and training courses aimed at school teachers. In particular, it funds initial teacher training courses and in-service professional development.

⁶ National Employer Skills Survey, 2005.

⁷ Forthcoming DfES report on employer and university engagement in using graduate level skills.

15. Higher education institutions derive revenue for their teaching activities through a combination of grant and fees. Whether the cap on the higher fee that can be charged to full-time undergraduates should be lifted will be for Parliament to decide in 2009, in the light of the report from the independent commission that will review the first three years of operation of variable fees. The terms of reference for the independent commission were published in January 2004.

16. In the decade since 1997, government funding for the UK research base has risen from $\pounds 1.3$ billion to $\pounds 3.4$ billion. Funding is provided under a dual support system. HEFCE provides funding to support the research infrastructure. The Research Councils provide funding for specific programmes and projects. The Government has repeatedly affirmed its commitment to this approach and continues to seek more effective and efficient ways of recognising and rewarding research excellence through both the funding councils and the research councils.

17. On 6 December 2006, following consultation, the Government announced its intention to replace the RAE after the 2008 exercise with less bureaucratic arrangements based to an important extent on the use of research metrics. Broadly, this will involve the use of a common basket of research income and volume measures across all subjects. To this will be added, for science, engineering, technology and medicine, a quality measure derived by bibliometric analysis. For other subjects, the quality measure will be provided by light-touch peer assessment. HEFCE has been requested to design the detail of the new system, including a bibliometric indicator and light-touch peer assessment arrangements, in close collaboration with the university sector and to report to the Secretary of State on progress by 30 September 2007. Parliament will be informed of progress in the 2007 Pre-Budget Report. The Government has made clear that these developments must not prejudice the smooth running of the 2008 RAE, whose results will continue to inform an element of HEIs' research funding until 2014–15.

CHALLENGES FOR THE FUTURE

18. We have a strong and diverse system of higher education. But while it is important to acknowledge and celebrate this, we cannot be complacent, and there are a number of key challenges that face higher education in years ahead. Specifically we need to do more in:

- developing higher education that can meet employers' specific skills needs, offering both the content and structure (smaller unit etc) that are needed;
- continuing to reach out to groups that are underrepresented in higher education;
- providing more flexibility in what providers can offer to learners and ensuring that services are fitted around the user, not around what is easiest for institutional custom and practice;
- ensuring that higher education is able to adapt to change elsewhere in society and in the education system through use of ICT and e-learning;
- opening up progression through vocational pathways;
- boosting the extent, quality and prestige of knowledge transfer as a key component of higher education;
- shoring up UK higher education as an supplier of choice in the global marketplace;
- bearing down on costs in higher education through efficiencies so that public funders and private customers can be sure of value for money;
- increasing the amount of money provided by philanthropic donors in support of higher education; and
- removing supply side rigidities through a more clearly defined role for further education colleges, and more market entry for private providers.

These are discussed in turn below.

DEVELOPING HE THAT CAN MEET EMPLOYERS' SPECIFIC SKILLS NEEDS

19. The recently published Leitch Review of Skills has highlighted the need for the UK to improve its skills profile if the nation is to maximise economic productivity to 2020 and achieve a truly world-class standing. Higher level skills are a crucial ingredient in the overall mix. Of the eighteen million jobs that will become available between 2004 and 2020, nine million will be in occupations most likely to employ graduates. The Leitch Report includes the following main recommendations in relation to higher education:

- to exceed 40% of the adult population qualified to Level 4 and above, by 2020;
- to widen the drive to improve the UK's high skills to encompass the whole working age population, changing targets for teaching away from away from the sole focus on young people aged 18–30; and
- to deliver a portion of higher education funding through a similar demand-led mechanism to Train to Gain in England.

20. A significant expansion of higher education above and beyond current targets will be required if we are to deliver the requisite number of qualifications at higher levels (ie, Level four and above).

21. Foundation degrees have an important part to play in this strategy. Early figures suggest that their numbers will have risen to more than 60,000 from their inception five years ago and, if these are verified, this will have significantly exceeded the Government's target of 50,000. This represents a strong endorsement of the work based HE learning model by employers and HE institutions. Our aim is for this growth to continue and we would hope to exceed 100,000 by 2010–11. Foundation Degrees are also proving popular with a diverse group of learners, and contribute to our widening participation objective, as well to higher skills.

22. But Foundation Degrees can only form part of our armoury. Lord Leitch's report therefore rightly makes clear the importance of higher education engaging with learners who are already in employment, especially older learners. Some 1.8 million full-time workers aged between 25–50 are already qualified to Level 3; higher education's potential target audience of adults in the workplace is sizeable. Reaching this target group through employers will require a business focused approach offering a range of relevant, responsive and flexible courses, capable of being delivered in or near the workplace. Consonant with Leitch's recommendation of shared responsibilities, the cost of growing this approach to meeting higher skills needs in the workplace should be distributed fairly and effectively between employers, learners and the taxpayer.

23. We are not starting from scratch. Employer engagement activity is already widespread in different ways throughout the sector (88% of HEIs offer short bespoke courses for business on campus; 80% offer similar courses on companies' premises; almost 90% provide a single point of contact for external partners to approach). There are also some excellent examples of institutional transformation within a group of HEIs that are keen to develop radically new approaches to provision around employers' higher level skills needs. We are keen to build on these existing examples, and to disseminate good practice and encourage wider innovation within the sector. It is entirely feasible that the "business focused" university will become established as a new model to complement the existing teaching and research-led institutions.

24. In order to establish and sustain such a model, HEIs will need to consider how the range of "products" they offer might be made relevant and adaptable to the evolving needs of employers in different sectors. Extending the provision of work-based, employer-led qualifications such as Foundation Degrees, in collaboration with Sector Skills Councils, represents one possible route for expansion. By further involving employers with the design and delivery of HE-level courses, and making those courses responsive to business needs, we hope that employers will be persuaded of the value of investing in that provision, and will be willing to contribute towards co-funded courses. Although it is difficult to assess the amount of annual employer expenditure on training that higher education could potentially capture, the market has been estimated at some £5 billion, of which the higher education sector currently secures no more than £300 million. But the challenge of creating a new model should not be underestimated. We shall be developing the Government's response to this challenge and the higher education focused recommendations of the Leitch Report over the course of the Comprehensive Spending Review period.

REACHING OUT TO UNDERREPRESENTED GROUPS

25. The Government is committed to widening participation in higher education, and to promoting fair access. Higher education offers significant benefits to individuals, yet despite 50 years of growth these opportunities are still not available equally to all. Reaching out to groups which have not traditionally benefited from HE is also critical if we are to achieve our objectives to upskill the workforce and maximise productivity.

26. Gradual progress has been made in broadening the social mix of the student population, but progress has been slow and there are signs that it may be starting to level off. We are undertaking research on how best to measure progress in widening participation, and will publish the results early in 2007.

27. The social class gap in participation remains the biggest single issue, although we are increasingly concerned about male participation. There are also issues about the representation of disabled students and some minority ethnic groups, and their patterns of participation across the sector.

28. Raising educational attainment is the best long term way to widen participation. Around nine out of ten students who achieve two A levels go on to higher education, but only about a quarter of 18–19 year olds from low socio-economic groups achieve this threshold, compared to just over 50% of those from high socio-economic groups. We are making concerted improvements throughout the education system, starting with the earliest years. Our focus on literacy and numeracy, raising school standards, the Academies programme, the personalisation agenda, Education Maintenance Allowances, our reforms to the 14–19 phase of learning and the new Level 3 entitlement for 19–25 year olds will all contribute. The Department is also taking an in-depth look at what more we can do to improve social mobility by narrowing the social class attainment gaps.

29. Raising aspirations and promoting applications are also important. The Aimhigher programme provides a range of activities, reaching people of all ages but focusing mainly to 13–19-year-olds. Activities such as university visits and taster days, summer schools, mentoring and masterclasses are designed to raise pupils' aspirations and help them to see that higher education is a realistic and achievable goal. Evidence shows that Aimhigher is already starting to make a difference, increasing aspirations to higher education by

3.9 percentage points in participating schools in the first 18 months. Our booklet *Widening Participation in Higher Education* (November 2006) sets out what is being done already to widen participation and some further steps that will be taken.

More Flexibility from Providers

30. Today's higher education system is very different from the one that many commentators experienced, with the most striking example of flexible and student-oriented provision being the Open University. Whereas in the past universities tended to provide courses with the same basic structure, now increasingly institutions recognise that there is a need to provide education that fits around the student. This may mean an increasingly diverse set of part-time options; distance learning; learning delivered outside of the university's own buildings; evening and weekend provision; courses starting at different times of the year, or running through traditional holiday periods. It may mean learners being able to complete courses more slowly or more quickly than has been the case in the past. All such developments are to be welcomed, and it is important to encourage a culture of flexibility in the higher education system.

31. The 2003 White Paper called for "more flexibility in course design, to meet the needs of a more diverse student body" and committed Government to piloting fast track degrees as a means of increasing flexibility in the supply of higher education and so the personalisation of the student learning experience. The University of Buckingham, a private higher education institution, has been delivering accelerated undergraduate honours degrees over two calendar years since the 1970s, albeit on a small scale.

32. To find out more about how fast track degrees and other approaches to flexible provision can best work, HEFCE has provided financial support through its Strategic Development Fund to a small number of institutions to run pathfinder projects flexibility into course design. Some one hundred students are now enrolled on these pathfinders, and more fast track courses are planned for 2007–08.

33. Fast track degrees may well be suitable for students who have a clear idea of what they want to achieve academically at university and after graduation, and demand appears to be strongest in subject areas linked to specific career paths: notably law, accountancy and business. We will need to have a close look at tuition fee regulations and institutional funding mechanisms, learning from the HEFCE-funded pilots, to better understand how ensure that those institutions which are most determined to extend student choice are not penalised by the funding system. Flexible Learning pathfinder courses are delivered within institution-wide quality assurance mechanisms as assessed by the Quality Assurance Agency through institutional audit. Three professional bodies currently accredit fast track degrees: the Law Society (courses at Staffordshire and Buckingham), ACCA and CIMA (both Buckingham).

Adapting to Change

34. UK higher education and research has benefited from its investment in ICT over many years and remains globally at the forefront of the innovative use of technologies. ICT and e-learning allow a personalised learning experience, providing the student with means of adjusting the pace and intensity of study, of overcoming physical disabilities, of enabling access to a limitless array of learning resources. E-learning can bring together of cutting edge technology with innovative pedagogy to deliver creative new approaches to learning.

35. The ability of HEIs to access an infrastructure allowing the exchange of vast amounts of digital information, securely, reliably and at low cost is fundamental to effective e-learning. This is a core responsibility of the Joint Information Services Committee (JISC). The SuperJANET5 network provides a dedicated, constant network for universities, colleges and research institutes. JISC has successfully delivered a first-class network infrastructure, and with it measures that maximise the benefits the network offers: supporting technical collaboration between HEIs; national digital repositories; and a range of other services to radically increase access to, and exchange of, digital information. JISC is recognised as a world-leader in providing technological solutions to academic problems. A recent study has concluded that for every £1 of the JISC services budget, the education and research community receives £9 of demonstrable value. For each £1 spent by JISC on the provision of e-resources, the return to the community in value of time saved in information gathering, is at least in the order of £18 and for every £1 JISC spent on e-resources the saving to the community was at least £26.58.

36. The higher education element within the DfES e-strategy *Harnessing Technology: transforming learning and children's services* is overseen by HEFCE. The *HEFCE strategy for e-learning* was published alongside the DfES strategy in March 2005. The e-learning strategy for higher education sets out a series of activities that help higher institutions develop and embed e-learning over the ten year period to 2015. Naturally the strategy must be subject to regular review as new technologies develop, and student demand and aptitudes change. Consequently, the Department looks to HEFCE, JISC and the Higher Education Academy to ensure that strategies remain live documents, adapting to meet the changing needs of academic and administrative staff and senior management teams from every type of institution.

VOCATIONAL PATHWAYS

37. A Joint Progression Strategy (JPS) between DfES, HEFCE and the Learning and Skills Council (LSC) aims to develop flexible learning innovation and improve progression from further education to higher education. One initiative is the development of Lifelong Learning Networks (LLNs) which bring together higher and further institutions across a city, area or region to offer new progression routes into higher education. LLNs will be a key driver for improving progression opportunities for learners on vocational programmes, including those currently in employment, putting them on the same footing as those following more traditional academic pathways. They will do this through formal agreements that they put in place to ensure progression; support for learners within the participating institutions; and appropriate curriculum adjustments. HEFCE has to date provided over £90 million to support 27 LLNs, spanning 113 higher education institutions and more than 260 further education colleges. Others are in the pipeline.

38. The new Specialised Diplomas being developed as part of the 14–19 reforms are a mix of practical and theoretical learning and will appeal to students preparing to enter the workforce at 18 and to those planning to continue their studies in higher education. Potentially significant numbers of students could be applying to higher education with this new qualification in the future, which has implications for higher education curricula and prospectuses. It is vital that the development of the Diplomas involves the higher education sector and that their purpose and content are communicated widely across the sector. DfES has established a higher education engagement board with representation from across the sector. A series of five regional events is planned in December, January and February to raise awareness of the 14–19 reforms and to discuss issues of relevance to higher education; and higher education representatives will continue to participate in the Sector Skills Councils-led Diploma Development Partnerships. We anticipate a significant role for the LLNs in developing and promoting progression routes for Diploma students, within their wider remit to develop local progression opportunities.

KNOWLEDGE TRANSFER

39. The DfES, the DTI and HM Treasury are continuing to work closely with other partners to help HEls to maximise their economic impact. The total value of the sector's knowledge transfer activities in 2003–04, the latest year for which figures are available, was around £2 billion, around £1 billion of which was delivered through contract and collaborative research for business and industry.

40. The 2006 Higher Education Business and Community Interaction Survey showed that, between 2000–01 and 2003–04, universities' consultancy income rose by 88% in real terms, while collaborative research income rose by 21% in real terms. Over the same period, there was a 198% increase in the number of licenses and options granted to universities.

41. Supported by over £100 million a year of government funding provided through the Higher Education Innovation Fund (HEIF), 90% of UK universities have established a dedicated enquiry point for small businesses, compared with 83% in 2000–01. Over the same period, the proportion of universities offering distance learning provision for business has also risen, from 52% to 66%.

42. In December 2006, HEFCE announced that it would be allocating an additional £60 million of funding in 2007–08 to support user-led research in English universities. This step is part of the transition to the new research assessment and funding arrangements described in paragraph 19 above, which are designed to give greater recognition to excellence in user-led research than has been possible through successive RAEs.

UK HIGHER EDUCATION IN THE INTERNATIONAL MARKETPLACE

43. International students in higher education generate £3 billion annually for the UK economy including over £1 billion in fees for HEIs. They contribute in many less tangible ways too. In 1999 the Prime Minister launched a five-year initiative to recruit more international students to the UK. It produced major marketing campaigns under a new Education UK brand, helped to streamline entry clearance procedures, improved the work rules for international students and increased the number of Chevening scholarships available to support the brightest and the best students from around the world. The initiative was very successful, achieving an extra 93,000 students in HEIs in 2004–05 against the target of an extra 50,000. But since the launch of the first phase, the global market for international education has become more competitive. In spite of the overall increase in international student numbers we have seen our market share decline from 12% in 2000 to 11% in 2004. These factors were taken into account in deciding on the direction of phase two of the initiative, which was launched on 18 April 2006.

44. The principal objectives of phase two of the Prime Minister's Initiative (PMI2) are to secure the UK's position as a leader in international education and sustain the managed growth of UK international education delivered both in the UK and overseas. Student recruitment remains an important element, with a target of an additional 100,000 non-EU students in the UK by 2011. However, the UK's ability to continue to attract international students will increasingly depend on the quality and value of our education and the strength of the partnerships we build. The new strategy involves the promotion of UK education delivered overseas, and encourages and supports more of our universities and colleges in engaging in collaborative

partnerships with their counterparts overseas. We are working with governments, education providers and industry to build bi-lateral co-operation and partnerships. We are developing a range of initiatives to support and drive these forward, for instance international networking forums, inward and outward visits, academic and student exchanges. A vital part of the initiative is to improve the UK education experience of international students by identifying and sharing best practice in order to support their particular needs, from the application and visa processes through to the end of their studies.

The majority of the UK's current international activities focus on a small number of countries. Under PMI2 the number of "priority countries" with which UK education engages is being widened to reduce dependence on a small number of countries that send high numbers of students to the UK.

MORE EFFICIENT DELIVERY

45. The higher education sector has actively engaged with the efficiency and value for money agendas. Throughout the current spending review period up to and including 2007-08, we expect the sector to achieve some £280 million worth of efficiency savings through activities such as improved procurement practices, better use of ICT, reduced bureaucracy, improved management of assets and savings arising from the implementation of new student finance systems.

46. For 2005–06 we have so far 'verified achievement of savings of £136 million; and we expect to be able to confirm achievement of the target figure of £196 million once the final data has been received from statistical returns made by the sector towards the beginning of 2007.

47. We continue to seek out further efficiencies within the sector and our Non-Departmental Public Bodies by stressing the importance of these activities in Ministerial statements of requirement. One area where we intend to pay particular attention in the near future is that of the provision of shared services with the HE sector. We will be undertaking this in conjunction with the Centre for Procurement Performance and HEFCE.

VOLUNTARY GIVING

48. The Voluntary Giving Task Force was commissioned in July 2003 by the Department with a remit to advise the Government on how to promote increased giving to higher education. The task force was chaired by Professor Eric Thomas, Vice-Chancellor, University of Bristol. The report of the task force was published in May 2004.

49. The Department welcomed the report and, in response to its recommendations, announced in December 2004 that it would be making available £7.5 million over three years for a matched-funding scheme in England to build the capacity of institutions without a history of fund-raising. Universities UK (UUK) was invited to make proposals for the administration of the scheme. Universities and other higher education providers were invited to submit proposals for inclusion in the pilot. 78 proposals were submitted, with the successful 27 selected by a UUK Panel. The income raised through donations provides the sector with an additional source of income on top of the resources we are already making available through variable fees.

REMOVING SUPPLY SIDE RIGIDITIES

50. The White Paper on further education published in March 2006 set out an important role for some further education colleges as providers of higher education. Further education colleges are often well placed to deliver skills-focused higher education, consistently with the overall skills-based mission that the Government has ascribed to the further education sector. Further education colleges often have well developed links with local employers which allow them to design specific programmes to meet local labour market needs, and this is no less important for higher level skills than for lower level ones. Colleges can offer community based provision, and provide clear progression routes into higher education for students. These characteristics are by no means unique to further education colleges—many higher education institutions can also lay claim to them—but unquestionably they show that further education colleges can play an important role in the fields both of employer engagement in higher education, and widening participation.

51. There is no one single model of successful higher education provision in further education colleges. Some of the larger colleges take funding directly from the HEFCE: others provide under a franchise arrangement with a local higher education institution; and there are a number of examples of collaborative networks which we would want to see develop. The Further Education Bill currently before Parliament would provide a freedom for larger colleges with strong experience in higher education provision to obtain powers to award their own Foundation Degrees. This will make it easier to bring to market innovative courses designed in partnership with business. We have made clear the importance of working with providers in both sectors to ensure that the quality assurance arrangements underpinning this change are effective: it is essential that students studying in one class of institution do not experience a lower quality of provision than those studying elsewhere. 52. Reforms to the system of degree awarding powers in 2004 made it possible for private providers to be accredited to award their own degrees, and in May 2006 following rigorous scrutiny by the Quality Assurance Agency the College of Law succeeded in taking up this new opportunity. The ability for new providers of higher education to emerge in this way opens the possibility of innovative approaches to provision and to engaging with employers, and has potential to increase the capacity of the higher education sector.

CONCLUSION

53. It is often asserted that our higher education system is a success story. This note has pulled together some of the reasons why that assertion is correct. There is much to be proud of and to celebrate. But we make no apologies for having focused also on the challenges ahead for higher education. We cannot stand still. We look forward to discussing these issues with the Committee.

January 2007

Memorandum submitted by the 1994 Group⁸

1. INTRODUCTION

The 1994 Group welcomes the invitation from the Education and Skills Committee to submit evidence to its inquiry into the future sustainability of the higher education sector. This is an important moment for the Higher Education sector. Following a period of unprecedented investment, HE institutions are now operating within a regulated marketplace defined by the Research Assessment Exercise and Full Economic Costing of Research Grants on the one side and the new student fee arrangements and the National Student Survey on the other. The further development of the sector is dependent on the success of institutions within this regulated market, backed up by continued and sustainable investment from central government.

Within the regulated market, it is essential that the autonomous HE institutions do all they can to enhance their competitive position both nationally and within the global sector in which they now operate. One simple way in which institutions are able to do this is through sharing best practice and developing shared policy objectives with a set of institutions with which they share common features, beliefs and values. Clustering into these defined 'mission' groups enables stakeholders as wide as students, parents, employers, employees, government departments and other interest groups ways to recognise the diversity and individual strengths of particular parts of the sector and makes potentially difficult choices between institutions easier.

In developing a vision for the future of Higher Education, it is essential that the strength gained from diversity and competition be identified, respected, valued and enhanced. In this spirit of understanding, this evidence provides detail to the Committee of the features, values and concerns particular to 1994 Group institutions which together define our position within the sector. The 1994 Group would welcome an opportunity to elaborate upon any aspect of this submission through the provision of oral evidence to the Committee.

2. The Role of the 1994 Group in a Diverse Higher Education Sector

2.1 The 1994 Group is an informal association of nineteen internationally renowned research-intensive universities. Each member undertakes diverse and high quality research, while at the same time ensuring excellent levels of teaching and student experience. Research-led teaching is central to the Group's mission, and a large majority of the top academics who achieved the Group's consistently outstanding results in the Research Assessment Exercise teach students. The Group's members are small- to medium-sized institutions, and are generally campus-based. They operate on a human and personal scale, maximising student-staff contact and ensuring an adaptable and inter-disciplinary approach to both research and teaching. Students made clear their appreciation for the 1994 Group's distinctive profile in both the 2005 and 2006 National Student Survey, in which the Group far exceeded the general standard of the sector and solidly outperformed all other mission groups.

2.2 The Group provides a central vehicle for member institutions to protect their common interests in the higher education market, to respond quickly and efficiently to key policy issues, and to share best methods and practice for the smoother running of their own institutions. The Group, while working on this collaborative basis, also recognises the need to preserve the distinct character and traditions of each individual member. There is ongoing assessment of how the Group's shared strengths and each member's distinctive elements can be promoted to best meet the diverse needs of students and staff, employers and industry, research councils, government agencies and all other stake-holding groups in the higher education sector.

University of Bath;	Lancaster University;	University of St. Andrews;
Birkbeck College,	University of Leicester;	School of Oriental and African
University of London;	Loughborough University;	Studies (SOAS);
University of Durham;	Queen Mary,	University of Surrey;
University of East Anglia;	University of London;	University of Sussex;
University of Essex;	University of Reading;	University of Warwick;
University of Exeter;	Royal Holloway,	University of York.
Goldsmiths College,	University of London;	
University of London;		

THE MEMBERS OF THE 1994 GROUP ARE:

⁸ This evidence is offered by the 1994 Group in addition to the evidence submitted by Universities UK on behalf of the Higher Education sector.

2.3 The Group has the following shared aims and values:

The Group's main aims are:

- To secure widespread recognition that enables it to influence decision and policy making groups;
- To achieve awareness and profile that underpins the ambitions of member universities in global markets;
- To promote the need for diverse and distributed centres for research and teaching excellence;
- To share good practice that enhances the staff and student experience;
- To provide services that enable members to respond flexibly and rapidly to developing market conditions.

The Group's members are committed to the following shared values:

- Institutional identities and tradition can be respected and aligned with innovative thinking;
- Research intensive universities should play a full role at local, regional, national and international level;
- High quality research and teaching are mutually supportive and should reinforce each other;
- Students and staff from diverse backgrounds should be enabled to maximise their potential in a well-maintained environment that provides a stimulating choice of academic, cultural and social opportunities.

3. THE VALUE OF 1994 GROUP INSTITUTIONS IN A DIVERSE HIGHER EDUCATION SECTOR

3.1 The UK Higher Education system is rapidly diversifying. Welcome changes since 1992 have seen Polytechnics become Universities, joined more recently by the Colleges of Higher Education. The recent announcement by the Government of their intention to award Further Education Colleges the power to award their own Foundation Degrees further increases the diversity and complexity of the system. Within this diverse system, 1994 Group institutions hold a unique position. Members of the 1994 Group are generally campus-based, small to medium-sized institutions. They are highly residential, with a significant proportion of students living in on-campus accommodation. According to HESA data for 2004–05, the average total number of students at 1994 Group universities is 10,000 but ranges from 3,500 at SOAS to 16,000 at Warwick. 1994 Group institutions are on average 50% smaller than Russell Group institutions and 25% smaller than member of the CMU. Within a diverse system, it is sometimes mistakenly assumed that the greater the size the more effective and successful the institution. The 1994 Group strongly opposes such suggestions. The 1994 Group's clear and consistent achievements in research, teaching and the student experience demonstrate that institutional excellence is independent of its size.

3.2 The smaller scale of 1994 Group institutions produces significant benefits. Being smaller allows more interaction between departments and disciplines, with activity operating on a human and personal scale. A certain nimbleness exists within a smaller institution which allows it to adapt to new challenges, and to stay at the cutting-edge of sector developments. Amongst many ambitious development plans currently being followed by 1994 Group members, new campus developments such as the University of Exeter in Cornwall, Essex in Southend, UEA and Essex in Ipswich; Lancaster's ongoing investment of £200 million in new campus facilities; and proposals to double the size of the University of York, are all concrete examples of the progressive drive at the heart of member institutions. In 2004–05, the average 1994 Group institution distributed its total activity across 16 of the 36 academic cost centres as defined by HESA. This concentration avoids spreading resources too thinly, and is a way of ensuring excellence within certain areas, enhancing the focus on quality rather than quantity.

3.3 The development of a strategy for the future of Higher Education must respect the diversity of the sector in terms of mission, size, and ambition of institutions. Sometimes this will mean that difficult decisions will need to be made by the funding councils and the government departments as a result. It should be the role of the Funding Councils and Government to set the framework in which competition takes place. Beyond this, autonomous Higher Education Institutions must have the freedom to find their own positions within the market place.

3.4 The 1994 Group would like to draw the Committee's specific attention to two areas for its detailed consideration: the contribution of the 1994 Group to excellence in research and the importance of the enhancement of the student experience.

4. The 1994 Group's Demonstrable International Excellence in Research

4.1 The 1994 Group represents nineteen of the most research-intensive universities in the UK (see Annex A). According to 2004–05 HESA data, 1994 Group members have a combined total of 190,000 students, research income of £453 million and 18,000 academic staff. On average, in 2004–05, each of the 1994 Group's 15,000 members of research faculty received £30,000 in research grants and contract income. The 1994 Group universities have an international reputation for the quality of their research. Members employ academics at the very top of their fields, whose expertise informs the major decisions of government officials

and policy makers, having a direct impact on the social, economical, cultural, technological, medical and environmental development of the nation and the globe. Within the 1994 Group there are many examples of research centres which are at the fore-front of international excellence and importance. These world-leading research centres often cross academic disciplines, calling on knowledge, innovation and expertise from diverse sections of the university's staff. These centres are closely engaged with industry, government and the public on regional, national and international levels, in order to deliver the most informed, meaningful and cutting-edge research.

4.2 1994 Group universities enjoy the very highest success rates when applying for awards from research councils. According to 2004–05 data released by Research Fortnight, amongst the universities with the ten highest success rates in the UK, there are six 1994 Group members, four of which have success rates of over 40%, and there are nine members in the highest twenty. The Group's average success rate (32%) is significantly higher than the average of the sector (27%) and of the other mission groups.

4.3 The overall strength of the 1994 Group's research performance is clearly demonstrated by the results of the 2001 Research Assessment Exercise in which member institutions received amongst the highest results in the country. 92% of the Group's academic staff selected for assessment received ratings of 4 and above, 65% were rated 5 and above, and 17% received the highest possible rating of 5* (for a league table of the 2001 results see Annex B). These results are even more impressive when it is taken into account that with 85% of all staff submitted for assessment, 1994 Group institutions submitted proportionally more staff than any of the other mission groups.

4.4 The 1994 Group welcomed the outcome of the review of research assessment and funding announced in the Chancellor's Pre-Budget Statement. The Research Assessment Exercise (RAE) has enabled the UK to prove its demonstrable excellence in research in all fields of study. The Chancellor's announcements will enable 1994 Group institutions to continue to enhance their capacity to deliver an excellent student experience and cutting-edge research and innovation.

4.5 The 1994 Group particularly welcomed the Chancellor's confirmation that:

- The 2008 Research Assessment Exercise will take place on the basis previously announced by HEFCE on behalf of the Funding Councils;
- The outcome of RAE 2008 will lead to a rational and stable funding system and that the results of the exercise will inform funding allocations until appropriately robust metrics-driven assessment mechanisms are in place;
- There is a continuing role for higher education institutions and HEFCE in the development and operation of the revised assessment and funding system;
- A revised research assessment exercise will be based on a basket of appropriate and robust measures of research quality, with the greatest weight placed on indicators of research output;
- The basic principles and framework underlying any future system for assessing quality and allocating funding will apply to all disciplines; and
- Government has implicitly restated its commitment to the dual funding of research. This is a key feature is maintaining the dynamics of UK research universities.

4.6 The Group looks forward to working closely with HEFCE over the next year to assist them in the development of the new research assessment system. The RAE has been vital for quality benchmarking and branding, particularly in international markets. It allows reliable comparisons to be made between subject units, institutions and countries. It is essential that this aspect be preserved if the UK is to retain its position as a world leader in higher education research. The 1994 Group is worried, however, that the removal of the simple quality grades in the 2008 RAE has already reduced the effectiveness of the RAE as a tool for international benchmarking. Thought should be given in any future system to the reintroduction of a simple comparative measure at subject (rather than institution) level.

In addition, one of the key strengths of the 2008 RAE is the panels' ability to recognise and reward a department's overall research environment. There is a strong danger that this element will be lost in a metrics-driven system. We believe that the simplest and clearest indicator of the depth in quality of departmental research is the proportion of research-active academic staff that were submitted for assessment. We strongly support the incorporation of this indicator into any new assessment and funding mechanism.

5. The 1994 Group's Demonstrable Excellence in the Delivery of Teaching and the Student Experience

5.1 Higher Education has been undergoing significant changes over the past decade, and no group has been affected more by these changes than students. The new system of variable fees has now been initiated, and, as students are being required to assume more and more financial responsibility, this is undoubtedly affecting the choices they make when they embark on their university life. A variety of factors, not least these financial responsibilities, is changing the lifestyles of students, as well as their expectations and attitudes towards Higher Education.

5.2 The 1994 Group's distinctive strength is within the social sciences, arts and humanities. The Group is characterised in particular by the high distribution of students and expenditure within the HESA Social Studies cost centre, in which according to 2004–05 data there are 18% of the Group's total students. Almost all member institutions have above 10% distribution of their students into Social Studies. Together the social sciences and humanities subject areas account for 59% of student numbers and 45% of expenditure. The Group's very high success rates when applying to the arts and humanities, and economic and social research councils reflects its proficiency in these areas. In addition to this strength, 1994 Group institutions make a very significant contribution towards education and research within medicine, engineering and the sciences.

5.3 In addition to their significant contribution towards to the education of undergraduate students, the 1994 Group has a unique profile in the teaching of postgraduates. According to 2004–05 HESA data, 8% of the Group's total students are engaged in postgraduate research and a further 16% are engaged in postgraduate taught (PGT) programs. Proportionally more PGT students are educated at 1994 Group institutions than any of the other mission groups. The 1994 Group's high provision of PGT courses reflects its joint commitment to teaching and research. It also demonstrates the Group's ability to adapt to the developing marketplace. With so many people now obtaining undergraduate degrees it is becoming increasingly necessary for students to undertake master's degrees in order to set themselves apart in the eyes of prospective employers. The 1994 Group's high distribution of PGT students reflects its willingness to nurture more students to postgraduate level, and its flexibility in light of general sector trends.

5.4 One of the major aspects that distinguishes the 1994 Group from other parts of the sector is the commitment of its members to student experience. The success of this commitment is reflected in the high level of student satisfaction that is evident. It is obviously important to continue to enhance the 1994 Group's growing reputation of delivery in this area. In order for the members of the 1994 Group to deliver the best possible student experience, and to ensure they continue to attract the best students, it is essential for members to appreciate and understand the changes in students' attitudes towards higher education and the expectations they have of the university to which they pay their fees. It is essential that the Group stays ahead of the trends and developments in students' lifestyles and expectations, and capitalises on its existing strengths to maintain its delivery of an excellent student experience.

5.5 With undergraduate students now behaving more like consumers in a market place, it is essential that there is a mechanism by which they can assess the relative qualities of Higher Education institutions and the courses they offer. The National Student Survey offers students the information they require to make such a value judgement. The 1994 Group values highly the feedback and opinions of its students, and so takes the National Student Survey extremely seriously. At the Group's institutions the survey is used as a tool for identifying problem areas and much effort is going into evaluating and improving these in the hope that the student experience can be enhanced in the future. The 1994 Group supports the continuation and further development of the National Student Survey. In addition to the NSS, the 1994 Group is actively looking at the development of further mechanisms that might be used by the sector to measure the experience of all students.

5.6 The results of the first two National Student Surveys clearly demonstrate that the model offered by 1994 Group institutions is appreciated by undergraduate students. In both 2005 and 2006, the 1994 Group emerged as highest performer compared to other mission groups and to the sector as a whole (see Figure 1).

Figure 1

	Assessment and Teaching feedback		Academic support					4verage Score
1994	4.09	3.58	3.84	3.96	4.00	4.01	4.10	3.91
Russell	4.04	3.41	3.80	3.90	4.13	4.00	4.09	3.88
CMU	3.90	3.57	3.68	3.59	3.90	3.96	3.85	3.77
Sector	3.99	3.54	3.77	3.74	3.97	4.00	3.98	3.84

NSS RESULTS 2006

In fact, in 2006, the 1994 Group's average results (see Figure 2) improved, building on the outstanding results received in 2005.

Figure 2

Year	and Academic		Organisation and management	Learning Resources	Personal development so	Overall A atisfaction	Average Score	
2006	4.09	3.58	3.84	3.96	4.00	4.01	4.10	3.91
2005	4.08	3.54	3.80	3.89	3.94	3.96	4.14	3.87
Change	+0.01	+0.04	+0.04	+0.07	+0.06	+0.05	-0.04	+0.04

COMPARISON OF 1994 GROUP PERFORMANCE NSS 2005 AND 2006

The top of the 2006 NSS mainstream universities league table (see Annex C) is dominated by 1994 Group institutions. The top four—St. Andrews, UEA, Leicester and Loughborough—are all 1994 Group members. Birkbeck and Durham join them in the top ten, and the rankings of Exeter, Reading, York and Lancaster mean that there are ten 1994 Group universities in the UK's top eighteen.

Of the 42 subject groupings listed in the 2006 survey, 1994 Group universities received the most student satisfaction in eighteen (see Figure 3 below), compared to six at Russell Group universities and three at CMU universities.

Figure 3

HIGHEST COURSE SATISFACTION NATIONAL STUDENT SURVEY 2006

Medicine & dentistry	St Andrews
Other subjects allied to medicine	Queen Mary
Biology and related sciences	UEA
Psychology	UEA
Physical Science	Loughborough
Physical geography & environmental sciences	Leicester
Mathematical sciences	Leicester
Mathematically based engineering	Loughborough
Technology	Loughborough
Architecture, building and planning	Loughborough
Economics	UEA
Human & social geography	Leicester
Business	Leicester
Management	Exeter
Finance & accounting	Exeter
Communications / information studies	Loughborough
English based studies	Leicester
Other creative arts	UEA

5.7 The 1994 Group's consistently excellent results of the National Student Survey are reflective of a distinct set of common factors and shared values unique to 1994 Group institutions. 1994 Group institutions have a shared sense of community to which a number of factors contribute.

- (i) As 1994 Group institutions are smaller, with close-knit academic communities, there is a more personal and friendly feel for students, which can be less daunting than at a larger university. They operate on a human and personal scale, maximising student-staff contact and ensuring an adaptable and inter-disciplinary approach to both research and teaching.
- (ii) 1994 Group universities are campus-based or single site institutions and all are defined by their physical environment. These purpose-built, self-contained environments give the academic community a 'village' feel. With most facilities contained on the same site and within a short distance of halls of residence, students can go about their university life whilst sheltered from the pressures and problems of the world at large. The close-knit academic environment provided by a campus ensures that the community is active and caring towards the student population.
- (iii) Due to the self-contained environment provided by the campus, this enhances the level of safety and security for students at 1994 Group institutions. Safety is a key consideration for prospective students and their parents whilst they are choosing a university. It is very important for the strategies of member institutions to ensure the highest levels of student safety on campus.
- (iv) A high provision of extra-curricular activity exists at 1994 Group universities, and there is a high level of involvement of students in sports and societies across many different areas. Involvement in sports teams, clubs and societies is an ideal way for students to meet people with similar interests and greatly enhances the overall student experience.

5.8 In addition to this shared community, 1994 Group institutions offer the following shared values that together enhance the student experience:

- (i) 1994 Group institutions offer a unique balance between teaching and research. 1994 Group institutions strongly believe that there is a clear connection between innovative research and the highest quality teaching. The commitment of the 1994 Group to providing effective research-led teaching to its students is demonstrated by the distribution of academic staff by their employment function. On average, 1994 Group institutions employ 56% of their faculty on teaching and research contracts. This compares to only 50% of Russell Group faculty. Importantly, 45% of Russell Group faculty are employed only to undertake research compared to only 32% of 1994 Group faculty. In 1994 Group institutions, the teaching of undergraduate students is still undertaken by researchers achieving the very highest RAE ratings.
- (ii) In the 2006 National Student Survey the 1994 Group received its second highest score in the category, 'Personal Development'. This average score was higher than the national average and all other mission groups. Because of the high level of extra-curricular activity and the inter-disciplinary approach to education, 1994 Group universities produce very well rounded graduates, with a wealth of different experiences and life skills that are applicable and desirable in the workplace. 1994 Group institutions believe that there is more to being a student than simply obtaining a qualification and that there is much more to the role of the university than simply teaching students so they can pass examinations and then leave. The role of the university should largely be to shape and mature individuals and develop their skills and attitudes so that they can leave university ready to contribute to society. Central to this wider objective is a satisfying and fulfilling student experience.
- (iii) The smaller, more close-knit nature of 1994 Group institutions allows a certain community culture amongst their staff and in their governance. In addition, smaller academic departments make it easier to understand specific needs of students, and easier to adapt in order to meet these needs. In the 2006 NSS, students made clear their appreciation of the 1994 Group's style of governance, by giving the group a higher average score in the 'Organisation and Management' category than any other mission group received, and significantly higher than the national average.

5.9 Through the Student Experience Policy Group, and in active partnership with the NUS, as the representative body for all students and a key partner in the provision of student services, and in collaboration with SU General Managers from 1994 Group institutions and other key sector stakeholders, the 1994 Group is engaged in a project to enhance the student experience at member institutions. This project, which is due to be completed in October 2007 will have a number of key outputs, the potentially most exciting of which is a set of common values around the student experience which can be used to brand the Group.

In addition to this, the Strategic Planning & Resources Policy Group, in association with the Association of Commonwealth Universities, is currently engaged in a project to identify ways in which the 1994 Group and UK Higher Education more widely might improve its competitiveness in relation to international recruitment of students and staff to the UK and develop strong and sustainable research and teaching links with international Higher Education institutions.

Being a member of the 1994 Group is already a kite mark of excellence in research and in the delivery of teaching and the student experience. Together these projects will provide concrete evidence with which to highlight to potential students, faculty, employers and other external stakeholders the strengths and ambitions of 1994 Group member institutions.

6. CONCLUSION

The aims and objectives set out by the 1994 Group's Mission Statement are clearly supported by the Group's performance in excellence indicators such as the Research Assessment Exercise and the National Student Survey. The results of these indicators demonstrate the 1994 Group's unique balance between excellence in research and in the delivery of teaching and the student experience at member institutions.

Moreover, the nature of the institutions—their size, distribution of staff and students, and areas of commonality and specialisation—combined with these excellence indicators to provide the Group with a distinctive profile that is desirable for all stakeholders in the rapidly developing market within the higher education sector.

In setting out its vision for the future, the Committee is asked to note the significant value and contribution of the 1994 Group to UK Higher Education.

December 2006

Annex A

				% Research
		Total	Total	Income of total
		teaching	research	Teaching &
		funding	funding	Research Income
	Institution	2006–07	2006–07	2006–07
1	LSE	9,165,589	17,618,947	66%
2	University of Cambridge	60,093,608	99,939,048	62%
3	Imperial College	52,592,967	85,289,434	62%
4	University of Oxford	61,628,278	97,954,380	61%
5	University College London	62,763,416	97,255,530	61%
6	SOAS	6,834,430	6,628,833	49%
7	University of York	23,654,441	22,840,390	49%
8	University of Southampton	48,949,839	45,329,656	48%
9	University of Surrey	21,259,590	17,490,245	45%
10	University of Manchester	90,736,383	73,949,400	45%
11	University of Reading	27,444,845	22,168,445	45%
12	King's College London	68,103,445	54,075,194	44%
13	Royal Holloway, University of London	17,734,980	13,918,752	44%
14	St Andrews University	19,107,000	14,935,000	44%
15	University of Warwick	38,710,941	29,770,637	43%
16	University of Edinburgh	76,803,000	57,486,000	43%
17	University of Sheffield	61,615,767	42,627,101	41%
18	University of Bristol	59,941,846	41,349,701	41%
19	Lancaster University	25,378,483	17,286,865	41%
20	University of Bath	27,482,760	17,608,826	39%
21	University of Sussex	27,689,779	17,441,117	39%
22	Cardiff University	64,293,208	39,936,934	38%
23	University of Durham	38,456,204	23,059,421	37%
24	University of Nottingham	66,040,319	37,350,113	36%
25	University of Birmingham	74,486,013	41,052,981	36%
26	University of Leeds	84,626,107	46,009,872	35%
27	University of East Anglia	29,095,512	15,626,093	35%
28	University of Newcastle upon Tyne	60,038,804	32,125,761	35%
29	Goldsmiths College, University of London	15,678,238	8,235,983	34%
30	University of Glasgow	81,958,000	41,801,000	34%
31	University of Leicester	35,253,210	17,757,013	33%
32	University of Essex	21,353,319	10,481,062	33%
33	University of Liverpool	63,424,819	29,075,119	31%
34	Birkbeck College	21,369,646	9,477,935	31%
35	Queen Mary, University of London	51,089,000	21,727,885	30%
36	University of Dundee	43,175,000	17,861,000	29%
37	Loughborough University	36,997,295	15,155,868	29%
38	Heriot-Watt University	23,975,000	9,767,000	29%
39	University of Exeter	34,683,899	13,599,666	28%
40	Wales, Bangor	22,280,992	8,266,462	27%

INSTITUTIONAL RESEARCH INTENSITY 2006-07

Annex B

2001 RAE LEAGUE TABLE RANKED BASED ON A CALCULATION OF WEIGHTED GRADE ON A 7 POINT SCALE MULTIPLIED BY PROPORTION OF STAFF SUBMITTED

	Institution	% staff submitted	grade x proportion submitted
1	Cambridge	96%	6.46
2	LSE	97%	6.28
3	Oxford	95%	6.24
4	Imperial	87%	5.83
5	Warwick	91%	5.63
6	York	93%	5.54
7	UCL	88%	5.45
8	Southampton	90%	5.40
9	Lancaster	90%	5.40
10	St Andrews	89%	5.30

	Institution	% staff submitted	grade x proportion submitted
11	SOAS	93%	5.29
12	Royal Holloway	89%	5.23
13	Birkbeck	91%	5.21
14	Durham	87%	5.21
15	Bristol	87%	5.19
16	Bath	88%	5.19
	Russell Group	85%	5.17
17	Sussex	91%	5.13
18	Manchester	85%	5.07
19	East Anglia	90%	5.02
	1994 Group	88%	5.01
20	Edinburgh	84%	5.01
21	Nottingham	89%	4.97
22	Cardiff	81%	4.96
23	Goldsmiths	89%	4.86
24	Reading	88%	4.86
25	Essex	79%	4.77
26	Queen Mary	90%	4.72
27	Surrey	81%	4.70
28	King's	80%	4.68
29	Exeter	84%	4.65
30	Liverpool	83%	4.59
31	Sheffield	76%	4.53
32	Leicester	86%	4.51
33	Leeds	77%	4.46
34	Newcastle	78%	4.38
35	Loughborough	78%	4.31
36	Birmingham	73%	4.27
37	The Queen's Belfast	81%	4.27
38	Glasgow	75%	4.25
39	Dundee	75%	4.20
40	Heriot-Watt	83%	4.19

Annex C

LEAGUE TABLE OF UNIVERSITY RESULTS OF THE 2006 NATIONAL STUDENT SURVEY RANKED BY AVERAGE SCORE AND THEN BY OVERALL SATISFACTION ON A 5 POINT SCALE

	Institution	Overall satisfaction	Average Score
1	University of St Andrews	4.4	4.10
2	University of East Anglia	4.3	4.08
2	University of Leicester	4.3	4.08
4	Loughborough University	4.2	4.08
5	University of Wales, Aberystwyth	4.3	4.05
6	University of Hull	4.2	4.00
7	Birkbeck College	4.3	3.98
8	University of Durham	4.2	3.97
8	University of Southampton	4.2	3.97
8	University of Wales, Lampeter	4.2	3.97
11	University of Exeter	4.1	3.97
12	King's College London	4.2	3.95
13	University of Reading	4.1	3.95
13	University of Wales, Bangor	4.1	3.95
15	University of York	4.1	3.93
15	University of Glasgow	4.1	3.93
17	University of Kent	4.1	3.92
17	Lancaster University	4.1	3.92
19	University of Huddersfield	4.0	3.92
19	University of Teesside	4.0	3.92
21	University of Wales, Newport	3.9	3.92
22	Imperial College	4.2	3.90
23	University of Wales Swansea	4.1	3.90
24	University of Bradford	4.0	3.90
25	Staffordshire University	3.9	3.90

	Institution	Overall satisfaction	Average Score
26	Aston University	4.1	3.88
26	University of Chichester	4.1	3.88
26	Queen's University Belfast	4.1	3.88
29 29	University of Bristol University of Liverpool	4.1 4.1	3.87 3.87
29 29	Cardiff University	4.1	3.87
32	University of Bolton	4.0	3.87
32	University of Newcastle	4.0	3.87
32	Oxford Brookes University	4.0	3.87
35	Canterbury Christ Church	4.1	3.85
35	University of Sheffield	4.1	3.85
37	City University, London	4.0	3.85
37	University of Leeds	4.0	3.85
37	University of Northampton	4.0	3.85
37 37	University of Winchester University of Glamorgan	$\begin{array}{c} 4.0\\ 4.0\end{array}$	3.85 3.85
41	University of Essex	4.0	3.83
41	Goldsmiths College	4.0	3.83
41	University of Plymouth	4.0	3.83
41	University of Edinburgh	4.0	3.83
41	University of Ulster	4.0	3.83
47	University of Brighton	3.9	3.83
47	University of Central Lancashire	3.9	3.83
47	University of Derby	3.9	3.83
47	Edge Hill University	3.9	3.83
47	University of Gloucestershire	3.9	3.83
52 52	University of Chester	4.0	3.82
52 52	Coventry University University of Nottingham	$\begin{array}{c} 4.0\\ 4.0\end{array}$	3.82 3.82
52 52	Queen Mary, University of London	4.0	3.82
56	UWIC	3.9	3.82
57	University of Worcester	4.0	3.80
58	Northumbria University	3.9	3.80
58	University of Portsmouth	3.9	3.80
60	University of Bath	4.0	3.78
60	Keele University	4.0	3.78
62	UCE	3.9	3.78
63	University of Sunderland	3.8	3.78
64	SOAS	4.0	3.77
65 66	University of West of England University of Bedfordshire	3.9 3.8	3.77 3.77
66	University of Hertfordshire	3.8	3.77
68	Roehampton University	4.0	3.75
69	Kingston University	3.9	3.75
70	Manchester Metropolitan University	3.8	3.75
70	University of Salford	3.8	3.75
70	University of Surrey	3.8	3.75
73	Southampton Solent University	3.7	3.75
73	University of Wolverhampton	3.7	3.75
75	Anglia Ruskin University	3.8	3.73
76	Bournemouth University	3.7	3.73
77 78	Bath Spa University	3.9	3.70
78 78	Nottingham Trent University Sheffield Hallam University	3.8 3.8	3.70 3.70
80	De Montfort University	3.7	3.70
80	Leeds Metropolitan University	3.7	3.70
82	Middlesex University	3.7	3.68
83	University of Sussex	3.8	3.67
84	University of Greenwich	3.7	3.67
85	Liverpool Hope University	3.9	3.65
86	Brunel University	3.8	3.65
87	University of Lincoln	3.6	3.63
88	University of Westminster	3.8	3.60
89	Thames Valley University	3.6	3.60

Memorandum submitted by Amicus

Amicus is the UK's second largest trade union with 1.2 million members across the private and public sectors. Our members work in a range of industries including manufacturing, financial services, print, media, construction and not for profit sectors, local government, education and the NHS.

Amicus is one of the biggest trade unions in the sector with 15,000 members working in Higher Education institutions. Amicus has a keen interest in any proposed changes, new initiatives or improvement strategies that could affect the education sector. Amicus welcomes the chance to respond to this consultation and would be willing to make further written and verbal submissions about any of the issues raised.

EXECUTIVE SUMMARY

- i. Higher education needs to balance the overall needs of UK society and economy with the broad needs of students for a rounded empowering and enjoyable educational experience.
- ii. Higher education should be expanded and more focus should be put on developing the skills and research needed for the knowledge economy.
- iii. Higher education needs to be better linked with schools, further education courses and employers in order to meet the demand needs of the economy.
- iv. Degree programmes should offer genuine benefits to the student. Vocational qualifications such as foundation degrees should enable students to access broader higher education courses if they so wish.
- v. More work needs to be done to remove the significant barriers to access in Higher Education. This must include greater links with schools and more emphasis on life long learning, part-time course and distance learning.
- vi. Amicus applauds the recent increased investment into higher education and hopes that this trend will continue in order to bring staff salaries and terms in line with other sector comparators. This will also include greater investment in technical skills.
- vii. The funding system for universities needs to be more transparent and accountable.
- viii. Amicus is opposed to the commercialisation of Higher Education and believes that education is a social right not a commodity. Variable tuition fees and the market in education are damaging student access and eroding national bargaining. Amicus opposes the removal of the £3,000 cap and calls for the renewal of the statutory bursaries.
- ix. Employers need to do more to fund participation in the skills training and HE qualifications that they require including providing bursaries.

THE AMICUS CASE IN DETAIL

1. The role of universities

Amicus believes that education is a human right and that the university system is a public service integral to developments in British society, culture and the economy. UNESCO describes "the core missions and values of higher education", as "to contribute to the sustainable development and improvement of society as a whole . . . educate highly qualified graduates and responsible citizens able to meet the needs of all sectors of human activity . . . to provide opportunities for higher learning and for learning throughout life . . . to educate for citizenship and for active participation in society . . . advance, create and disseminate knowledge, help understand, interpret, preserve, enhance, promote and disseminate national and regional, international and historic cultures . . . and help protect and enhance societal values".⁹ Amicus fully supports this position and calls on the Government to promote Higher Education in this light.

2. Economy and skills

Amicus supports the Government's aim to produce highly skilled workers, value added workplaces and increased investment in research and development. A highly skilled workforce requires an effective higher education system. Universities and higher education are crucial to the future economic achievements and stability of the UK. As both the Organisation for Economic Co-operation and Development (OECD) and the recent Leitch review have recognised, for the British economy to maintain its global position the UK will need to heavily invest in the skills of its population. The OECD figures show that the UK had gone from having the second highest graduation rates for tertiary-type A programmes in 2000 to ninth in 2004 with other countries predicted to over take soon.¹⁰ The Leitch review clearly recognises that "as the global economy changes, an economy's prosperity will be driven increasingly by its skills base."¹¹ With countries such as China, India and Brazil set to massively increase their skills base and economic strength over the next decade Britain will have to offer some added value if it hopes to compete.

⁹ "World Declaration on Higher Education for the Twenty-First Century: Vision and Action" adopted by the World Conference on Higher Education, 9 October 1998.

¹⁰ The economic impact of UK higher education institutions, Universities UK, May 2006.

¹¹ Prosperity for all in the global economy-world class skills, Final Report, December 2006, Lord Leitch Review.

3. Sector strategy

The sector needs a much clearer strategy. If HE is to be of maximum benefit to the learner, employers, local communities and the economy as a whole then universities must be more strategic in the courses that they offer. They should be providing the right courses at the right time in the right places so that students gain qualifications that will offer them the greatest benefit and increase national productivity.

4. Links with employers

Amicus supports many of the aims of the Leitch review including more demand led courses, increases in funding in HE and the aim to bring many more people into the UK up to Level 4 and above skills. Amicus is concerned that these proposals may not receive the adequate commitments or infrastructure needed to be put into practice. To this end the HE sector needs to be better linked to employers in all sectors to promote and fund the skills that they need and government needs to take an active role in promoting courses and research in areas vital to sustainability of this country. Skills Academies could provide a useful conduit for this link although Amicus would stress that trade unions need to be much more integrated in the skills academy structures and consulted on all proposals. This does not mean that the diversity of the sector is to be rigidly curtailed. The Government's role is to create a strategy that reflects the interests of all stakeholders in society not just those with access to money.

5. Science and technology

In particular Amicus is concerned that there are substantial blockages in the supply of scientific and technically skilled applicants to university courses. The OECD rankings for upper secondary educational attainment in the population, place the United Kingdom "13th position among 55-to- 64-year-olds in the 30 OECD countries (ie those who completed school some 40 years ago) but only the 23rd position among 25-to-34-year-olds, who completed school a decade ago."¹² It also predicted significant improvements in countries like Korea who are now world leaders among 25–34 year-olds. The UK's standing in upper secondary education is leading to skills shortages in the British economy and will have potentially serious knock on effects if not addressed soon. We are already seeing high profile closures of scientific departments such as Reading's physics department, due to lack of applicants and funds. The Government must make it a priority to improve the take up of scientific, maths and engineering courses at schools and further education in order to improve the numbers going on to university. It also needs to encourage the development of specialist science based courses in conjunction with sector skills councils and trade unions to boost the specific skills needed for certain industrial sectors.

6. Broad education

Amicus believes that the education system should provide a broad range of skills including generic skills like communications, team working and problem solving. There should be opportunities for a student to diversify in to more than one subject as is common in the USA and other OECD countries. Amicus also supports the exploration of political and ethical dimensions to all subjects to allow for more empowered career choices and encourage more active citizenship. This is especially true for more vocational courses like foundation degrees and higher national diplomas (HNDs). These courses need to be seen as useful gateway to skills and employment as well as opportunities in broader higher education. Foundation degrees need to be come better integrated into the whole higher education system rather than corralling students down specific career paths.

7. Societal role

Amicus believes that universities should offer a more outward looking service. Universities have often been characterised as insular elite organisations or more recently as commodity providers to benefit the individual on the labour market. Universities should be more fundamentally imbedded in society offering and actively promoting opportunities for all citizens to participate in education. They should play a more central role in promoting cultural awareness, diverse perspectives, critical thinking and debate. Education should be promoted as something that carries a social responsibility to be shared rather than an asset to gain advantage in the labour market.

8. Access

One important way to do this should be through expansion of access. Amicus is strongly committed to Article 26 in the United Nations Universal Declaration of Human Rights that declares that "Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit."¹³ There are still major barriers to merit based access to education in the UK. Research by the Higher Education Funding Council for England (HEFCE) suggests that over 50% of people from affluent backgrounds go to university while in some poorer areas it is less than 10%. This inequality is compounded by non-completion rates.¹⁴ HEFCE also reports that these trends are contradicted in parts of Scotland where the use of alternative paths such as HNDs are more common and tuition fees do not apply. This suggests that these statistics can be improved upon. We are yet to see the long term effects of the implementation of variable top-up fees however Amicus continues to be concerned by the possible impacts of debt and variable costs on access. Amicus urges more work to be done to remove these barriers to education.

9. Life long and flexible learning

Access means access to education at whatever stage in life you are in. The Government should do more to integrate HE into systems of life-long learning and distance learning. This may mean traditional systems of elite learning could be supplemented with more empowering techniques of collaborative learning, popular education and the use of technology to reach more people. Trade Unions should play an important role in this process and Amicus believes that the role of union learning representatives should be expanded to strengthen access to learning through the workplace. There should also be a greater commitment from employers to grant flexible working rights, sabbaticals and paid release to employees that wish to study.

10. Earnings

Access to higher education continues to have important social economic implications to those who benefit. The OECD estimates that "in the United Kingdom, earnings for tertiary graduates are 58% higher on average than those for people with only secondary education, a differential that is higher in only five other countries."¹⁵ If the Government is aiming to target relative poverty in the UK access to higher education is an important place to start.

11. Bursaries

Amicus is in favour of the creation of statutory bursaries for students. Some employers already make contributions toward bursaries or other educational support to employees who seek to obtain degrees or other qualifications. Amicus believes that this needs to be rolled out much further, especially due to the Government's continued commitment to university fees.

12. Grants

Statutory bursaries should be covered by legislation, either by compelling those employers who do not make any contribution to individuals to do so or by specific government grants to people seeking qualifications that will enhance the skill and knowledge base of UK and the country as a whole. Employers could also offer incentives such as paying off student loans.

13. Incentives

This should not be limited to those who work for large companies with access to capital but facilities should be made available to those who wish to work on social goods in both the public and not for profit sectors. The Government should continue to offer incentives such as cancelling student loans and "golden hellos" to those people who commit themselves to vital services such as doctors, nurses and teachers, while also maintaining opportunities for all in arts and other culturally important subjects.

14. University funding

Good public services should be valued and need to be properly funded. Universities currently generate £45 billion of output a year—making them a larger part of the economy than either the UK pharmaceutical industry or the aircraft industry. They employ 1.2% of the UK's workforce.¹⁶ For a service to be valued it needs to value both users and the dedicated staff that deliver the service. The OECD highlighted that

¹³ http://www.un.org/Overview/rights.html United Nations, Universal Declaration of Human Rights December 1948.

¹⁴ Young participation in higher education, HEFCE, January 2005–03.

¹⁵ OECD Briefing Note for the United Kingdom-Education at a Glance 2006, September 2006.

¹⁶ The economic impact of UK higher education institutions, Universities UK, May 2006.

although the UK has made significant increases to higher education funding it still suffers from historic underinvestment. The UK invests 1.1% of GDP in higher education compared to 2.9% in the USA and 2.6% in South Korea.¹⁷ In this light the UK Government's commitment to continue increasing university budgets is extremely welcome.

15. Staff

For growth in higher education provision to be sustainable plans must include improvements to staff terms and recruitment. HEFCE predicts that "if the increase in student numbers meets the DfES' target, all else remaining equal, the wage bill in 2011 will need to be around 20% higher than in 2003–04, and this is before any adjustment for cost of living increases or implementation of the new pay framework."¹⁸ Amicus estimates that considerably more money is needed to reverse a 30% decline in higher education staff salaries and bring it in line with comparators in other sectors. For example technicians in the aerospace sector earn a minimum of about £21,000¹⁹ whereas some starting salaries in higher education are around £12,000.²⁰ The same is also true in the public sector as HEFCE reports that "in general, pay awards in health and education have been higher than those in HE in recent years."²¹ Amicus members have made it clear that other benefits such as a thirty-five hour week could also improve recruitment into the sector.

16. Higher education market

Amicus is opposed to the commercialisation of higher education and supports the view of the European University Association (EUA) that: "higher education exists to serve the public interest and is not a 'commodity'."²² In this light Amicus continues to oppose the creation of tuition fees and the removal of the cap on variable top-up fees or any other increases in real terms of student tuition fees. The fees system and the lifting of the £3,000 cap in the 2008 review will cause a further extension of the market in education that will discourage students from poorer families from studying at more expensive universities and force more to live at home while they study.

17. Impact of the market on terms and conditions

The market in education is having a detrimental effect on working conditions in the sector as the differing budgets are eroding national bargaining and leading to departmental closures. The increasing reliance on industry funding and proposals to limit funding to Research Assessment Exercise (RAE) grade 5 and 5* departments pose a substantial risk to continuity and diversity in Higher Education. As a consequence the sector is seeing increases of short-term contracts, a narrowing of the teaching spectrum and a loss of positions and skills in under-funded areas. Amicus believes that a more responsible and long-term view of education is necessary to secure high standards and good working conditions in the sector for the future.

18. Sector skills loss

Another major concern is the rapidly accelerating skills loss amongst technicians in the sector and the use of PhD students and post doctorates to cover the technical jobs on the cheap. The average age of HE technicians is now over 40 and 30% are over 50.²³ Amicus believes that there should be a national training programme for this valuable group and that the use of PhD students and post doctorates is a waste of universities research resources.

19. Bureaucracy

Amicus believes that much of the bureaucracy in higher education funding needs to be streamlined. There are too many funding bodies and quangos involved in the sector. Amicus thinks that the whole system needs to be made more transparent and accountable. For example the Reward and Development Staff Initiative (RSDI) needs to be made more transparent and easily accessible so staff can verify where funding has been distributed and how it has been spent. Amicus members have highlighted concerns that RSDI funding at some HEI's never reached the intended staff recipient groups. Amicus therefore believes that funding councils should require stricter funding and accounting regimes.

¹⁸ The higher education workforce in England—A framework for the future, HEFCE 2006.

¹⁷ The prosperity of English universities: income growth and the prospects for new investment HEPI, September 2006.

¹⁹ Amicus Aerospace pay survey.

²⁰ Pay in the public services 2006, Incomes Data Services.

²¹ The higher education workforce in England—A framework for the future, HEFCE 2006.

²² "Joint Declaration on Higher Education and the General Agreement on Trade in Services", signed by European University Association (EUA) and various North American bodies.

²³ Staff employed at HEFCE funded HEIs, HEFCE Report 2005.

20. International cooperation

Amicus is in favour of the opening up of UK universities to greater international exchange and is broadly in favour of the projects such as the Bologna Process.²⁴ UK students do not take enough advantage of international study and Amicus suggests that more emphasis needs to be put on language skills to promote this. An international education deepens international understanding and facilitates the transfer of innovative ideas from other parts of the world to the UK.

21. International market

Having said this Amicus is bitterly opposed to the creation of a competitive market in higher education under World Trade Organisation or European Union rules. Amicus members would resist any attempts to reintroduce the sector under the General Agreement of Trade in Services (GATS)²⁵ or the Balkenstein directive.²⁶ International higher education provision should be based on principles of cooperation not competition.

December 2006

Memorandum submitted by the Association of the British Pharmaceutical Industry (ABPI)

The Association of the British Pharmaceutical Industry (ABPI), the trade association for the pharmaceutical and biopharmaceutical industry in the UK, welcomes the Education and Skills Select Committee Inquiry into the future sustainability of the higher education sector.

Pharmaceutical companies employ 73,000 people directly and invest around £9 million every day in the UK, amounting to 25% of all private sector R&D investment. This figure is substantially greater than pharmaceutical company investments in any other European country. The pharmaceutical sector is also a significant supporter of academic research, hosting over 650 PhD students in laboratories and funding over 300 separate collaborative research projects. This equates to funding over £70 million on collaborative research (excluding contract and clinical research) and provides access to new compounds, technologies and resources students and universities would not otherwise have. However research carried out by ABPI amongst its member companies indicates that, in the last two years, the numbers of both studentships and grants supported in the UK have decreased; the latter by nearly 25%. The reasons for this include the move towards full economic costing in UK universities, and the high quality of research in countries such as India and China.

The chemical and biological sciences are core disciplines in drug discovery and development. A number of research based pharmaceutical companies have major facilities in the UK in order to interact with the excellent academic research base and to recruit well trained graduates, postgraduates and post docs from its Higher Education Institutions.

Over the last fifteen years there has been a fundamental shift in the sector—mergers and organic growth have led to truly multi-national companies that invest in R&D and manufacturing on a global basis. Today there are no global R&D headquarters for any of the major companies in the UK.

The creation of a strong emerging biopharmaceutical sector in the UK and the strength of the contract research sector have created a hotbed of new companies and technologies. Yet these companies also operate on a global stage. The Government can no longer assume even those companies with shares listed in the UK, or emerging biotechnology enterprises, will continue to invest here—it is up to Government to sustain and enhance a competitive environment for pharmaceutical R&D.

Four factors are critical to the success of the UK in retaining R&D investment: access to skills and knowledge; a good regulatory climate; competitive cost base for collaborative research and a market that supports innovation. Unless the UK is able to sustain and improve the environment in relation to these four issues it is difficult to see how the Government vision of a science and innovation-led economy can be realised.

²⁴ "Amicus response to the Education and Skills Committee consultation on the Bologna Process initiative in Higher Education," December 2006

²⁵ World Trade Organisation website: http://www.wto.org/

²⁶ European commission website: http://ec.europa.eu/internal market/services/index en.htm

Key Points

Higher Education must be aligned to the strategic needs of the UK.

- Enhancing excellence in teaching and learning is vital, but may not be compatible with an intake comprising 50% of young people and a sustainable higher education system. High quality teaching for undergraduate science degrees must be maintained. A pool of quality science talent should be created not just to enter industry, but to sustain academe and provide the science teachers who can encourage pupils to pursue science in Higher Education.
- Further enhancing the internationally-competitive research capacity is a worthwhile goal; however it should be noted that University science departments with world class research teams do not always produce graduates with the skills industry needs, or high numbers of graduates who wish to pursue a career in science. Industry is most likely to value the skills and knowledge developed during a four year MChem/MSci "sandwich" course.
- Companies which support collaborative research with universities are interested in collaborating
 with departments that deliver quality science and show evidence of a leadership position in the field
 of interest. These are not necessarily those with the highest RAE ratings.
- The contribution of Higher Education to the economy and society needs a clear steer from Government. ABPI members are finding it increasingly difficult to source certain types of graduates and skills within the UK—especially those with good quality chemistry degrees and in vivo pharmacologists. Many graduates have not had the opportunity to develop the excellent basic practical skills that industry seeks and may not have studied a single subject in depth, but instead have taken a science course in which the science has been diluted by study of other subjects.

Subjects of strategic importance to the UK economy must be supported more generously.

— Whilst the recent focus on, and Government support for the physical sciences, particularly chemistry, are welcomed, we have equal concern over the state of core biological science provision in the UK. Whilst the top level HESA statistics show biological science undergraduate numbers to be increasing, this is due to substantial increases in the number of students studying psychology and sports science; those studying the core biological subjects are decreasing or increasing only marginally, as Table 1 shows.

Table 1

SUBJECT OF HE QUALIFICATIONS OBTAINED 2000–01 TO 2004–05–TOTAL NUMBER OF FIRST DEGREES

	2000–01	2001–02	2002–03	2003–04	2004–05
Biological sciences (total)	18,890	18,495	23,725	25,955	27,200
Broadly based programmes					
within biological sciences	680	520	240	230	200
Biology	4,405	3,915	4,430	4,485	4,585
Botany	85	80	55	80	60
Zoology	890	910	825	895	895
Genetics	500	510	575	580	550
Microbiology	610	610	850	800	820
Sports science			3,745	4,975	5,630
Molecular biology, biophysics,				-	-
biochemistry	1,910	1,905	1,960	1,785	1,830
Psychology	6,000	6,085	8,900	10,405	11,435
Others in biological sciences	3,810	3,965	2,145	1,725	1,195

Source: HESA. Information taken from table 13 (2000–01 and 2001–02) and table 13a (2002–03 onwards) of "Students in Higher Education Institutions" statistics.

- Changes made by HEFCE to subject weightings in 2004 have made laboratory based courses of importance to the economy, less viable. The reduction in the qualifier for laboratory based courses, from its previous level of 2 to 1.7, has resulted in the increase in funding for these courses being much less than that for clinical and lecture based courses. It is vital that universities are funded to invest in high quality facilities and provide incentives, such as tuition fee waivers and bursaries, to attract students onto these courses. The future productivity of the UK depends on an increase in practical science and technical skills and increased numeracy.
- Regional provision of strategically important subjects is likely to become even more important as
 increased tuition fees impact on the number of students who can afford to study away from home.
- An overall strategic plan for support of teaching and research in the UK is required

Many of the points made above are expanded in our November 2005 report, *Sustaining the Skills Pipeline* in the pharmaceutical and biopharmaceutical industries.

December 2006

Memorandum submitted by the Association of Colleges (AoC)

INTRODUCTION

1. AoC (Association of Colleges) is the representative body for colleges of further education, including general FE colleges, sixth form colleges and specialist colleges in England, Wales (through our association with fforwm) and Northern Ireland (through our association with ANIC). AoC was established in 1996 by the colleges themselves to provide a voice for further education at national and regional levels. Some 98% of the 425 general FE colleges, sixth form colleges and specialist colleges in the three countries are in membership. These colleges are the largest providers of post-16 general and vocational education and training in the UK. They serve over 4 million of the 6 million learners participating in post-statutory education and training, offering lifelong learning opportunities for school leavers and adults over a vast range of academic and vocational qualifications. Levels of study range from the basic skills needed to remedy disadvantage, through to professional qualifications and higher education degrees. 96% of colleges were judged satisfactory or better by Ofsted in 2004–5 for their overall effectiveness and the LSC's Learner Satisfaction Survey showed that 90% of learners were at least satisfied with their teaching experience at college.

2. This submission will be presented under the three broad headings of the terms of reference of the inquiry:

- The role of universities over the next 5–10 years.
- University funding.
- The structure of the HE sector.

This will be related specifically to the role of higher education which is provided in the further education sector.

THE ROLE OF FURTHER EDUCATION COLLEGES IN RELATION TO HIGHER EDUCATION

3. Further education colleges' functions in relation to HE are twofold:

- They provide 44% of all entrants to HE, both full and part-time undergraduates in universities and FE colleges.
- 14% of all HE learners study in FE colleges—some 200,000 in total.

4. Traditional HE is well respected and well established. However AoC would argue that there is a distinctive role for FE contributing to the HE arena through the development of level 4 and 5 programmes of study linked closely to local employer need and demand. This would require greater flexibility in the system, with colleges being given more freedom to respond to employer and individual demand. We could see this linked with an incremental approach to learning, with a blurring between stages of education, and an expansion of a unit based approach that would allow for part-time, staged, or highly intensive learning, consistent with employment or other family or social responsibilities.

5. AoC see the next few months as critical in exploring how FE's contribution can be seen as contributing to a broader spread of HE choice and not as a potential threat to existing HE provision.

6. The targets for participation in HE leads us to believe that there is the need to attract the untapped market of young people and adults that would not naturally aspire to higher level education; these groups may already be engaged with FE, which is well placed to take them forward.

FOUNDATION DEGREES—PROPOSALS IN THE FURTHER EDUCATION AND TRAINING BILL

7. This paper is written in the wake of the Government's Further Education and Training Bill which, through Clause 19, proposes that the Privy Council be able bestow the power to award foundation degrees on further education colleges. This would remove the current requirement for colleges to validate their foundation degrees only via a university. AoC warmly welcomes this proposal and see it as a valuable opportunity to expand the numbers of young people and adults to further develop the distinctive employer focused and locally driven foundation degrees.

8. The current validation arrangements do not always give the sufficient flexibility that the market requires. It is AoC's belief that most colleges expect to continue their successful relationships with universities in delivering foundation degrees and, as a result, few colleges will wish to apply for Foundation Degree awarding powers.

9. However, the fact that colleges will have the opportunity of an alternative validation route, which has been through the stringent Privy Council and QAA procedures, can only be viewed as a positive development and help them meet the needs of employers and learners. Colleges look forward to continuing their work with local employers and SSCs directly to address the skills challenge facing the UK.

RANGE OF PROVISION

10. The majority of HE provision in FE colleges is funded by HEFCE and the remainder by the Learning and Skills Council. Of the HEFCE funded provision in FE:

- 63% of students are on sub-degree programmes (HNC/HND/Foundation Degree);
- 30% of students are on degree programmes; and
- 7% of students are on post-graduate programmes.

11. The most popular HEFCE funded programmes are business and management studies, education, creative arts and design, architecture, computer science and engineering. The LSC funded provision includes higher level vocational qualifications including NVQs and qualifications awarded or recognised by professional bodies.

12. AoC would welcome the opportunity for the sector to tailor provision to local skills demands, in effect a widening of the purpose of HE, based on our educational objectives of including, at Levels 4 and 5 more, economically and socially directed learning.

13. Care must be taken that local, FE based HE provision is neither rationed nor controlled disproportionately, for example through the allocation of places through HE institutions. There must be no privileging of the traditional academic route over the new employer related route. Both are equally important in addressing the economic competitiveness of the UK.

DISTINCTIVENESS OF PROVISION OF HE IN FE

14. FE excels at vocationally oriented, skills based, learner centred provision. It is renowned for its rapid response to employer needs, using flexible delivery models, unitised chunks of learning, delivered locally in a variety of settings. The design of FE in HE accommodates modern lifestyle expectations, allowing learners to juggle family and work commitments which is essential if the drive to up-skill the current workforce is to be a success.

15. AoC welcomes the recognition of FE colleges' place and contribution to the Skills Agenda. Colleges are responding by re-defining their mission and aligning their offer to perceived need. However, to be self-sustaining there needs to be greater emphasis on the new curriculum and institutions need to be freed to design and customise qualifications, as recommended by Lord Leitch.

QUALITY OF PROVISION

16. A Quality Assurance Agency three-year review showed that 90% of programmes in FE colleges received "confidence" judgements in respect of academic standards, and 99% received "commendable" or "approved" judgements in respect of the quality of learning opportunities (HEFCE Review 2005).

17. Given this evidence, care must be taken to dispel myths about HE learning in FE being second rate, nor ought there to be a hierarchy of HE providers that assumes dominance of academic over applied learning.

18. AoC welcomes the recognition of the quality of HE in FE colleges that the development of Centres for HE Excellence will bring, as well as their remit for supporting and disseminating good practice throughout the sector. However, it is AoC's view that there needs to be provision for the specialised, niche level 4 or 5 provision currently offered by some FE colleges, and that excellence should not necessarily be dictated by volume of provision alone.

DISTINCTIVENESS OF LEARNER

19. FE is characterised by expertise with distinctive learners and has a track record of widening participation. It offers a range of programmes from levels 1–5 developed for learners in the workplace, characterised by flexibility, support systems and learning environments (including on-line) which suit both traditional, non-traditional and the employed learner.

- 49% of learners are part-time compared to 37% in HEIs.
- 25% of first year undergraduates in FECs are from areas with low rates of participation compared to 19% in HEIs.
- 48% are 25 + compared to 37% in HEIs.
- 50% are male compared to 42% in HEIs (HEFCE Review 2005).

20. However, more needs to be done. The numbers of HE in FE learners are static or falling. Greater awareness of the needs of part-time learners needs to influence the mode of delivery of HE. Advice and guidance needs to have a higher profile, be impartial and fit for purpose. And, with 70% of the population who need up-skilling already in work, FE needs to be empowered and funded to exploit its existing excellent employer links to stimulate demand.

FUNDING OF HE IN FE

21. FE colleges in England which provide HE operate at a funding and institutional boundary as there is no single organisation where this provision is their core focus.

22. The majority of provision is funded by HEFCE in one of three ways: either directly, indirectly through an HEI, or via a consortium of HE institutions and FE colleges. The remainder (non-prescribed) is funded by the LSC—at a lower rate than prescribed HE.

23. AoC would like to see agreed criteria for the extension of directly funded HE in colleges to increase their autonomy and release them from the legal, regulatory and financial burdens associated with indirect funding.

24. In addition, whilst there are some examples where indirect funding arrangements are working well there are others where this is not the case. AoC would like to see transparent and equitable arrangements for indirectly funded higher education regulated by HEFCE that enables colleges to plan long term.

25. The distinction between prescribed and non-prescribed HE is an anomaly which disadvantages one form of provision over another, and creates a burden for colleges. It is likely that new employer led provision will be at this HEFCE/LSC funding boundary and AoC would like one organisation to take responsibility for funding all HE and ending the anomaly of differently funded prescribed and non-prescribed HE.

26. HEFCE's formula capital allowances are driven by student numbers and consequently, because the majority of FE colleges have less than 500 HE students, they do not provide sufficient funds for the majority of FE colleges to develop their infrastructure for HE provision. AoC would welcome access to capital funding to build the infrastructure for HE in FE.

27. The LSC's strategy for HE recognises that "in delivering the platform of skills and employability at Levels 2 and 3, we must also invest in building the ladder of progression and higher level skills we will need for the future" (LSC Strategy for HE May 2006). However, the concentration on lower levels has led to cuts in adult funding which has caused a black hole of now unfunded provision which previously provided a bridge to HE for adult learners. AoC would like to see recognition of the fact that adults need a means by which to approach higher education courses and that the steep rise in fees has depressed the market of available courses and has led to a loss of provision.

28. There is currently great disparity in the charging of fees for HE. Of the one hundred colleges directly funded by HEFCE, forty-five charge top-up fees and fifty five do not. The situation with regard to indirectly funded colleges is more varied although exact figures are not known. AoC would like to see more clarity in relation to fees with parity between part-time and full-time learners in respect of fees and financial support.

29. It is AoC's view that HEFCE's current funding system is too inflexible, and that the current ways in which funding is allocated preserve existing patterns of provision by guaranteeing institutions 100% of the previous year's allocation. This results in a system where existing modes of study predominate, where choice for students cannot expand, and which consequently fails the widening participation agenda. The impact of these policies on colleges is to freeze them in relatively low volumes of HE, particularly where the college is dependent on a partner university to provide indirect funding.

30. AoC believes that there are strong grounds for moving towards funding based on the basis of credit, in order to encourage institutions to offer more flexible modes of study. HEFCE's current funding approach is punitive in its treatment of retention and partial completion. This discourages universities and colleges from offering alternatives to full-time three year degrees which, in turn, restricts choice for adult learners in higher education. AoC welcomes HEFCE's plans to base funding on awarded credits, although our preference would be for funding to be based on completed credits rather than awards but we believe that HEFCE's proposal is better than the current system.

31. Funding should be available to colleges for HE Certificates and small credit based HE programmes on the same basis as is available to HE institutions too enable them to better meet the needs of employers.

THE STRUCTURE OF HE IN FE

32. The interface between FE and HE is insufficiently developed in England in comparison with other countries, notably Germany and the US, and yet this is where growth is required. AoC welcomes the joint LSC/HEFCE strategy for implementing the FE White Paper and for employer engagement, but more work is needed to break down age stage barriers.

33. Currently HE in FE has too many masters: the LSC is responsible for FE colleges as institutions but not for most of their HE provision, only that which is non-prescribed.

34. It is subject to two quality assurance regimes: the bulk is reviewed by the QAA, while the non-prescribed is subject to inspection by Ofsted. AoC welcomes the move towards self regulation which should provide greater alignment.

35. AoC's vision is however for further streamlining within a single Quality Assurance framework and a positive move towards this is the implementation of IQER (the proposed new QAA method of Integrated Quality Enhancement and Review). This uses verifiers and takes a holistic approach to quality assurance and should produce outcomes that provide a basis for comparison of HE wherever delivered. The longer term goal would be to find a way of subsuming the different quality assurance arrangements required by different agencies into a single overarching framework that allows data and evidence collected once to be used many times.

36. Data is currently collected in different formats, by a range of agencies. If FE is to play a greater role in delivering advanced education and training AoC believes more needs to be done to explore how data collection systems might be aligned, avoiding duplications.

37. A wide range of organisational and management arrangements for HE exist in FE colleges. These differ in relation to the extent of the HE provision, and the nature of the funding relationships. Many colleges have a mixture of funding types and are sometimes in partnership with a number of HE institutions, with different quality assurance regimes. AoC believes that to in order to be self-sustaining, far greater alignment of processes is necessary, leading to reduced bureaucracy.

CHANGING THE COHORT OF LEARNERS

38. The declining supply of new entrants to the workforce post 2011 and the demographic peak in the number of young people emphasises the urgency in up-skilling and retraining our current adult workforce. Consequently there is general recognition of the need to shift the balance within HE away from young, full-time, campus-based students developing and maturing as they prepare for entry to employment, towards vocationally focused older learners. Such learners will be increasingly employment based; juggling work, home life and study; seeking to acquire skills and knowledge as a route not to personal development, but to better perform their working roles and enhance their career opportunities.

39. In this changing landscape, higher level learning will no longer be predominantly linear. More learning will take place over an extended timescale with individuals moving in and out of learning, and with learners moving around the same level, or moving between levels as needs dictate.

40. AoC is working proactively within Lifelong Learning Networks to secure well-founded progression routes to HE and employment. These networks combine the strengths of a number of diverse providers, and enable learners to move between different kinds of vocational and academic programmes, and between institutions, as their interest, needs and abilities develop.

DEVELOPING NEW LEARNING PATHWAYS THROUGH DIPLOMAS

41. AoC welcomes the introduction of Diplomas and of the involvement of Sector Skills Councils (SSCs) in their development. It views them as the natural territory of FE colleges who have both the resources and expertise to deliver them in partnerships with schools, and sees the potential of a coherent learning pathway linked to a locally delivered Foundation Degree.

42. The perceived shift of the diplomas to closer alignment with general education is seen as an opportunity for FE colleges to offer parents and young people greater choice and seamless progression routes from 14 years through to degree level study via specially designed foundation degrees that could be delivered locally and tailored to employers' needs.

43. This would provide a pathway that would meet the needs of learners who may not traditionally aspire to HE, both retaining them in education beyond the age of sixteen and contributing to the Government's intention of encouraging more young people to achieve university level education.

44. AoC would like to propose an initiative to provide Foundation Degrees as natural extensions to Diplomas, encouraging young people to learn incrementally with the option of starting HE units whilst studying Level 3. Those successfully completing Level 3 would in this model be entitled to progress to the locally devised foundation degree.

SUPPLY AND DEMAND

45. AoC believes there is the need for Government investment to secure a culture shift towards continual personal development and employer involvement. There is an assumption in a demand led model that there is willing but latent demand for training. AoC is yet to be convinced of this. We believe there needs to be a balance struck between the open market place and a situation in which reasonably stable institutions can be called on to stimulate demand, and then respond to it. The planning landscape for sustainability needs

to have a degree of stability to allow investment. FE is currently subject to a variety of potentially destabilising and contradictory policy decisions, priorities and targets that may stifle investment and innovation.

December 2006

Memorandum submitted by the British Computer Society (BCS)

INTRODUCTION

The British Computer Society (BCS) is pleased to send its response to the House of Commons Education and Skills Committee Inquiries into Higher Education on the Future Sustainability of the HE Sector and the Bologna Process.

Established in 1957, the British Computer Society (BCS) is the leading industry body for those working in IT. It is driving a worldwide programme to develop the IT profession into the equivalent of any other profession. With a worldwide membership now over 56,000 members in over 100 countries, BCS is the qualifying body for Chartered IT Professionals (CITP).

The BCS was incorporated by Royal Charter in 1984. Its objects are to promote the study and practice of computing and to advance knowledge of and education in IT for the benefit of the public. It is also a registered charity.

The BCS is also licensed by the Engineering Council to award Chartered Engineer status (CEng) and Incorporated Engineer status (IEng); and more recently by the Science Council to award Chartered Scientist status (CSci). The essential requirement for professional competence coupled with appropriate professional standards lies at the heart of almost all BCS activity and the services that it provides.

The BCS enables individuals, organizations and society to realize the potential of and maximize the benefits from IT by:

- setting and maintaining the highest professional standards for IT professionals including:
 - accrediting individual professional competence and integrity through the award of BCS professional qualifications and those of the Engineering Council and of the Science Council, and by inspection and accreditation of university courses and company training schemes;
 - defining standards for professional conduct through the BCS Code of Conduct and Code of Good Practice.
- initiating and informing debate on IT strategic issues with Government, industry, and academia;
- advising the UK Government and its agencies on IT-related matters regarding proposed legislation;
- representing the profession on issues of importance and liaising with other professional bodies, including other engineering institutions and overseas societies;
- examining and initiating debate on topical IT issues, most recently through the BCS programme of Thought Leadership debates;
- supporting individuals in their career development;
- providing opportunities for networking through the activities of the Branch and Group networks and the Forums.

THE BCS AND HIGHER EDUCATION

Within HE the Society plays a number of important roles. It carries out accreditation of computing courses within the UK and beyond and has done so since around 1984. Almost all universities in the UK have their programmes of study accredited by the Society. Over the last 12 months a thorough review of its accreditation processes has been undertaken to take full account of each of CITP (Chartered IT Professional), CEng (Chartered Engineer), and CSci (Chartered Scientist). Within this review every attempt has been made to be comprehensive in terms of its coverage of aspects of computing and to reduce as far as possible the administrative burden on academia through the accreditation process.

The accreditation process itself is carried out via the Society's Academic Accreditation Committee. Through this activity the Society is able to take note of the development and evolution of academic programmes and is careful to undertake its accreditation activity in a spirit of improvement.

Following on from this accreditation review, the Society has recently signed a Memorandum of Understanding with the UK Quality Assurance Agency. The intention here is to share (in a constructive way) information about computing within institutions. The Society views this as a very positive development

and suitable working relationships will need to evolve over the coming months. Another avenue being explored as a result of the review relates to the international recognition of qualifications. At a time of globalization of the workforce it seems particularly appropriate to explore such ideas.

More generally, the Society is seeking to even further enhance its relationships with Higher Education. A committee has been set up to look at possible further developments. In addition there are discussions underway to have a closer working relationship between the Society and some highly influential bodies representing the interests of academia (namely the Council of Professors and Heads of Computing as well as the UK Computing Research Committee) and to do so in a supportive and non-threatening manner. These developments require mutual trust and understanding and must be nurtured with care and sensitivity.

THE IMPORTANCE OF COMPUTING

Naturally the Society is keen to stress the importance of computing. These comments are made with some feeling. As a discipline computing tends to fall between engineering and science and often misses out on important funding opportunities. For instance, it was not funded in the recent STEM initiative, nor in the HEFCE initiative for disciplines with falling application numbers (despite the fact that it was the most seriously disadvantaged discipline in this regard).

There is wide recognition that advances in computing have been responsible for major advances in engineering and in science over the last 20 years or so. To quote from the web site of Computing Research Associates (CRA) in the US:

- IT drove U.S. productivity revival [from 1995–2000].
- About two-thirds of the 80% gain in economic productivity since 1995 can be attributed to advances in information technology.
- IT has changed the conduct of research enabling scientific discovery across every scientific discipline—from mapping the human brain to modeling climatic change.
- The opportunities for future advances in information technology research are enormous—in fact, the opportunities are even greater than they have been in the past.

These comments are then reflected in predictions from the US Bureau of Labor Statistics forecasting that the demand for computing specialists is expected to grow faster than the average for all occupations and predicts a growth rate in new jobs in the IT sector of more than 30%.

From all of this, there are some important conclusions to which the Society subscribes: computing is the key to innovation, Innovation and therefore computing are fundamental to competitiveness. Consequently a thriving computing community will serve the country well and will underpin and provide the engine to drive the economy. There are some very important issues here.

BCS is determined to advance IT knowledge and deliver professionalism at the highest standards by "Creating the IT Profession" for the 21st century. Therefore, BCS is pleased to take this opportunity to comment on this issue.

A. THE FUTURE SUSTAINABILITY OF THE HIGHER EDUCATION SECTOR: PURPOSE, FUNDING AND STRUCTURES

I. The role of universities over the next 5–10 years

1. What do students want from universities? What should the student experience involve, including for international students?

Different students have different expectations and different requirements, many of them dependent on the subject(s) they study. Some have predetermined their career choices, others have not. For the latter group, flexibility of courses choices is important. What students want is in any case not necessarily what they should get. Increasingly, there is a view that students have been spoon-fed by their schools and they expect universities to behave likewise. This view is encouraged by those who categorize students as consumers. This has some very unhealthy aspects: students should be at university to learn and to be challenged, not simply to be taught or pandered to.

With the phenomenon of globalization of the workforce and all that this entails, there is scope for paying attention to the international competitiveness of students. Apart from issues of standards of education, this also implies an international perspective in the curriculum, and ensuring that graduates can confidently compete with graduates from any other country.

HE is about education, and this embraces not only learning about the subject and acquiring appropriate skills, but it is also about personal and social development and maturity. Students should be presented with structured learning opportunities appropriate to the subject(s) they are studying. These opportunities should involve both formal and informal interactions with the teaching staff. Students need to learn and understand the principles underlying their subjects and to acquire skills appropriate to those subjects. In particular they should be encouraged to learn how to challenge perceived wisdom on the basis of rational

argument. Both within and outside formal teaching they should have opportunities to learn to be tolerant of people from different backgrounds and with different ideas. The presence of international students is very valuable in this respect, for both them and home students. Ghetto situations should be avoided at all costs.

From perceptions about attendance at many universities—attendances of 50% or substantially lower are not uncommon—changes need to take place. The attendance figures suggest that the courses are not meeting the needs of the students. There are issues here about commitment and work ethic, and ultimately about the quality of the educational experience. Changes are needed, either of behalf of the students or on behalf of the academic staff. In practice, the institutions themselves need to change their practices to address this important matter. It is likely that such changes will require greater staff involvement and so resources.

2. What do employers want from graduates? Skills base, applied research, links with industry?

Different employers have different requirements and different perceptions. Where any sort of consensus exists, it tends to be focused on the so-called "transferable skills". A certain diversity in the types of graduate that universities produce is desirable; hence some programmes of study should address fundamentals, others should have an orientation to industry, and so on. This facilitates the desirable scenario whereby each student can find a programme within which they can succeed and so gain confidence in their ability. But students with a good work ethic and a certain pride in their work and their performance are increasingly of particular value.

With the rate of changes in technology, it is important that students have a certain facility and a love of learning, and that must come through from their early educational experiences. Related to this, HE does need to pay attention to fundamentals, since these matters are less likely to change with time and with the latest fad.

3. What should the Government, and society more broadly, want from HE?—A stable, internationally competitive, HE sector?—Internationally-competitive research capacity?—Graduates appropriate for a high-skill economy?—Widening participation, contribution to social mobility?—A much greater level of engagement with schools?—Engagement in society and democratic debate, and producing active citizens?

Generally the universities ought to be providing a strong leadership role in the community. That role has been compromised in recent years when the level of bureaucracy seems to have grown "almost out of control". The Society has tried to play its part by reducing the overheads of its accreditation activities and with the Memorandum of Understanding with the QAA sees ways in which the burden on academics can be reduced; in effect accreditation, combined with institutional audit in a sensible manner, can play a significant role in the maintenance of quality.

Some additional comments are desirable:

- Of course, an internationally competitive research capacity is absolutely vital.
- Increasingly, and with greater emphasis than at present, highly skilled graduates are appropriate for a high-skill economy but not exclusively so. Universities should be primarily about education, not training. It would certainly be desirable to see greater attention to the ingredients that support greater competitiveness, ie innovation, entrepreneurship, and so on. In this regard the publication of the report on 14th December, 2006 entitled America's choice: high skills or low wages? by the recently formed New Commission on the Skills of the American Workforce seems worth noting. It comments that the current "education and training systems were built for another era. We can get where we must go only by changing the system itself". Some additional quotes also seem relevant:
 - The best employers the world over will be looking for the most competent, most creative, and most innovative people on the face of the earth . . .
 - [That kind of leadership] depends on a deep vein of creativity that is constantly renewing itself.
- Universities inevitably contribute to social mobility (though normally only in one direction), without any need for this to be presented to them as some form of requirement. Widening participation is not something over which the better research universities have had much influence or control, as has been amply demonstrated in recent years. There is a danger that widening participation becomes associated with sacrificing academic standards, and that is a disservice to everyone.
- At one level one can make the following comments. A much greater level of engagement with schools is a fine principle but difficult to implement in practice: which universities with which schools? Indeed many universities do have links with schools in their region and some engage in national activities or projects with schools. But, without additional resources, this engagement with schools can only be at the expense of not doing something else, ie teaching or research. However, HE has a role to play in monitoring developments at schools. For instance, they need to ensure that their courses are accessible to those coming forward with schools qualifications. But additionally if they sense some unsatisfactory aspect of schools qualifications, they should

recognize that they have a duty to draw this to the attention of relevant agencies with a view to initiating any appropriate action and helping as required. In the context of computing, the recent decline in applications to HE was one such indication of a need for action.

Engagement in society and democratic debate, and producing active citizens are important and vital for society. But in some quarters this is actively discouraged by almost automatically dismissing as irrelevant university contributions (and indeed that of most qualified experts) to any issue and denigrating the authors.

II. UNIVERSITY FUNDING

1. Is the current funding system fit for purpose? Is the purpose clear?

Certainly the computing community in England is very sensitive and disappointed about the relatively recent reduction in the funding levels of their discipline. The particular circumstances associated with rapid growth in student numbers brought about a situation whereby not all of the funding for students was passed on to departments.

See also answer to (4) below.

2. What are the principles on which university funding should be based?

There are various principles here: diversity is important; quality is important in its many manifestations; opportunity for both institutions and for individuals is important; and so on.

One important principle that ought to be highlighted is that high quality students should be able to be encouraged to attend the top universities.

3. Should the £3,000 cap on student fees be lifted after 2009 and what might be the consequences for universities and for students, including part-time students?

The notion of removing the $\pm 3,000$ cap on student fees is likely to have the implication that the fee level will be raised to an even higher level than at present by certain institutions. This is likely to have the effect that these institutions will become inaccessible to a broad section of the population. It is also likely to increase student debt. These are huge concerns. It would be undesirable for the most highly qualified students to find it difficult to gain access to the more prestigious institutions.

There is also a serious long-term funding problem for Scottish universities but it is unclear if they are to be considered within this review.

4. What should the Government be funding in HE and by what means?

In many parts of the world greater attention than ever is being given to computing education. For instance, Computing Research Associates (CRA) in the US is holding a summit at the start of January 2007 to look at setting up an activity with a particular focus on education in computing, the Heads of Computing institutions in Europe has set up groups with particular responsibility for educational matters, the ACM (the major professional body in computing) in the US has set up an Education Council as well as an Educational Policy Group, and so on. Much of the concern seems to relate to the future. Unless young people are educated to a very high level, then increasingly work and prosperity will move to India and to China, etc. There is a responsibility to guard against that. Of course, research is very important, but so is education and certainly some consideration might be given to the balance between these.

A related and important observation is that much innovation (and hence support for competitiveness) is driven by advances in computing. That has been shown to be true—see, for instance, the CRA website. So support for computing education at an advanced level is a particularly vital matter. Initiatives in the US, for example, are placing a greater emphasis on computing education as a matter of priority and something similar is needed in the UK.

Within the community, there is an unfortunate perception that computing has been all but ignored. It is very serious. Yet it is important to emphasize that computing is underpinning advances in engineering, in science, in business, in education, and so on. All of these are very important for the economy and the future.

Related to these comments there would be considerable merit in having something akin to the National Science Foundation in the US (and this explicitly has a division which addresses computing) being formed here. Currently the focus of activity in the UK Funding Councils is the funding of the universities, and in the Research Councils is research. There could be much merit in the creation of a body whose task is to drive forward innovation in the education world, with top people applying for awards there and for awards to be highly valued and be held in high esteem.

5. Should central funding be used as a lever to achieve government policy aims? Is the balance between core or block-funding and policy-directed funding correct at present?

Universities, like the judiciary, should be free from direct government interference. However, agencies such as the research councils, the funding councils, or an NSF—see (4) above—can be used to bring about desirable change.

The balance between core or block-funding and policy-directed funding is not correct at present. There is far too much hypothecated funding, largely created to satisfy the need to announce something at regular intervals and to increase state control.

6. Should research funding be based on selection of "quality"? How should quality be defined and assessed? How might this drive behavior across the sector?

It is important that high quality groups, but also importantly high quality individuals have the opportunity to flourish. It is very important to recognize quality wherever it flourishes; see comment about—under the answer to question 4 above—an NSF (or equivalent) initiative.

Regarding considerations of quality, the Society genuinely believes that it can build positively on its recent Memorandum of Understanding with the UK QAA. Through its accreditation activity, subject experts as well as industrial representatives become involved with assessments of quality and do so in a manner that places an emphasis on improvement. And steps have been taken to reduce the bureaucratic load on institutions.

It is mentioned elsewhere that fundamentally quality is about what happens between students and academic staff. The current problems of attendance at many institutions are a major cause for concern.

7. How can leading research universities reach internationally competitive levels of funding? Should limited central-government funding be directed elsewhere?

Certainly the leading research universities need to be properly funded. But they must not be funded to the exclusion of everyone else. Comments have been made elsewhere about the delicate issues of balance here.

8. How well do universities manage their finances, and what improvements, if any, need to be made?

Universities do not always pass on resources to particular subject areas. Especially when there is rapid growth, departments need to be protected and that did not happen during the rapid rise in computing applications other than in a few enlightened institutions. That phenomenon has been apparent in computing and has resulted in a reduction in the funding level in England.

9. Are some parts of the sector too reliant on income from overseas students?

There are sensitive issues here. In many institutions Masters courses are seen to be primarily for overseas students. Of course, on the one hand gaining resources for HE is desirable and can be used to beneficial effect. On the other hand, that can be seen as exporting advanced technology developments so increasing the possibility of outsourcing and offshoring. There are issues of balance here that are exceedingly delicate.

III. THE STRUCTURE OF THE HE SECTOR

1. Is the current structure of the HE sector appropriate and sustainable for the future?

No comments.

2. How well do structures and funding arrangements fit with "diversity of mission"?

Comments have been made elsewhere about issues of balance. The education of young people is very important and yet in HE promotion is scarcely ever based on excellence in education and scholarship. That fails to recognize many remarkable contributions from academics.

3. Is the current structure and funding affecting growth of HE in FE and part-time study?

No comments.

4. How important are HE in FE and flexible learning to the future of HE? Would this part of the sector grow faster under different structure and funding arrangements?

Comments were made earlier about issues of attendance, and the need for change. That needs to be addressed in some way. One possibility is for institutions to video all their classes (as happens in many German universities, for instance). But quality in HE is largely about what happens in the interaction between academic staff and their students. There really ought to be a return to these basic principles.

5. Can, and should, the Government be attempting to shape the structure of the sector?

Here there are considerations of e-learning and related activities. Students need to receive feedback on their work. Where large classes and large projects are involved, it is often the case that students receive inadequate feedback, and that is a great pity.

6. Is the Government's role one of planning, steering, or allowing the market to operate?

It is desirable that this is done through agencies such as research councils, funding councils and NSF-like bodies.

7. Should there be areas of government planning within HE—eg for strategic subjects?

Again this is best done through intermediate agencies. In part, this lies behind the suggestion of a National Science Foundation kind of organization that would have appropriate aims and objectives. Primarily it would be about stimulating developments leading to high quality educational initiatives. Just as in the US, the Society would like to see a division with special responsibility for computing. Currently the US NSF has a special call out for proposals under a programme called CPATH via which they are looking for imaginative proposals to transform the way in which computing education is performed. Behind this lies the wish to produce a workforce that will ensure US continued competitiveness.

8. What levers are available to the Government and how effective are they?

See answer to (7) above, for instance.

9. Is there a clear goal for the future shape of the sector? Should there be one?

There would appear to be no clear goal about the future. Indeed it seems desirable that the sector should exhibit a certain level of agility so that it can be responsive to future changes and to new demands. For change just seems to be part of the life of institutions.

For instance, one agent of change is likely to be Bologna. Here much is likely to depend on the nature of the implementation of the Bologna Process. In the universities in Germany, for instance, the expectation is that a large percentage of students will stay on for Masters study. In the UK at the moment, the numbers of UK students staying on is low. There is reason to be concerned about UK competitiveness in the future if this situation does not change.

10. Is there a clear intention behind the balance of post-graduate and under-graduate international students being sought? Is this an area where the market should be managed? Can it be managed?

Currently in many institutions there is an emphasis on overseas students at post-graduate level. There ought to be concerns about the involvement of UK students in advanced study; currently that figure would appear to be relatively low. There are ways of encouraging advanced study in certain discipline areas, eg through attention to the acquisition of chartered status, and certain professional requirements for continuing education.

B. The Bologna Process

This year the BCS sponsored the Informatics Education Europe conference in Montpellier in France. This was a European conference run and organized by Europeans and was a great success. Such events serve to bring folk of different European countries together, this allows them to collaborate on projects and to investigate matters such as student mobility. They have enormous potential, and an additional such event is planned for 2007.

Even at that conference there was a fear that the notion of a European-wide curriculum was imminent. Of course, within Bologna the wish is to retain diversity of educational experiences and opportunities but to provide a framework within which mobility of students and comparability can occur.

Also the Society (through CEPIS) is becoming involved in a European project investigating accreditation issues on a European wide basis.

1. Implications of the Bologna Process for the UK Higher Education sector: advantages and disadvantages.

Typically UK students lack the language skills that are needed to support student mobility; having said this, English is ever-more the international language. But also certain countries, eg Germany, place a great emphasis on theoretical matters, which tend to be an impediment for many UK students.

The MEng degree is seen as very valuable within the UK. Yet this degree does not fit well with the requirements of Bologna.

2. The agenda for discussion at the 2007 meeting in London—clarifying the UK position.

Possible topics might include the following:

Does the fact that entry to HE is based on A levels in England and Highers in Scotland create any difficulty or differentiation over the requirements of Bologna?

What impact does mobility and the requirements of Bologna have on benchmark standards? Do these need to have an international stamp of approval? Or are different benchmark standards needed?

Where does industrial placement most naturally fit within Bologna? Is it in the first three- year cycle or in the second two-year cycle?

Presumably mobility most naturally fits at the start of the second cycle or within that cycle? What incentives are there for institutions to encourage mobility or indeed for students to engage in it? An important matter here is: why should a student not go the US rather than to a European country—so motivation is a vitally important matter for the millennial student.

At the Masters level, are European countries content with the notions of the different flavours of Masters degree—generalist degrees, specialist degrees, MEng degrees. There seem to be issues over the MEng since the final year of the MEng is just the normal Sept—May and not a full 12 months.

Can the UK quality system be adopted as a basis for European accreditation of degrees (here accreditation should be interpreted as a quality matter rather than as a preparation for a profession)?

What issues arise in connection with the funding of mobility—fees for students coming from abroad and support for UK students moving abroad?

3. The implications of a three-phase structure of higher education awards for one-year Masters and short undergraduate courses (HNCs, HNDs, and Foundation Degrees).

See answer to question (2) above. The MEng seems to be a particularly awkward entity. Yet it is highly valued within the UK.

4. Awareness and engagement in the Bologna Process within HEIs.

To a large extent Bologna and the implications of Bologna are being ignored in most institutions. The problems outlined in (2) above are seen as real impediments.

5. Opportunities to enhance the mobility of students from the UK.

Some glib comments can be made about student mobility. In reality this is a very sensitive and personal matter. Students should engage in mobility when they are mature enough to do so, and when they see genuine beneficial opportunities in doing so. For a student to decide to move to another country for an entire year or semester is a huge decision that can have a very upsetting and disturbing effect. Opportunities for more modest periods of study abroad, eg short course during summer months could have the attraction of allowing students to "test the water".

6. The possible implementation of a European Credit Transfer System (ECTS) and a focus on learning outcomes and competencies.

The UK is well positioned in this regard. Fundamentally the ECTS scheme could be accommodated with relative ease within most credit schemes, and the vast majority of UK institutions employ these.

7. Quality Assurance systems in HE (teaching and research): the compatibility of UK proposals and Bologna.

Again the quality mechanisms in the UK are relatively advanced in comparison with those of most other European countries. The Society is involved with a project in Germany whose purpose is to investigate European-wide standards in this regard.

8. Degree classification reform in light of Bologna.

No comment.

9. The broader impact of Bologna across Europe: a more standardized Europe and the consequences for the UK's position in the global market for HE (Bologna and the second phase of the Prime Ministers Initiative for International Education (PMI 2)).

Part of the activities within the Society involves looking at mutual recognition of accreditation activities with the US, Australia, etc. In short, efforts are being made to arrive at a Washington Accord type of arrangement for computing. So the Society is attempting to lead in this very area, recognizing the challenges of Bologna as well as the wider implications associated with globalization.

CONCLUSION

In conclusion the Society would wish to re-emphasize the vitally important role that computing in HE can play in the future well-being, prosperity and economic competitiveness of the country. Degree level computing is so vital. Undoubtedly attention needs to be given to this important area. The essential link with economic prosperity needs to be formally recognized and subsequently will require careful nurturing.

December 2006

Memorandum submitted by The British Education Research Association (BERA) and The Universities Council for the Education of Teachers (UCET)

1. INTRODUCTION

The British Educational Research Association (BERA) is the main association of educational researchers working in the UK and has members working in higher education, local authorities, the voluntary sector and educational establishments ranging from pre-school to primary and secondary schools and further and higher education. The vast majority of members are employed in the higher education sector. The Universities Council for the Education of Teachers (UCET) represents almost all higher education institutions across the UK who provide initial and advanced teacher education programmes. This submission focuses on issues of:

- the impact of the concentration of research funding as a result of the Research Assessment Exercise upon programmes of initial teacher education;
- the sustainability of educational research in terms of the demographic profile of staff engaged in educational research in higher education; and
- the exposure to and engagement with educational research of beginning teachers.

We have framed our response in terms of answers to three main questions posed by the Committee.

- 2. The Role of Universities Over the Next 5–10 Years
 - 2.1 One key question for us under this section is:

What do employers want from graduates?—skills base, applied research, links with industry?

It is well recognised that teachers have a key role to play in developing young people's academic learning and attainment. They also have a key role to play in promoting social cohesion in an increasingly diverse society. Curriculum developments in education for citizenship and in environmental sustainability, for example, explicitly recognize the contribution that schools are expected to make in equipping young people to take part in an increasingly globalised society.

2.2 This means that it is imperative that teachers are well equipped in terms of knowledge and skills in their subject disciplines, keeping pace with research and developments in discipline based knowledge. They also need to be aware of research and developments in learning and in the teaching methods most likely to contribute to effective learning. Moreover, they need to be alert to debates about the goals and means of

achieving social cohesion, including debates about inclusion of children with special educational needs in mainstream classrooms and ways of recognizing and valuing the diverse cultures and needs of the young people they teach.

2.3 The complex and multi-faceted job of teachers means that they need to develop:

- practical, technical competence in the classroom;
- understanding of the intellectual foundations of that competence;
- curriculum knowledge and expertise;
- awareness and understanding of educational policy debates; and
- self awareness and critical reflection upon their practice.

As key professionals taking forward an important public policy, they need to be equipped critically to appraise policy and their own practice not just to apply techniques and curricula unthinkingly. We as a society need teachers who are flexible, adaptable, secure in their knowledge and expertise but willing to review and reflect on their practice using a range of evidence to do so.

2.4 It is of concern to us therefore that the effects of the RAE have been to concentrate research funding in a small number of higher education institutions with the result that 80% of primary school teachers and approximately 56% of secondary teachers in England are trained in institutions with no QR funding. Staff in these institutions have to attract external grants to enable them to have time to undertake research and typically have much less opportunity for scholarship. It is also disturbing that large regions are without higher education institutions with QR funding, making it more difficult for schools and local authorities to work in partnership with universities who have large numbers of staff working at the forefront of educational research. This makes knowledge transfer and exchange more difficult.

2.5 A second key question is:

What should the Government, and society more broadly, want from HE?—internationally-competitive research capacity?

It is generally agreed that educational improvement remains a priority for the UK and that policy developments to achieve this goal should be informed by evidence. Evidence can come from many sources but high quality educational research conducted in universities is clearly an important source given traditions of university autonomy and links between the curricula in schools and universities. In June 2006 the Economic and Social Research Council (ESRC) published a demographic review of the UK Social Sciences as it was concerned about the sustainability of the social science base in the UK. Education emerged as an area for priority action. This is partly because a significant proportion of staff in education faculties enter academic posts having gained experience in school teaching. Some also enter academic posts with little or no social science research training in their original degrees. The main points emerging from discussion with ESRC are:

- The current provision available for funded places in educational research is too small to meet the needs and demand in this subject area.
- As a field of study education research is growing, with expansion in pedagogic research in higher education further increasing demand for doctoral training.
- Any review of current funding provision needs to address capacity building in this field and reflect the particular demographics impacting on capacity in education research.
- The education research community draws in practitioners and researchers from different disciplines and at different stages in their careers and funding models need to be appropriate to the particular needs of this breadth and diversity of resource.

3. The Structure of the HE Sector

3.1 The question we wish to address here in terms of the future of educational research is: Is the current structure of the HE sector appropriate and sustainable for the future?

Our response to the effects of the concentration of QR funding largely answers this question. We also wish to draw to the Committee's attention the existence of school-based routes into teaching. Such routes need not encompass any involvement of higher education institutions. While these routes emphasise the practical and technical competence of teachers they further exacerbate concerns about the exposure of teachers and hence some education academics of the future to social science research training and evidence from, for example, Ofsted suggests that some of them are not of the same standard as those programmes run in partnership between HEIs and school.

December 2006

Memorandum submitted by The British Medical Association (BMA)

The British Medical Association (BMA) is a voluntary, professional association that represents doctors from all branches of medicine all over the UK. It has a total membership of over 138,000, rising steadily, including more than 2,500 members overseas and over 19,000 medical student members.

The BMA's Medical Students Committee and Medical Academic Staff Committee have considered the terms of reference for the inquiry and our comments, focussing on medical education, are set out in this paper.

Role of Universities Over the Next 5–10 Years

1. Medical students want adequately resourced, good quality education and training that will result in a professional degree and lead them to registration with the General Medical Council.

2. Medical students wish to see the current broad-based educational arrangements remain in place. A good doctor is one with the creativity and initiative to recognise the issues a patient has and who takes steps to address those issues. They must also have sound clinical knowledge and skills. Currently medical schools have autonomy to deliver teaching and training in a way that ensures students are equipped to meet these requirements. This variety of approach between medical schools allows a student to choose a course type that best suits their learning style, and we believe this is key to creating an environment where the student can learn effectively. This is of benefit to the profession and patients by enabling students to fulfil their greatest potential as doctors. A variety of educational methods broadens the skill mix within the profession with the ultimate goal of constant improvement in patient care.

3. Medical education and training in the UK is held in high regard outside the UK. In order to ensure that it remains of a high standard, it is vital that adequate funding is available. Universities have a key role to play in recognising the value of medical teaching and in hosting an environment where medical teaching careers can thrive. The quality of medical education is under significant threat from the reduction in clinical academic staff at a time when the medical student population has increased markedly. The quality of education is further threatened by instability in funding in the NHS of medical academic staff. Many Universities have responded to changes in the curriculum by increasingly devolving the delivery of medical student education to the NHS. This is happening at a time when budget cuts in NHS funding and tightening of supporting activities in NHS contracts are affecting the delivery of undergraduate education.

4. Increasingly, Universities will have a role to play in contributing to the UK economy through innovation and excellence in health research.²⁷ This will require better coordination between Universities, the NHS, pharmaceutical companies and medical device companies and an ongoing recognition of the synergy between education, research and clinical practice in medicine.

5. The need for greater University collaboration is especially vital given the dual funding of academic medicine. Current NHS deficits and corresponding cuts in funding for medical education will, we believe, directly affect teaching posts and medical students, potentially in the longer term²⁸. If the numbers of teaching posts are reduced the viability and quality of teaching in the NHS and medical schools, as well as schools themselves, will be endangered. This will have a consequent adverse effect on the future medical workforce and impact on patient care. This is compounded by the current problems with Modernising Medical Careers (MMC) with the fear that up to 5000 doctors currently in training could be sidelined into non-training posts.

6. Universities need to play a key role in ensuring that the medical profession reflects the composition of society and therefore schemes encouraging school students to apply to medicine should target students from backgrounds that are under-represented in the medical profession. We believe that measures to widen participation in medicine must be targeted specifically at medicine as well as the whole university to which the medical school belongs. We are concerned that there are currently significant barriers to entry to medical school from students from lower socioeconomic backgrounds, particularly that the costs for students are prohibitive.

7. Figures from UCAS²⁹ demonstrate that there has been no change in the socio-economic number of applications to pre-clinical medicine for 2006 with 19% from the lower groups 4 to 7 submitting applications. This is of concern both to the Department of Health and the BMA.

²⁷ Drive to boost Clinical Research 14 December 2006, http://www.timesonline.co.uk/article/0,,5-2502546.html

²⁸ House of Commons Health Committee, NHS Deficits, First Report of Session 2006–07, Volume 1, 7 December 2006.

²⁹ Applicants to Pre Clinical Medicine & Dentistry Received by June 2006–UCAS.

UNIVERSITY FUNDING

Lifting the cap on student fees

8. We strongly believe that the £3,000 cap on student fees should not be lifted after 2009. Student fees are already affecting applications/admissions to universities and to medical schools within universities with a 4% decline in applications to universities and an almost 3% decline³⁰ in applications to medical schools. This is at a time when student debt is at an all-time high. Lifting the cap would we believe aggravate this situation.

9. Results from the BMA's annual medical student finance $survey^{31}$ demonstrate that the average amount of debt for a medical student was £12,657 and the highest figure was £53,350. Average total debt increased markedly by year of study and ranged from £6,920 for first year students to over £22,000 for students in their sixth year. Thirteen per cent of respondents had total debt exceeding £25,000, and amongst fifth and sixth year students this proportion was considerably higher at 26% and 44% respectively. Six percent of respondents had total debt exceeding £30,000. The high debt levels are explained by the fact that medical students study for two or three years longer than those on most other courses, have fewer opportunities to work part-time, and face additional expenses for travel to hospitals, and equipment.

10. Lifting the cap would severely exacerbate medical student debt. We are concerned that this may deter able individuals from studying medicine particularly those from lower socio-economic backgrounds.

Medical degree funding

11. Funding for medical degree courses is complex and lacks transparency. There are a broad and complex range of finance streams and it is difficult to obtain information about spend on medical education and training.

12. Given that block grant funding for medical education comprises a significant proportion of the total central funding for higher education institutions and all medical students will pay $\pounds 3,000$ per year in tuition, there is a clear need to improve transparency in funding within medical schools and Universities.

Funding cuts

13. At some medical schools, and in some specialties, the proportion of NHS funding for clinical academic posts is much higher that Funding Council funding³². This year, NHS funding cuts have a detrimental effect on teaching with Universities struggling to manage their finances for medical degree courses. First quarter performance for the NHS³³ indicates that Strategic Health Authorities have been required to save £350m which is to be used to off-set overspending elsewhere and will be held centrally by the NHS Bank as a "contingency fund".

14. At the same time, Universities have gradually reduced the numbers of clinical academics, (primarily teaching academics), by moving the funding of teaching academic salaries away from universities into the NHS funding streams. Over the past five years the number of medical students has increased by almost 10,000 to meet the future needs of the medical workforce, and at the same time there has been a 25% reduction in academics and an associated shift of undergraduate education to the NHS. Further pressure on funding, from either funding source would make the delivery of medical undergraduate education in many medical schools unsustainable, given there are currently around 35,000 students in UK medical schools.

15. The pressure for job cuts, especially teaching posts, appears fairly high. There is a real concern that funding cuts will reinforce a continued high vacancy rate amongst medical academics, especially if money is not available to recruit to vacant positions. The current vacancy rate is 7% of the total number of clinical academics and vacancies are especially prominent in senior academic positions—in 2005 there were 91 professorial vacancies.³⁴

³⁰ UCAS figures for 2007 entry, News Release, 31 October 2006.

³¹ BMA,—Survey of medical student finances 2005–06.

http://www.bma.org.uk/ap.nsf/Content/Studentfinance0506?OpenDocument&Login

³² Across the UK, clinical academic salaries are 38% NHS funded, rising to 66% (Leicester), 71% (Bristol and over 90% (Swansea and Keele). Source: Clinical Academic Staffing Levels in UK Medical and Dental Schools, A data update by the Council of Heads of Medical Schools June 2006.

³³ NHS financial performance—Quarter 1 2006–07, Department of Health.

³⁴ Clinical Academic Staffing Levels in UK Medical and Dental Schools, A data update by the Council of Heads of Medical Schools June 2006.

Flexible central funding

16. The University funding structure, especially the Research Assessment Exercise (RAE), has the effect of discouraging excellence and quality in teaching, in spite of the significant and increasing amount that students are expected to personally contribute to their tuition.

17. Despite the substantial in increase medical students (10,000 over the past 5 years), discretionary funding through the RAE has encouraged medical schools to expend disproportionate amounts of energy on attracting money for research at the expense of teaching and there is a real risk that medical teaching and medical teachers are devalued. The result is that medical teaching and its quality control has been shifted to the NHS which is under threat from a number of quarters. For example:

- There is a tightening up of consultant contracts and a corresponding loss of planned time for teaching through supporting professional activities in job plans.
- NHS money for medical education through the Service Increment For Teaching Money (SIFT) money has been mis-spent on clinical work rather than teaching. In the current climate of NHS deficits, the concern is that any cuts from this budget line will preserve money spent on clinical work to the detriment of money for education.

18. The present RAE actively discourages a vigorous teaching culture in Universities, as it disengages teaching from research by assessing them in different ways. Active attempts should be made to integrate research and teaching through funding mechanisms.

19. The measures of RAE assessment used until now have been criticised for their narrow focus and a tendency to reward laboratory based projects instead of human studies, and hence an overall failure to adequately measure the contribution of medical academics to clinical research.

20. University funding should give due consideration to the differential requirements of professional groups in defining quality. For medicine, funding must acknowledge innovation in clinical research where innovation or change in practise is usually the result of several (as many as four or five) complementary studies and give appropriate credit for the contribution of each piece of research made to the advancement of clinical practice. Furthermore, research quality for medicine ought to value applied/translational research, as well as basic science, to break down the divergence of research outcomes that are expected of clinical academic staff by Universities and the NHS.

CONCLUSION

21. The high quality and standard of medical education and training in the UK should not be eroded by lack of funding.

22. Medical students should have an expectancy that the fees they pay will be hypothecated towards furthering their education. As medical students pay $\pm 3,000$ per year of study and leave university with significant debts and a less stable employment market, this expectancy should be met. Universities should set up transparent funding mechanisms to ensure that students are getting value for their money.

23. Lifting the £3,000 cap on student fees is, we believe, unacceptable. This will adversely affect applications to medical schools and for those who study medicine would have a severe impact on student debt, particularly for those from lower socio-economic backgrounds.

24. In addition, there is a clear need to for medical teaching to be valued and better integrated into funding arrangements than at present. These funding arrangements need clarity and openness.

25. The quality of undergraduate medical education should not be compromised by the significant increase in medical students and massive decline in medical teachers. Adequate funding to support teaching in medical schools is therefore essential. There are potential tensions in the funding system which also spans health sector (the latter budgets have been raided to fund NHS deficits. Quality undergraduate medical education also relies on synergy between teaching, research and clinical environment.

THE BOLOGNA PROCESS

The Bologna Declaration has the potential to change the face of medical education as it currently stands, and consequently the experiences of the profession and those it serves. The nature of the delivery of medical education proposes additional challenges to the implementation of the Declaration and this needs to be considered before wide reaching mechanisms are implemented throughout higher education. Whilst aspects of the Declaration have possibly detrimental affects through loss of diversity and individual country autonomy through the bachelors/masters system, increased quality assurance and collaboration throughout Europe provide a valuable opportunity to enhance European achievement. It is essential that UK stakeholders drive forward discussion regarding the implementation of the Bologna Process in order to have optimal results for the profession as a whole, in both the UK and Europe.

December 2006

Memorandum submitted by Professor Roger Brown, Vice-Chancellor, Southampton Solent University

EXECUTIVE SUMMARY

Higher Education is a process masquerading as an outcome—Martin Trow, Professor Emeritus, Goldman School of Public Policy

1. The introduction of variable fees and bursaries marks an important step towards the marketisation of UK undergraduate education. One issue the Committee may wish to consider is whether and how far this trend should continue. Drawing on experience in America and Australasia, this memorandum considers the potential benefits and detriments of markets in undergraduate education. It recommends a cautious approach to any further liberalisation, such as the abolition and raising of the fee cap, until more experience has been gained of the potential impact on structure and diversity.

MARKET DEFINITIONS

2. In classical economic theory, markets are held to produce both greater static efficiency (the best allocation of resources at any one time) and greater dynamic efficiency (more innovation and better management). In such markets the nature and quality of what is supplied are ultimately determined by the consumer.

3. If undergraduate education were to be supplied in this way, market entry would be lightly (if at all) regulated, tuition fees would cover teaching costs, students would meet the cost of the fees from their own (or their parents') resources, and their choice of institution and course would be based on adequate information about its suitability for them. Institutions would compete on price to meet these requirements. Those that did not succeed would disappear from the market (most probably being merged, or at least taken over, by another institution). This is the position advocated by, amongst others, Sir Richard Sykes.

4. However higher education has a number of important characteristics that make it unsuitable for a pure application of market theory. Higher education confers not only private but also public benefits, including social mobility. This is why both tuition and maintenance receive some form of public subsidy in nearly every major system. It is also the main reason why there is usually some regulation of market entry. However the real difficulty in applying a pure market model is the absence of information enabling students to make valid and reliable choices about courses prior to entry (together with limited facilities for subsequent transfer). This in turn reflects the difficulty of defining, measuring and comparing the outputs.³⁵

5. One important consequence of this is that prestige comes to play in higher education (and not only in the provision of undergraduate courses) the part that information plays in conventional markets. Such prestige is typically associated with higher student and staff selectivity and with staff performance in research and scholarship. But it is not only institutions and professors that seek prestige. Students and employers also seek the prestige of association with a high ranking institution, what one American commentator has called the "selectivity sweepstakes" (Geiger, 2004: 77–83).

6. In this situation, removing restrictions on prices, channelling an increased proportion of teaching funding through the student, and increasing the amount of private funding—together with league tables that use input factors to rank institutions in order to sell newspapers—leads inevitably to what another American writer has called the "higher education arms race":

Competition at the top is heavily positional . . . the bottom line for any school is its access to the donative wealth that buys quality and position. Several authors have described the conflict between individual and social rationality and the wasteful dynamics of positional markets. Essentially, the notion is that the players become trapped in a sort of upward spiral, an arms race, seeking relative position (Winston, 1999: 30).

7. Besides increased stratification, the other main casualty is decreased diversity—of institutions and students. Innovation is cardinal to diversity. In market theory, producers compete through innovation. In higher education, it is well established that suppliers compete through emulation, what yet another American commentator, David Riesman, has called the "academic procession" which he described as:

a snake-like entity in which the most prestigious institutions in the hierarchy are at the head of the snake, followed by the middle group, with the least prestigious schools forming the tail. The most elite institutions carefully watch each other as they jockey for position in the hierarchy. In the meantime, schools in the middle are busy trying to catch up with the head of the snake by imitating the high prestige institutions. As a result, schools in the middle of the procession begin to look more like the top institutions while the institutions in the tail pursue the middle range schools. Ultimately, institutional forms become less distinctive, relatively little real change occurs in the hierarchy, and the system of higher education struggles to move forward (Riesman, 1956).

³⁵ Other difficulties are that there is an incomplete understanding of the production processes and the relationships between inputs and outputs; that the same processes (eg research and scholarship) produce different outputs; and the limited understanding of the relationships between different processes eg between teaching and research.

8. It is left to lower status institutions to innovate to meet new needs yet these are the institutions at most risk from positional competition. As the Australian writer Simon Marginson has said:

Positional markets in higher education are a matching game in which the hierarchy of universities, and individual market choices are determined by status goals (Marginson, 2004)

9. Another American writer Robert Zemsky has written:

What the faculty and staff of both public and private institutions have learned is that in the end there is really no market advantage accorded to institutions that provide extra-quality education . . . What matters in this market is not quality but rather competitive advantage (Zemsky quoted in Burke (ed) 2005: 287)

CONCLUSION

10. This analysis suggests that:

- 1. We need to develop a much more sophisticated understanding of the potential impact of marketisation on undergraduate education;
- 2. We need to acknowledge the public goods aspects of undergraduate education and the need for state intervention to ensure a proper balance between public and private benefits and interests;
- 3. Recognising the interrelated issues of research, resourcing and reputation as sources of institutional prestige, we should be very cautious about any move to abolish or increase the value of the fee cap, at least until there is further evidence of the impacts on institutional diversity and responsiveness to the full range of learner needs;
- 4. Similarly, we should be very cautious about opening the market to private "for profit" providers who might "skim off" programmes and revenues from comprehensive public institutions without compensating benefits to the system as a whole; and
- 5. We should be realistic about the extent to which adequate comparative information about courses or institutions can be provided and will be used by students, parents, employers and others.

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December 2006

Memorandum submitted by the Campaign for Science and Engineering (CaSE)

1. Campaign for Science and Engineering is pleased to submit this response to the Committee's inquiry into the future of higher education. CaSE is a voluntary organisation campaigning for the health of science and technology throughout UK society, and is supported by over 1,500 individual members, and some 70 institutional members, including universities, learned societies, venture capitalists, financiers, industrial companies and publishers. The views of the membership are represented by an elected Executive Committee.

2. It has not proved possible in the time allowed to provide detailed evidence and fully-reasoned answers to every one of the large number of important questions set out in the call for evidence.

THE ROLE OF THE UNIVERSITIES

What do students want from university? What should the experience involve?

3. Different students want different things, and to treat the entire student body as a single entity is probably one of the largest mistakes policy makers can make. In a mass system of higher education, the variety of institutions and individuals will be enormous.

4. Prior to entering university, the majority of students probably want a pathway to a rewarding and lucrative career. Many individuals want to study something they find interesting. For example, a recent survey of what would induce 15-18-year-olds to study the sciences found that interest (50%), good job prospects (24%) and high salaries (17%) were the top reasons given¹.

5. Many students probably want to study something with which they are familiar, and which extends their earlier educational experience. Some, probably an increasing number, want something not too demanding.

6. But many probably *do not really know what they expect or want*. An increasing proportion go to university because it is the thing to do, following their peers, although they have no real career pathways in mind and no real interest in acquiring new knowledge for its own sake.

7. In view of this, the deeper question is to what extent the preferences of 16 and 18-year-olds, choosing A levels and university preferences, should be allowed to determine the structure of higher education.

8. Although they may not realise it, what students really want is honesty about their higher education experience. For too long, many in the system have colluded in the fiction that all degrees are of equal value. Studying at different institutions and (importantly) studying different subjects bring different rewards, some very much greater than others (both intellectually and financially).

9. The student experience should involve acquiring new skills and knowledge, both general and subjectspecific. Students should be intellectually challenged to the limit of their abilities throughout their courses. They should also be encouraged to take the opportunity afforded by the student lifestyle to develop as citizens across the widest range of activities possible.

10. Nevertheless, it is evident that current financial arrangements are such that many students need to take paid work both during and out of term, and it is unrealistic to expect that a large proportion of students will have the time to enjoy the ideal level of extra-curricular activities.

11. It is also crucial to remember that the higher education experience should be considered not on its own, but as part of the whole education lifespan of an individual. What a student's experience at university should involve will depend in large part on what he or she has experienced at school or college.

What do employers want from graduates?

12. As with students, employers are varied and want different things. The university system should be sufficiently diverse and flexible to deliver many of the things they want.

13. In so far as it is possible to generalise, employers want people who are perfectly trained for whatever roles happen to be available in their companies today, but that is not a realistic ambition. Moreover, the economy changes so constantly that it is verging on impossible to predict what specific skills will be needed by the time someone in their first term at university comes to enter the labour market.

14. In preparing people for the world of graduate work, therefore, the aim of the system should be to help students to be flexible, adaptable and independent. Most graduates go into employment that has no obvious connection with what they studied at university; even those that go into broadly the same field probably use in their jobs relatively little of the specific information they have been taught at university.

15. However, it is possible to say that the economy will continue to require adequate numbers of people with skills falling within the broad range of experimentation and reasoning inherent in the hard sciences, especially significant mathematical ability.

16. Employers are certainly entitled to assume that graduates will have good levels of literacy and numeracy, and it is worrying that a number of recent surveys and opinions have tended to suggest that many graduates of UK universities appear not to have acquired some of the basic skills that one might expect².

What should the Government, and society more broadly, want from Higher Education?

17. The university system delivers, or could deliver, a whole range of benefits to society. Perhaps one of the more interesting purposes is to speak truth to power, to be a repository of unconventional thinking from which comes genuinely novel research ideas and questions that serve to sharpen the government's thinking and improve its policies. Recent policy changes have tended to play down this role, but if universities cannot perform it, who can?

18. But the universities also have the more prosaic purpose of producing graduates suitably skilled to work in the modern economy and of conducting internationally competitive research.

19. Other activities, such as widening participation, engaging with schools and working with local industry may be valuable, but they cannot happen unless the core business of teaching and research is strong. Of course the benefits of higher education should be equitably distributed, but it is absurd to propose that "widening participation" should have the same strategic status as sustaining the quality of teaching. There would be no point in widening participation in a low quality system.

20. Moreover, although it is perfectly sensible for universities to engage with local schools, and to offer methods of entry into higher education that are suitable for as wide a range of people as possible, this cannot be a substitute for sorting out the failures of the schools system. If not enough young people from relatively deprived areas of the country achieve the required grades to get into university, and if not enough of them aspire to higher education, then there is only so much the universities can do. For example, as long as a quarter to schools teaching 11-16-year-old have no physics teacher³, and as long as A level results in physics differ so strongly between private and state schools⁴, no amount of subtly or unsubtly blaming the higher education institutions will do anything genuinely to widen participation in university-level physics or to give the state-educated children of the inner cities the chances that every right-thinking person believes they deserve.

21. While universities should do everything to widen participation, we must recognise the abilities and limits of different students, and create a range of qualifications to match. Any temptation to lower standards in order to push students past their academic limit should be avoided. There cannot be a general dumbing down to meet fatuous targets on widening participation at the expense of international competitiveness or intellectual rigour.

22. Overall, it must surely be taken as a given that the UK deserves and expects an internationallycompetitive higher education sector, and that the Government's role in this is to ensure a stable platform from which the universities can continue to develop their research and teaching activities.

23. In future, this may have to involve a greater degree of honesty about the level of variation within the system, and it will certainly require us to stop pretending that all universities are equal or that all degrees are equivalent, when they are not.

UNIVERSITY FUNDING

Is the current funding system fit for purpose? Is the purpose clear?

24. The current system is manifestly not fit for purpose. It is based on the idea that the Government can set both the demand and the supply for higher education teaching and research, but that it does each independently of the other. The level of student fees is based on the political compromise the Government could pass through the House of Commons rather than any serious assessment of what is needed to do the job properly. The system is basically still operating in a way that it did when conditions were very different and there was far less diversity across institutions.

25. The purpose of much funding is not clear. Although some streams of funding have increased dramatically in recent years, these changes have been accompanied by new and enhanced demands outside of the universities' core business of teaching and research. These include engaging with local industry, attracting participation from under-represented groups and commercialising the results of research. The increases in funding have not kept pace with these demands, but perhaps more importantly, the funding mechanism has not adapted to these purposes. In research, for example, the bulk of the new money is channelled through the Research Councils, which are designed to be good at picking basic research projects from among competing applications. They are not set up to fulfil other roles, such as knowledge transfer or outreach to the wider community, but have nevertheless been expected to undertake these activities.

What are the principles on which university funding should be based?

26. The basic principle is that the nation should decide what it wants, what it is prepared to pay for out of the public purse, who it thinks should pay for the rest, and what it is prepared to forego in the absence of adequate funding.

27. In more detail, one of the principles for funding anything should be honesty. At present, the system is based on a serious of half-truths, dodgy assumptions and unfunded mandates. For example, the ratio of teaching funds between science disciplines and others was reduced two years ago on the basis of an analysis that the Higher Education Funding Council for England admitted at the time was inappropriate⁵. When asked to justify it, the Chief Executive of HEFCE stated as facts reasons that are either not supported by the evidence or for which there simply is no evidence⁶.

28. For example, he claimed that "there is little differential between classroom-based and laboratorybased subjects" in terms of the proportion of the total cost of teaching that is attributable to the salaries of staff. When CaSE asked for the evidence for this, HEFCE directed us to the 2001–02 Edition of Resources of Higher Education Institutions, published by the Higher Education Statistics Agency⁷. Quite why this edition was quoted was unclear, but in any case, the data it contains show quite clearly that proportion of identifiable teaching costs attributable to staff various from 72% to 79% for science and engineering subjects and from 85% to 86% for arts and humanities, a consistent and important difference. Sir Howard also claimed as a fact in his evidence that the difference costs of IT equipment had narrowed between science and non science subjects over the past ten years, but when CaSE asked for the evidence base we were told that "these are not areas on which HEFCE holds . . . specific quantitative evidence".

29. A second principle on which funding should be based is some gross assessment of national needs. Precise calculation of the numbers of graduates required in different fields would be absurd and impossible, but at present, huge quantities of public money are put into teaching particular subjects because 17 and 18-year-olds happen to think they want to study them, at the expense of subjects that happen currently to be unpopular with this age group. This false market does not serve the country especially well, nor it there any reason to believe that it will serve the students involved, who are being misled about the opportunities that will be available to them following different choices.

30. A third principle is that of autonomy, both within institutions and within the wider teaching and research communities. For example, in research funding, there has been a creeping tendency for more and more of the money to come with strings and conditions attached. The Science Budget, which used simply to be divided among the Research Councils has in recent years come with ring-fenced pots for research on subjects like the "rural economy" (where policy-driven research ought properly to be in the remit of the Department of the Environment, Food and Rural Affairs). On one occasion, there was even a list of specific questions that that researchers should work to "solve in the next few years". It included "What does it mean to be a citizen of the expanding European Community [sic]?" and "What is gravitation?"⁸

31. The first of these may be an important policy question, but if so, it is the job of the Foreign Office to commission research, not the job of the Science Budget to hypothecate money to it irrespective of the quality of relevant applications. The second is a genuinely fascinating and important question but the idea that it will be "solved in the next few years" by central diktat is laughable.

Should the £3,000 cap on student fees be lifted and what might be the consequences?

32. It is difficult to see how the fee can remain at $\pounds 3,000$ into the medium term future. The facts are that universities are underfunded for the range of activities that society expects them to perform and that there is no realistic prospect of any other source of income making up the difference within the next decade. There are many calls on public money, even within the education system let alone more widely, and no political party appears to have the will to promise the levels of funding needed to sustain a world-class university system.

33. Of the other sources of funds, industry already funds a higher proportion of university activities in the UK than in other countries⁹, borrowing on the necessary scale would be both financially imprudent and probably impossible, and endowments cannot be built overnight. There is no easy solution, and it would be preferable to accept and admittedly-imperfect one than to allow universities to be chronically underfunded until the ideal method is devised. To hold fees at £3,000 may endanger standards and quality of higher education.

34. However, the cap cannot simply be abolished without an informed debate about the wide range of issues that this throws up. For example, if *differential* fees become a reality, science disciplines will cost more to study than arts subjects, because the costs of laboratories will always make them inherently more expensive. Proper thought will need to be given to how the country maintains its strategic needs in different disciplines, and it will not be enough to act as if a market based on the whims of 17-year-olds is capable to delivering the optimum result, or even an acceptable one.

35. The debate about uncapping fees must recognise that a properly diverse higher education system will have a shifting assortment of ambitions to meet a range of student needs, not all of which necessarily demand the same level of resourcing. If this debate is worked through properly, it has the potential to lead to a sector that is not subjected in a mechanistic, uniform manner to the Funding Councils' levers for implementing government policy.

Should research funding be based on selection of "quality"? How should quality be defined and assessed? How might this drive behaviour across the sector?

36. How quality is defined and assessed depends on what the assessment is for. The aim is not to reward departments and individuals for being "good" but to ensure that huge sums of public money are distributed in ways that promotes the research the nation wants done. This means, for example, that how far strictly applied research should be included depends not only on how we judge its quality against that of pure research in some abstract sense, but in part on whether it is being adequately supported from other sources.

37. The key element of any assessment must be that it measures *outputs* and *outcomes* not inputs.

How can leading research universities reach internationally competitive levels of funding? Should limited central government funding be directed elsewhere?

38. Leading, internationally-competitive universities around the world obtain their funding from a wide variety of sources, but the mainstays will always be public sector grants, industrial sponsorship and contracts, fees, commercialisation of research, philanthropic donations and endowments. To sustain levels of funding similar to the best in the world, universities need to maximise their income streams from all of these.

39. At present, the only one in which UK universities excel is in industrial funding—a higher proportion of British university research is funded by the private sector than in most other industrialised countries, including the USA.

40. Of the other income streams, any enhancement in fees is likely to be swallowed up by the desperate need to remain competitive in teaching, with relatively little effect on research. Income from commercialising research will never be a massive element of the overall mix—the best in the world produce a few per cent of their research income in this way.

41. That leaves two major potential sources—public funds and endowments, including philanthropic donations.

42. The building up of endowments is an essential part of the future of funding world class universities in the UK, for a variety of reasons, not least that substantial endowment funding gives a degree of freedom and independence from Government. But reserves of the magnitude needed to compete with the best in the world are not going to be generated overnight, and any policy that relies on UK alumni suddenly behaving like their American counterparts is doomed to failure. There should be very significant tax and other incentives for individuals and organisations to donate towards university endowments, with a view to securing major financial benefits to the institutions on a timescale of decades.

43. However, the *only* credible way of ensuring in the short to medium term that our major universities have the resources needed to compete on the world stage is for them to be adequately funded from public funds. Preferably those funds would be channelled through a variety of different routes, allowing ideas that do not suit one funder to have a chance of succeeding elsewhere. This needs to be carefully balanced with the need not to create a confusing array of small and ineffective pots of money.

44. At present, despite the very welcome increases in research funding that have been delivered in recent years, UK universities do not receive the same level of public investment as those in the other major economies. If we are serious about using our higher education institutions as important drivers of economic, social, cultural and environmental development, we have to acknowledge that their share of public spending is not yet sufficient to the task.

How well do universities manage their finances, and what improvements, if any, need to be made?

45. Different universities manage their finances with differing degrees of competence, but all suffer the same difficulty not shared by the private sector institutions with which they might be compared. In higher education, the supply and demand of all sorts of activities (teaching undergraduates, performing research etc.) are both controlled by the Government, which sets targets, dictates prices and micro-manages. But the supply and demand are not set in conjunction with one another. Inevitably, the supply of cash is rarely adequate to the full cost of meeting the demand for activity.

46. Unlike private companies, universities do not have complete freedom to axe the loss-making parts of their businesses. If they did, then they would almost certainly close down the vast majority of their science departments. In chemistry and physics for example, detailed examination of the finances of a range of faculties has demonstrated that they are all losing money, and that their financial losses can be attributed to both teaching and research activities¹⁰.

47. Thus, there is little point in concentrating on criticising the universities for poor financial management unless there are to be changes that would give them the power to improve their performance.

Are some parts of the sector too reliant on income from overseas students?

48. Yes, and it is reasonable to ask if UK taxpayers are getting value for money when too high a proportion of the facilities they paid for and being devoted to educating and training students from competitor countries. The UK should be competing for business in the higher education sector, and should be proud of its record in attracting foreign students. But it cannot afford to rely on them.

THE STRUCTURE OF HE

Is the current structure of the HE sector appropriate and sustainable for the future?

49. No, the structure is essentially that which evolved when only a relatively small proportion of 19-yearolds went to university. It is not appropriate now is supposed to include half the population.

How well do structures and funding arrangements fit with "diversity of mission"?

50. Not well at all. The *only* mechanism through which universities can obtain significant sums of additional public money for being good at anything is the Research Assessment Exercise, which measures one specific kind of activity.

51. There is no similar route to recognition and investment for universities that are superb at internationally-competitive teaching, or which are brilliant at creating educational access for youngsters whose schools have let them down, or which expertly solve the problems of local businesses.

52. There is an underlying assumption that all universities are supposed to be achieving all the different goals of the sector.

Can, and should, the Government be attempting to shape the structure of the sector? Is the Government's role one of planning, steering, or allowing the market to operate? Should there be areas of Government planning within HE—eg for strategic subjects?

53. At the beginning of the 21st century, nobody would plan a higher education sector *ab initio* and create the one we have now. But we must start from where we are, and adapt the system we have for the future.

54. The diversity of mission that is arguably needed by the country and which is espoused by the sector may only be sustainable in the short to medium term if there is more explicit stratification. Much of this already exists in fact, even if it is not explicit, but it may well be advisable for it to be codified in revised institutional mission statements and funding mechanisms.

55. Given the number of universities and other institutions delivering higher education in a country as geographically small as the UK, resources are being spread very thinly, and there is no case for further expansion without appropriate consolidation and resourcing.

56. The Government spends billions of pounds of taxpayers' money on higher education each year, and the idea that it can simply absolve responsibility to "the market" is ridiculous when there is no way a proper market, with everyone free to do as they choose, could ever really operate. The market is, and will always be, rigged by the Government.

57. Recent debates about strategic subjects have been falsely polarised into the idea that any degree of central planning is tantamount to micromanagement of the universities. There is all the difference in the world between, on the one hand, a minister instructing an institution that it must keep open a struggling department and, on the other, a sensible assessment of national needs leading to appropriate incentives. The science community has been asking for the latter, but the Higher Education Funding Council has been pretending that the debate was about the former.

58. The Government should have a planning role in relation to important subjects and must steer changes to the sector. But in doing so, it must embrace the needs of the nation in general and of employers in particular. It must also recognise that students paying significant fees are customers and will act as such. They can only be drawn into studying particular subjects as a result of good school teaching, credible and timely advice, guidance and information and attractive employment opportunities. These would in themselves provide the one of the most secure methods of supporting strategic subjects. Coupled with a much fairer funding mechanism than currently exists, these things would obviate the need for government interference.

What levers are available to the Government and how effective are they?

59. The chief lever available to the Government is money—he who pays the piper calls the tune. The problem is that this can be a very clumsy lever. For example, the current funding arrangements have led to the closure of many science, engineering and related departments, but it is far from clear that this was the Government's intention. The problems are not simply a matter of demand from students.

Is there a clear goal for the future shape of the sector? Should there be one?

60. The only body that could have a "goal" for the whole sector is the Government on behalf of the electorate, so the question should be "Does the Government have a clear goal?" It may well do, and if so, it would be better to acknowledge this openly.

Is there a clear intention behind the balance of post-graduate and under-graduate international students being sought? Is this an area where the market should be managed? Can it be managed?

At present, there does not appear to be a clear intention behind the balance because all the pressure is for universities to attract as many international students as possible for financial reasons. It is probably impracticable (and possibly not even desirable) to manage the market across the entire sector, but it would be wise at least to monitor the situation and possibly act where there were problems, for example where there was a shortage of places and home students were at an unreasonable disadvantage. We believe that the University of Toronto Medical School, for example, offers only 7 places a year (out of over 200) to students who are neither citizens nor permanent residents of Canada.

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NOTES AND REFERENCES

¹ What teenagers think of science, London Metropolitan University, 2006.

² For some examples, see *The Observer*, 21 February 2006, p.31.

³ *Physics in schools and colleges,* The Gatsby Charitable Foundation, 2005.

⁴ Minutes of Evidence before the House of Lords Science & Technology Committee, 28 June 2006, *Science Teaching in Schools*, 10th Report of Session 2005–06, HL Paper 257, p.13.

⁵ Funding method for teaching from 2004–05: The Outcome of the Consultation, HEFCE, 2004 (HEFCE 2004–24).

⁶ Minutes of Evidence before the House of Commons Science & Technology Committee, 7 February 2005, *Strategic Science Provision in English Universities,* HC 220-II, Question 197.

⁷ In a letter dated 30 March 2006, which arrived on 10 May 2006.

⁸ A Vision for Research, RCUK, 2003.

⁹ OECD Science & Technology Statistics.

¹⁰ Study of the Finances of Physics Departments in English Universities, Institute of Physics, 2006; Study of the Costs of Chemistry Departments in UK Universities, Royal Society of Chemistry, 2005.

Memorandum submitted by the Careers Research and Advisory Centre (CRAC)

The Careers Research and Advisory Centre is an independent organisation which is dedicated to career development and active career-related learning. With over 40 years experience in the career development field, CRAC has a passionate belief that individuals have the ability to achieve their career goals if they are equipped with the skills to do so.

CRAC's strategic aims are:

- to encourage the structured growth of active and conscious career planning through collaboration and the promotion of good practice amongst educational institutions, employers and other stakeholders.
- to influence individuals' attitudes and motivations towards career development and learning to help them choose fulfilling career paths and make wise use of their talents and skills.
- to become a leading, national provider of innovation and expertise in careers knowledge, research and skills development.

CRAC works in partnership with schools, colleges, universities, government agencies and other key national organisations, ensuring that the work we do impacts as many individuals as possible, to achieve CRAC's vision of a society where individuals understand how to harness their strengths, develop their skills and make a positive contribution to their communities through employment.

CRAC's work involves:

- creating innovative training programmes for students, teachers, careers practitioners, graduates in employment and experienced managers
- delivering training on behalf of our clients ranging from one day events to week long residential activities
- devising and conduct relevant research, and effectively disseminate their findings
- producing interesting and professional conferences
- writing, publishing and disseminating reports, training resources and academic publications.

CRAC also hosts and manages the UK GRAD Programme on behalf of the UK Research Councils, and within this response takes into consideration the perspectives of both undergraduates and postgraduate researchers.

CRAC welcomes this opportunity to contribute to the discussion on the future sustainability of the higher education sector; in particular, to provide information and evidence to support the employability and career development for those engaged in higher education.

We have chosen to highlight postgraduate researchers particularly as an important, but often invisible, cohort in HEIs. Until recently there had been little focus on their employability and potential contribution to the UK economy and society. We would be pleased to provide additional information if you wish to know more about the work UK GRAD and the HE sector is doing in this area.

The Role of Universities Over the Next 5–10 Years

What do students want from universities? What should the student experience involve, including for international students?

In 2006, two major surveys³⁶ of undergraduate students found that well over two thirds of respondents cite the improvement of their job prospects as the primary reason for entering higher education. This is unsurprising; improvement of job prospects has long been a key reason for entering higher education, regardless of the funding situation, number of places available at HEIs, or the number of applicants to HE.

It is, however, surprising, given the change in funding arrangements and the greater personal financial commitment made by individuals entering HE, students have not become more specific about the type of career they are hoping to pursue. Approximately 20% of undergraduates specify that they have undertaken a specific degree course as it is a necessity for their chose career path—with a wide disparity between women (c. 25%) and men (c. 15%)³⁷.

As an organisation dedicated to career development and active, career-related learning, CRAC believes that the student experience should involve access to good quality, structured career development opportunities available from the careers service and academic departments, with coherent links between formal and informal learning. Some excellent practices already exist, and rather than re-inventing the wheel best practice should be disseminated.

However, in order to maximise the benefits for students, HEIs must work to a clear standard of career development provision. A key difficulty for employers of graduates is the lack of clarity between the differing "skills programmes" offered by individual HEIs, and often graduates are unable to articulate their achievements and skills outside of their academic qualifications. It is advised that best practice should include best national practices, including the work conducted by the National Council for Work Experience, the Careers Research and Advisory Centre and the European Framework for Work Experience partnership.

EUROPEAN FRAMEWORK FOR WORK EXPERIENCE

Objectives

This project developed a European standard for the assessment and accreditation of employability skills developed through paid/unpaid work experience undertaken by students whilst studying. The project's period of funding from both the Leonardo da Vinci and Joint Actions programme was November 2002—May 2006.

Specifically, the project team achieved the following:

- A review of existing work experience programmes, systems for assessment and accreditation, initiatives and good practice
- A "glossary" of transferable terminology relating to the development of work related skills
- A framework of best practice for work experience programmes for employers, practitioners and students which includes structured reflection, understanding and articulation of the value of work experience by students
- An agreed set of 12 work-related competencies for students
- An accredited work experience programme successfully piloted with 150 students from 5 European countries
- An International conference for 110 delegates agreeing a European Declaration on work experience
- A dedicated website at www.efwe.org

The primary target groups for the programme and materials are:

- All HE students who undertake paid/unpaid work experience whilst studying
- Employer organisations including SMEs

³⁶ The UK Graduate Careers Survey from High Fliers Research was based on interviews with 16,452 final-year students. Over two-thirds (68%) of respondents in the UK Graduate Careers Survey said their primary reason for going to university was to improve their job prospects. The 2006 Times Higher Education Supplement (THES)/Sodexho survey revealed that students regarded a university education as the route to a good career. The survey, based on a poll of 2,172 students at 112 UK universities, found that over seven in ten (72%) went to university in order to enhance their job opportunities, while six in ten said they opted for a degree education in order to earn potentially higher wages.

³⁷ Futuretrack 2005, Warwick IER and HECSU.

- Careers services and educational charities which help students in finding placements (paid and unpaid)
- Universities/Further Education organisations researching this area

EFWE helps to establish work experience as a basis to develop key skills and student employability, helping students to reflect on their work experience and to translate the skills they gain into sellable attributes. In addition, it can help employers, who continue to express that there is still a real need for evidence of the extra-curricular skills of students. EFWE is a result of this need for students/graduates entering employment directly from education to be able to evidence their employability skills to future employers.

EFWE also aims to work with key initiatives in partner countries and across Europe, such as the Europass scheme. This will create a coherent message concerning work experience, employability and its value for all stakeholders.

CRAC also supports the employability of postgraduate researchers (doctoral candidates) (PGRs) through the UK GRAD Programme. The majority of PGRs are undertaking a doctorate because they are very interested in research (82%) and almost half have strong expectations of careers in academia (45%).³⁸ However there is concern as to whether a research degree programme adequately prepares for a career in academia, or beyond.³⁹ The UK GRAD publication "What Do PhDs Do?", an analysis of the first destinations of PhD graduates, demonstrates that they are employed across all sectors. Where the PhD was traditionally an "apprenticeship" for academia, it is no longer a vocational qualification. Most universities now provide a programme of study for the PhD that acknowledges the broader employability issues. These recent developments have been recognised nationally by the Quality Assurance Agency revised code of practice for research degree programmes (2002).

UK GRAD works with all UK universities to embed the personal and professional skills to prepare researchers for academic practice and to improve their general employability.

THE UK GRAD PROGRAMME

The role of the UK GRAD Programme is to support the academic sector to embed personal and professional skills development into research degree programmes (RDP).

It operates through a national centre for excellence at Cambridge and eight regional Hubs located in universities, which support their local universities.

The UK GRAD vision is for all postgraduate researchers to be fully equipped and encouraged to complete their studies and to make a successful transition to their future careers. Doctoral researchers are our most talented: they have the potential to make a significant difference to the economic competitiveness of the UK. The UK GRAD Programme has a key role in enabling them to realise their potential.

To achieve this vision the UK GRAD Programme has four main objectives:

- raise the profile of the importance of personal and professional development in researcher training for all stakeholders.
- encourage the integration of, and opportunities for, personal and professional skills development in research degree programmes.
- encourage and share good practice within higher education institutions.
- as a national resource, continue to innovate, develop and provide exemplar ways of embedding personal and professional development and career management skills.

INTERNATIONAL STUDENTS

There are compelling arguments for HEIs to support equally career development for international students

Financially, UK HEIs are now dependent on international students. The UK remains the second most popular destination for international students, after the US, with over 300 000 students choosing to study at a UK higher education institution.⁴⁰ Almost 50% of all postgraduate students are international students. International students contributed approximately £3.1 billion to the UK economy in 2003 in tuition and other spending according to a British Council/UK Trade and Investment report. In 2004–05, non-EU domiciled students directly contributed £1.3 billion to UK HEIs—a figure representing almost 8% of total income. However, the market is threatened by several key factors, including price, cost of living in the UK and the growth of the higher education sectors outside of the UK—in particular, China, where the number of HEIs today stands at over 2000, second only to the US, and with over 16 million students China now has the world's largest higher education system.⁴¹ Financially, the UK cannot afford to lose its international students.

³⁸ Recruitment and retention of academic staff in higher education, 2005, NIESR.

³⁹ SET for Success: the supply of people with science, technology, engineering and mathematic skills, April 2002.

⁴⁰ Patterns of Higher Education Institutions in the UK: Sixth Report, September 2006, Universities UK.

⁴¹ Higher Education Crossing Borders, February 2006, UNESCO.

Along with this, although still perceived to provide high quality degree programmes, the UK is facing increased pressure to ensure it provides the level of employability demanded by international employers. China is again a good example: despite having experience of more practical degree programmes and of living in a different culture, it seems that simply studying outside of China is no longer sufficient guarantee of a graduate's skills to potential employers: a World HR Lab sample survey shows that 35% of returned overseas students have difficulty finding work back in China. Among those interviewed, it took 30% three months to find a job, and 15% are still jobless after five months of looking.

The Northern Consortium UK (of universities) is working with CRAC to provide a career development programme for international students comprising a series of twenty-one modules which cover key competencies such as communication, leadership and team working along with "harder" skills areas including cross-cultural working, business awareness, interview skills and participating in assessment centres. The programme will be delivered by NCUK to Chinese students in the first instance across their higher education career, commencing at pre-entry to the UK and ending in the final year of the degree course.

CRAC and NCUK believe that the Career Development Programme will achieve the dual aims of supporting Chinese graduates in the competitive job market back in China—and internationally—and provide the added value to the UK degree which will continue to entice Chinese students to study at UK HEIs.

International doctoral researchers are critical to the economic health of UK HEIs. Approximately a third of registered PGRs are non-UK domiciled. However, competition for these researchers is increasing. Other European countries are providing similar PhD programme in English, with the added advantage of not charging fees. More developing countries are now providing internal PhD programmes for their students. If the UK is to sustain its position as an attractive location for international PhD researchers it will need to offer a more attractive package, including opportunities for these researchers to improve their employability and understanding of local employment markets.

What do employers want from graduates? Skills base, applied research, links with industry?

CRAC is a membership organisation with almost 200 graduate employers and employer organisations within its membership network. As part of the European Framework for Work Experience, CRAC conducted research to find out from employers their perceptions of the skills levels of graduates compared to their expectations of graduates. 100 UK employers took part in the research, along with 400 others from Germany, Romania, Finland and Spain.

The core skill areas employers identified were:

- problem solving.
- customer awareness.
- influencing and negotiating.
- time management.
- written and verbal communication.
- leadership.
- teamworking.
- ability to manage self-development.
- numerical aptitude.
- managing change.
- networking.
- information technology.

In the UK, the greatest disparities between expectation and reality were in customer awareness, written and verbal communication and teamworking—the latter two of which are a basic expectation of graduates, even those who have not taken part in extra-curricular activities. This finding is in line with the regular feedback from recruiters who state that graduates are unable to articulate their skills and abilities well during the application process.

It is undeniable that the increase in graduates has made it more difficult for "graduate recruiters" to distinguish between one 2.1 and another; now more than ever employers have an expectation of both an excellent academic record and evidence of extra-curricular learning which will contribute to their ability to function in the workplace. Few of these recruiters will state that an academic record alone is enough to gain a place with their company.

In particular, recruiters are keen to see graduates with an element of work experience not simply for evidence of skill development, but also for the more general reason that they have some experience of the "real" workplace and an awareness of the business world.

It must be noted that "graduate jobs" with "graduate recruiters" make up only approximately 15% of the jobs on offer to graduates; these are the bigger and often global organisations which target specific campuses and degree disciplines and provide a structured training programme for graduates. Often their needs are quoted as being representative of all recruiters of graduates simply because they attract more attention in the media, and have more access to representation.

For many HEIs it is difficult to attract such employers to their campuses, as much emphasis is still placed on high achievement in traditional A Levels, and for these employers the return on investment of their marketing campaigns is much greater when they target those HEIs with higher entry criteria. Some forwardthinking HEIs work extremely well with local, smaller employers who tend to prioritise a certain skill or vocational qualification over more generalised skills. In terms of engaging the broader employer market, the government should look to the Campaign for Mainstream Universities group for examples of good practice in this field.

What should the Government, and society more broadly, want from HE?

- a stable, internationally competitive, HE sector?
- internationally-competitive research capacity?
- graduates appropriate for a high-skill economy?
- widening participation, contribution to social mobility?
- a much greater level of engagement with schools?
- engagement in society and democratic debate, and producing active citizens?

Higher education can and should contribute to all of the agendas above, as well as provide employment opportunities, staff and student volunteers to contribute to the local community and other significant, positive impacts on the local economy.

Focusing on the issue of "graduates appropriate for a high-skill economy", it is vital for HEIs to recognise that they should provide a platform for their students to develop attributes that will support their personal development and their future careers—in whichever field—thus enabling them to function usefully in a high-skill economy. The argument that a degree is the culmination of a successful pursuit of knowledge is out of date. The Roberts Review⁴² in its recommendations for PhD training, stated:

... in order to assure employers of the quality of PhD students ... the Review believes that HEIs must encourage PhD projects that test or develop the creativity prized by employers.

The recommendations of the Roberts Review were welcomed by the higher education sector, acknowledged by the government and broadly implemented; it would be logical, given that 63% of first degree holders move directly into full time employment,⁴³ that the undergraduate degree should also allow opportunities to test or develop skills prized by employers.

The phrase "a degree is no longer enough" is often coined by employers seeking to encourage potential applicants to engage in broader, skill-enhancing pursuits during their time in higher education—but why?

It is generally accepted that employers seek evidence of extra-curricular skills development through volunteering, part-time work, work experience or engagement in student clubs and societies, as there is a strong belief that these are more likely to provide opportunities for students to develop workplace skills than a degree currently would. Careers services, students' unions and even some academic departments have made efforts to provide a form of "additional currency" for graduates to use as evidence of the development of such skills during the application and recruitment processes; localised efforts, however, hold little real currency for employers and it is a student's ability to communicate their skills and attributes which remains valuable, not the "add-on" accreditation. (It remains true also that a number of larger employers of graduates focus solely on recruiting from the Russell Group of universities, regardless of the quality of "add-on" accreditation modules from other universities.)

But if a degree becomes a mark of attaining a certain level of knowledge and skill, and enabled its holder to articulate this, then higher education would fulfil many of the needs stated within the original question— and attract a broader range of participants, encouraging social mobility.

This is equally applicable to PGRs. The process of undertaking a research degree requires researchers to develop a range of additional competencies and attributes that differentiates them from graduates. However, many PhD researchers are unaware of their skills and are unable to articulate them to potential employers. At its outset, UK GRAD, working with the sector and the research councils, created a statement of the skills and attributes that postgraduate researchers will have developed by the end of their PhD programme.⁴⁴ This statement has proved to be a pivotal document in supporting HEIs to develop their research degree programmes, to raise the awareness of researchers of their skills and to work with employers to increase their understanding of the value of PhD graduates.

⁴² SET for Success: the supply of people with science, technology, engineering and mathematic skills, April 2002.

⁴³ What Do Graduates Do 2007, Graduate Prospects (using HESA First Destinations data for 2004–2005 graduates).

⁴⁴ The Research Councils Joint Statement of skills training requirements for postgraduate researchers, 2001, www.grad.ac.uk/jss

That our universities have internationally-competitive research capacity is critical to the success of the UK as a knowledge economy.⁴⁵ Our PGRs are the next generation, needed to sustain our academic base. However, despite the apparent health in numbers of PGRs, much of the recent growth has come through international registrations. UK-domiciled PhD researcher numbers are flat, if not falling, in some disciplines. It is critical that the UK makes the option of research and undertaking a PhD more appealing to students and research careers more attractive, particularly in the academic sector. Increasing student debt, poor working and social conditions for post-doctoral researchers and poor career prospects within academia all serve to deter students from undertaking a research degree.

UK GRAD is working with RCUK and the HE sector to improve the quality of postgraduate research degree programmes, demonstrate the employability of PhD graduates and improve their career management skills.

UNIVERSITY FUNDING

What should the Government be funding in HE and by what means? Should central funding be used as a lever to achieve government policy aims?

As indicated above, recruiters seek a high level of employability from their graduates and it is clear that higher education institutions must play a role in nurturing such skills during any type of degree programme. Higher skilled workers will improve the productivity of the UK workforce and the prosperity of UK society, allowing the UK to hold its position at the forefront of the global economy.

Recent Government funding of employability initiatives for postgraduate researchers the "Roberts Agenda" have been welcomed by the higher education community, and much has already been achieved within the first three years of funding.

To encourage universities to address the skills acquired by PhD students, and to ensure they are relevant to business, the Government expects all universities to meet high quality minimum training standards on their PhD programmes, and agrees that all funding from HEFCE and the Research Councils in respect of PhD students should be made conditional on meeting these standards. The Government has also provided additional funding to the Research Councils in the Spending Review to enable enhanced training for their students, as recommended in the Roberts Report.⁴⁶

Following the Government's response to the Roberts Review, HEIs received an additional £20 million per annum,⁴⁷ ring-fenced for postgraduate researcher career development and training, on which HEIs must report separately. The UK GRAD Programme has proven to be a successful model in leveraging this funding to best effect, by encouraging the sharing of good practice, delivering training innovation within this field and facilitating the relationship between HEIs and the UK Research Councils, the Government and other key bodies.

Currently it is too early to evaluate the impact of this funding on the employability of researchers and impact on the economy, but it is clear from the UK GRAD Programme's Database of Practice⁴⁸ that the HE sector is working hard to achieve the aims of the Roberts Review; approximately 450 entries of HEI practice have been posted on the database since its launch in October 2005.

It is clear that a similar amount per head would be unachievable for undergraduates (circa £1 billion per annum), but some central investment must be made in graduate employability to ensure that current and future first degree students leave higher education with the capacity to function in a high-skill economy. This could take the form of ring-fenced funding direct to HEIs—on which HEIs should report separately—or a combination of ring-fenced funding and a central co-ordinating and supporting body, as is the case with postgraduate researchers.

THE STRUCTURE OF THE HE SECTOR

- Is the current structure of the HE sector appropriate and sustainable for the future?
- Is the current structure and funding affecting growth of HE in FE and part-time study?
- How important are HE in FE and flexible learning to the future of HE? Would this part of the sector grow faster under different structure and funding arrangements?
- Can, and should, the government be attempting to shape the structure of the sector?

The remit of the Leitch Review of Skills (December 2006) was to focus on adult skills, for the reason that 70% of the 2020 working age population have already left compulsory education and the flow of young people will reduce. Its recommendations included an extension of Train to Gain to higher level

⁴⁵ Facing the challenge: the Lisbon Strategy for growth and employment, Wim Kok, November 2004. http://ec.europa.eu/ education/policies/2010/doc/kok_en.pdf

⁴⁶ Investing in Innovation: A Strategy for Science, Engineering and Technology, Annex A: The Government's Response to the Roberts Review, Spending Review 2002, HM Treasury.

⁴⁷ c. £800 per head per annum of the degree programme for RC-funded researchers.

⁴⁸ www.grad.ac.uk/practice.

qualifications, improved engagement between employers and universities and an increase in co-funded workplace degrees. There is already some activity on the higher level Train to Gain initiative and HEFCE has recently released its Employer Engagement Strategy for consultation amongst employers.

It is clear that Further Education Colleges are important and vital providers of Higher Education, particularly to part time, adult learners, many of whom are in work. Given the level of employer-supported (either through financial support or support for learning time), FECs' role as equal but different providers of HE must be taken into account by any employer engagement strategy, as well as by any review of the broader higher education sector.

Recent government strategies to focus funding on 16–19 learners have led to a modest rise in the numbers of young people leaving education with basic skills, but have also resulted in a drastic reduction in the number of adult learners enrolling in certain forms of learning. Alongside this are the emerging diplomas, through which it is hoped that vocational learning achieves a parity of esteem as well as to make a significant contribution in key areas of skill shortages. With this in mind, the sustainability of the HE sector must consider the clarity of progression routes, through both FECs and HEIs, for learners of all ages.

December 2006

Memorandum submitted by the City and Guilds of London Institute

EXECUTIVE SUMMARY

The evidence presented is from the City & Guilds of London Institute and explains the Higher Education Qualifications it awards. Their purpose in providing parallel and linked qualifications largely on a part time basis to traditional University delivered qualifications. It raises the key issues of the funding for these qualifications and that that this needs to be made much more easily accessible and assured.

1.1 FACTUAL INFORMATION

City & Guilds of London Institute are keen to respond to this House of Commons Education and Skills Committee Inquiry into Higher Education as we believe that the work based model of Higher Level Qualifications that we have developed provides parallel pathways to connect with the University/Higher Education system as well as potentially adding value to the University Higher Education system; but these pathways do require proper funding and recognition for them to be both successful and sustainable.

1.2 Over the past five years City & Guilds have developed a range of Higher Professional Diploma qualifications focussed on Level 4 of the National Qualifications Framework—equivalent to the first year of a degree. These are described in Appendix 1.⁴⁹ These qualifications provide a developmental pathway for the 110,000 City & Guilds candidates who achieve a Level 3 qualification each year and also give them potential to move onto the second year/stage of a Foundation Degree.

They are aimed principally at part time in work candidates but can be run as full time programmes so long as significant work experience is provided. This is because the HPDs are structured as 120 credit qualifications across a significant range of vocational subject areas illustrated in Appendix 2.

1.3 The key issue for increasing the take up of these qualifications is that of a clearly defined source of funding.

They have been accredited by QCA which means that they are fundable but still come within the "nonprescribed HE" area and so funding is not assured for centres. There are promises in the FE White Paper that such defined sources will be forthcoming and it is vitally important that this occurs soon. We would be keen for the Committee to support and endorse this development. It would also greatly aid the Leitch Report's emphasis on the need for greater acquisition of higher level skills if the UK is to develop its competitive edge worldwide in the next 15 years.

1.4 What these qualifications also provide is a way of giving recognition to the first year of Vocational Foundation Degrees and Degrees. This model is explored in Appendix 3 (article for Foundation Degree Forward Magazine). The attraction of giving recognition to students on HE programmes at Level 4 is likely to increase as tuition fees kick into the HE system and students and parents increasingly ask what outcomes they are achieving from the programmes they are now having a financial, consumer interest in and "shopper" focus.

1.5 The Master Professional Diplomas have been developed to provide a Masters Level Qualification that again can be achieved part time and whilst at work and could equate to 90 -120M credits (half or two thirds of a Masters programme). The same issues of assured funding to encourage and increase take up also apply to these QCA accredited qualifications. Again they can be a valuable qualification in their own right or a pathway to a Master's Degree.

⁴⁹ Appendices are not printed.

1.6 As well as these focused qualifications we also have Senior Awards which derive from the Royal Charter that City & Guilds has held since 1900. These provide a mechanism for gaining recognition of professional development through the award of Licentiateship, Graduateship and Membership—LCGI, GCGI, MCGI, designatory letters. A number of Universities (Appendix 4) use these to give added value recognition to undergraduates completing work experience as part of their programmes. There are also a variety of other organisations that use these programmes to give higher level recognition to staff of softer skills and in-house training at a variety of levels (Appendix 5).

1.7 As well as this recognition process through Delegated Authorities, City & Guilds has systems to enable individual candidates to put themselves forward for recognition through completion of a portfolio or a project for which advisers and assessors can be provided directly to the candidates (see Appendix 6 for information on Senior Awards and Appendix 7 for Delegated Authority information.

1.8 Sometimes organisations pay for staff to acquire this recognition, occasionally there are sources of funding as in the armed forces that individuals can use. However, some assured source of funding to encourage take up of these Continuous Professional Development recognition routes would enable take up, participation and engagement.

1.9 As well as these broad offerings covering most Sectors and specialisms of higher level qualifications and recognition, we do run a specialist pathway in Engineering in conjunction with EC/UK—the Engineering Council Exams (see Appendix 8, please note this is only available in hard copy). These provide an alternative part-time route to gaining Engineering Technician, Incorporated Engineer and Chartered Member status with British and other country Engineering Institutions by providing an examinable pathway that can be engaged in part-time and parallels the established undergraduate/postgraduate Degree pathways. Again these exams have been accredited by QCA as fundable but assured funding is needed if Colleges are to run courses leading to these qualifications.

2.1 Recommendations for Action

We believe we have developed a model of Higher Education progression for those largely in work which can connect with and dovetail to traditional university delivered HE qualifications. The key requirement for greater involvement by individuals and employers is clearly designated and easily accessed funding. It is in this area that we believe the Committee needs to focus some important attention and make key recommendations to support growth of the part time, in work, HE provision that City and Guilds has now successfully developed.

December 2006

Memorandum submitted by the CMU Universities Group

INTRODUCTION

1. CMU represents over 30 universities (referred to as modern universities in this submission) with a commitment to and a record of success in widening participation and promoting excellence in teaching, research and innovation.

BACKGROUND

2. Modern universities are based on institutions which have provided professional and other education, often in highly specialized disciplines for over a hundred years. Some modern universities have been education providers since the early to mid 19th century. The majority became independent corporations in 1988 and achieved teaching and research degree-awarding powers and their right to university title as a result of the Further and Higher Education Act of 1992. In fact by 1992, these institutions were teaching as many undergraduates as institutions already awarded university title. In one sense to describe these universities as "modern" or the "new" universities is something of a misnomer. They have long-standing records as institutions and have continued their commitment to access, "studenticentredness" and flexible provision following their award of university title—a fact reflected currently in their inclusive student profiles.

PROMOTING THE VALUE AND ROLE OF ALL UNIVERSITIES

3. The 1992 Act ended the binary divide, ensured quality, capacity for expansion of undergraduate and postgraduate students and delivered for students and staff, institutional recognition. A decade later, Kenneth Clarke MP was quoted in the Times Higher Educational Supplement (28 June 2002) as stating that "the ending of the binary divide was an obvious step to take . . . the polytechnics would have been described

as universities in any other country in the world".⁵⁰ In the event, public policy statements, funding regimes, the media portrayal of "new" universities and the factors used to determine the university League Tables (all Tables are constructs of newspapers and not the Government), have not always endorsed this view. All too often, "excellence" has been and continues to be deployed only to describe those universities which have been historically funded to compete in terms of international and world-class research. The sustainability of the higher education sector will depend on narrow descriptions of excellence being challenged and the values which currently inform public funding regimes being amended.

4. All British universities and higher education institutions are subject to rigorous quality assurance arrangements and regulation by professional bodies where course programmes require it. For students entering Year 11 in 2007 and considering applying to university for entry in 2009, the binary divide is something to be read about in histories of education. Moreover, as Robbins and subsequent Governments recognised, wider access to and "mass-participation" in higher education (to use the Committee's own current terms of reference) could not be delivered by a small number of universities nor can Britain compete internationally in higher education provision on the basis of a small number of research-intensive institutions.

5. The future sustainability of British higher education is therefore dependent not only on funding regimes but also on the political and public endorsement of the contribution of all universities—an endorsement that in value terms needs to be promoted not only by DfES but also by HMT, OSI and other Government departments.

6. It would be useful for the Committee to consider how Government might further take a lead in promoting to all stakeholders, including business and industry, the value and contribution of all publicly funded universities and their students. The sustainability of the sector relies on it and students (the majority of whom have attended or will attend universities other than the research-intensive institutions) deserve it.

LEAGUE TABLES

7. Many stakeholders and indeed students do not realise that the university League Tables are not produced by or based on DfES / Government guidelines. As Professor Roger Brown has asserted "The main purpose of league tables is to sell newspapers. Whilst we don't know how much Times Newspapers Ltd makes (or used to make) from its league tables, we do know that its American equivalent—America's Best Colleges—is a considerable money spinner for its publisher US News and World Reports. League tables are big, or at least healthy, business".⁵¹

8. The point is often made (for example by Yorke and Longden, 2005) that the league tables reflect the value judgements of those who compile them. This is an understatement. The other main purpose of league tables is to promote a particular kind of higher education as being intrinsically superior: "the kind of higher education provided by those institutions that regularly appear in the higher positions. As a corollary, the education offered by institutions that do not rank highly is devalued".⁵²

9. The newspaper League Tables continue to value factors largely determined by research and RAE income. They are neither a transparent nor an equitable means of promoting the value of British universities. The tables are closely (although unsurprisingly) linked to institutional prosperity rather than student or staff success. However, they are influential with employers and in domestic and international markets and they lend credence to a mission and funding model which applies to only a small number of institutions. The Committee is asked to consider the merit of the Government at least modifying the effects of the press League Tables with its own analysis.

MODERN UNIVERSITIES—FIT FOR PURPOSE

Responding to stakeholders

10. Modern universities have long-standing records at local, regional and national level of responding to student, employer, Government and market demand, matching the challenges of social and industrial change with higher education provision. In many cases, these universities are the drivers of regional regeneration providing new avenues in areas which have experienced the decline of long-standing industries eg in Sunderland and Teesside but also responding to new requirements eg graduate programmes in nursing, midwifery and the professions allied to medicine, children's and adult services and teacher training—all disciplines in which modern universities have taken the lead. Modern universities have responded to new markets and ventures eg biotechnology, computer games, have led the way in the development of applied science departments eg London Metropolitan, UCLan and have significant arts, humanities and social science provision.

⁵⁰ "The new university decade 1992–2002", David Watson & Rachel Bowden, 2002, p. 13.

⁵¹ Annual league tables are published by The Times, The Sunday Times, The Guardian, The Daily Telegraph, the Times Higher Education Supplement, also America's Best Colleges and the Australian Good Universities Guides.

⁵² "League Tables—do we have to live with them?" Prof Roger Brown, *Perspective*, 30 June 2006.

Employer Engagement

11. Modern universities are already delivering in the important area of employer engagement in both the private and public sectors and will respond to any new Government initiatives. However, the latter must be based on the employment needs of the learner (with progression) and not just on the workforce needs of the employer, is not necessarily a cheap option and must be both incentivesed and sustainable in funding terms. An agreed objective must also be that any additional employer engagement should avoid substitution of funds that the employer would have spent anyway, including on the funding at full economic cost of the many courses already agreed with and provided for employers by modern universities. Crucially, initiatives in employer engagement should not substitute for fully funded growth and the full funding of the costs of widening participation to which we refer later.

NHS-funded programmes

12. Employer engagement and workforce development are not without their risks for higher education institutions. This has been demonstrated in particular by the 25% cut in MPET funds for nursing, midwifery and professions allied to medicine courses implemented by the Department of Health in 2006–07 and applied in different degrees by Strategic Health Authorities. Modern universities which have led this provision have faced (and continue to face) flooring of contracts with minimum notice in respect of programmes that also require professional body accreditation and associated staff-student ratios. Thus, lack of coherence in planning and / or inadequate notice of amended employer workforce requirements, including in the public sector, can pose significant financial and strategic risks for modern universities with diverse funding streams.

Collaboration with other education provider in Britain and internationally

13. Modern universities have been in the forefront of working collaboratively with other education providers in the UK including schools but also further education colleges. Some HEIs have progressed mergers with the latter eg Thames Valley University and Reading College (wef January 2004) and modern universities have been in the forefront of working to ensure the quality delivery of foundation degree programmes, both directly and also in collaboration with further education colleges.

14. Modern universities have spearheaded international partnerships and recruitment, established campuses overseas, provided flexible opportunities through e-learning for domestic and international students and are key contributors to UK exports and trade in higher education (estimated to be a total contribution to the economy of £2.9 billion of GDP out of a total of £1,044.1 billion in the year 2003).⁵³

They are also involved in initiatives and collaborations with institutions in developing countries.

15. Accordingly by history and current activity, modern universities are well placed to respond to the need for:

- a dynamic and responsive higher education sector.
- the deepening of access and widening of participation in higher education.
- an increasingly graduate workforce with life-long and flexible access to higher education.
- a dynamic research base including applied research.
- expansion of knowledge transfer activities.
- the promotion of learner progression based on the employability needs of students.
- collaboration with other education providers and employers.
- a British higher education sector that is attractive and can meet the challenges of the international market.
- a British higher education sector that continues to contribute to education and civic development in developing countries.

16. Modern universities are successfully involved in all of these activities. The extent to which they will be enabled to do so in the next decade will be dependent upon public policy and Government funding models that incentivise their contribution and support student participation. We believe that this should be a key focus of the Committee's Inquiry.

Student profile

17. CMU Member Universities have their own diversity. As institutions, many are former polytechnics but others have backgrounds in religious foundations eg Roehampton and Gloucestershire. Some member institutions were awarded university title more recently eg Northampton. They have been united by a common consensus about the role of a university, the principle that access to higher education should be a right and not a privilege and that students themselves should be entitled to equity of resource wherever they choose to study.

⁵³ Parliamentary Answer, Stephen Timms MP, 17 Jan 2005.

- 18. In summary, CMU universities have characterized themselves as:
 - creative and lively learning environments where students come first
 - committed to relevant research
 - socially and culturally inclusive
 - innovative and responsive

19. In terms of student profile, CMU member universities dominate the top 20 universities for intake by socio-economic groups 4, 5, 6 and 7, low-participation neighbourhoods, admission from state schools and ethnic inclusivity (Appendix A). It should be noted that the first two criteria are particularly relevant to widening participation, bearing in mind that admission from state schools while significant, is not indicative per se of first generation university students or social class.

20. In addition, modern universities have approximately the same number in total of part-time students as the Open University. Part-time students now comprise between 42 and 45% of the total student cohort. Part-time students are frequently also mature students and in modern universities, a significant number of part-time students fall into the widening participation cohort. The average age for full and part-time students in modern universities is the mid-twenties.

Adjusting funding to match the student profile

21. Notwithstanding this student profile, institutional funding models continue to reflect a student profile which is full-time and "constant" ie students who "seamlessly" complete a degree programme. It is crucial therefore that funding policies are adjusted to reflect and take account of the institutional and administrative costs of supporting and educating students who themselves take risks to fulfill personal aspirations, who access higher education with non-traditional qualifications, may need to switch between modes of study (eg full-time to part-time), will currently face differing student support regimes and may have significant family or care commitments.

Inequity in institutional funding

22. The more inclusive student profile of modern universities is one of the sector's and Britain's most important assets. It is therefore particularly ironic that institutional public funding regimes have failed not only to reflect the student profile of modern universities but also to maintain equity of value between teaching and research in spite of the support of previous and the current governments for expansion and widening participation.

23. We raise specific issues in relation to institutional funding in the following paragraphs. It would be helpful if the Committee could consider inequities in institutional funding further.

The Role of Universities: Teaching and Research

24. It is important to emphasis that the success of modern universities has been predicated on the principle that universities deliver teaching and research. We see no merit for students, employers or for the UK in public policy deviating from this principle notwithstanding the discriminatory effects for students and institutions of current research funding models. Policy approaches which have the effect of "siloing" some universities into teaching, research or knowledge transfer institutions fundamentally misunderstand the interaction between these activities and will have the effect of limiting capacity, including the capacity of modern universities (their staff, students and graduates) to contribute to the success of the UK economy.

25. As indicated by the activities of modern universities previously outlined, the acceptance of this principle ie the inter-relationship between teaching and research and the role of universities in society, does not detract from universities as institutions being "outward-facing" or engaged in other related activities to differing extents—nor does it presume that all universities will or should be funded to compete internationally in terms of research.

26. A "silo" approach to universities' missions also runs the risk of undermining the potential of UK higher education to trade on a global basis. Partner institutions and international as well as domestic students recognise and value teaching, research capacity and applied research. The link between research infrastructure, the delivery of applied research capacity, informed teaching and international engagement of higher education needs to be better understood and specifically promoted in public policy and investment.

27. All definitions of the role of universities from Socrates, Newman, John Stewart Mill to the Magna Carta Universitatum which underpins the Bologna Declaration rely on the concept of curiosity driven teaching and research and the principle that all universities and their students should be able to engage in education, questioning, be open to new ideas and "not succumb to orthodoxies of the day".

- 28. The Magna Carta Universitatum to which British universities subscribe states that:
 - The university is an autonomous institution at the heart of societies differently organised; it produces, examines, appraises and hands down culture by research and teaching. To meet the needs of the world around it, its research and teaching must be morally and intellectually independent of all political authority and economic power.
 - Teaching and research in universities must be inseparable if their tuition is not to lag behind changing needs, the demands of society and advances in scientific knowledge.
 - Freedom in research and training is the fundamental principle of university life, and governments and universities, each as far as in them lies, must ensure respect for this fundamental requirement.

29. We would encourage the Committee to:

- endorse this definition as the underpinning principle of British higher education policy for the next decade.
- examine the funding and related policies required to secure this principle in the context of the dynamic and responsive and expanded sector that is required.

The Role of Universities and Research Funding

30. One of the most significant factors determining the differentials in institutional funding and the student resource available in different universities, has arisen as a result of the distribution of research funding made available through the Science and Innovation Budget and in particular, through the Research Assessment Exercise (RAE).

31. The much higher levels of Government investment in research and development since 2004 have been welcomed by CMU but assumptions behind the Government's strategy continue to give rise for concern. The Government's strategy can be summarised as seeking to:

- increase the level of funding substantially, especially for science research.
- concentrate HEFCE (Higher Education Funding Council for England) research funding (RAE) in fewer universities (strictly speaking in fewer "departments") in the belief that this will enable a few universities to be ranked close to "the world's best" like Harvard and Yale.
- ensure that university research remains sustainable by ensuring that research projects are funded to cover their full costs (although for any given level of funding this implies fewer projects, thereby leading to further concentration).

32. It can be argued that the Government has sought to buttress this strategy by questioning the existence of a link between research and teaching quality, removing research performance and research degree awarding powers from the criteria for university title and providing some compensating streams of funding through HEIF (the Higher Education Innovation Fund) to universities that do not get significant research funding. In fact, the distribution of the latter (£150 million), while important, has continued to benefit research-intensive institutions.

33. CMU submitted a paper to the Higher Education Research Forum in July 2004⁵⁴ which suggested that a number of assumptions behind the science and investment strategy needed to be tested.

34. Accordingly, the Committee may also wish to consider the following questions in its consideration of investment and funding strategies:

- Could extra funding for research based on the current system of distribution, simply lead to high cost (for teaching and research staff and facilities) with no significant increase in output or quality?
- Will concentration (of research funding) reduce competition?
- Is the gap between Oxbridge and Harvard realistically bridgeable and would the cost of trying to bridge the gap be excessive for a country the size of the UK?
- Given that research-intensive universities concentrate on "blue sky" research, has and will concentration crowd out the more directly applicable business and policy research done by other universities?

35. While there has always been concentration of funding in research intensive universities, considerable emphasis has hitherto been placed on the essential need to build research capacity and performance in all universities. For the first time, the degree of concentration being implemented threatens to reverse decades of successful capacity building right across the UK higher education sector for both advanced teaching and research.

36. Further questions for the Committee to consider include:

What assessment has been undertaken of the effect upon the future volume and quality of UK research through high levels of concentration?

⁵⁴ "Public Funding of Research in Universities", Prof M. Driscoll (CMU), July 2004.

- If there is no link between teaching and research, why fund universities to do research? Why not simply set up independent research organisations?
- What effect will increased concentration have upon UK institutional capacity to compete in the international market?
- What effect will increased concentration have upon student resources and institutional research infrastructure (both staff and facilities)?

37. The development of knowledge in all areas of the university curriculum is moving faster and faster and the need for the curriculum to be informed by the latest research is growing. Accordingly, an active policy of building and reinforcing the links between teaching and research could give UK universities a competitive lead in the world higher education market. Failure to do this may mean that subjects which are generally not taught in research-intensive universities (eg nursing, art and design) will be excluded from benefiting from the strong research-teaching link found in such areas as medicine.

38. CMU's paper also raised questions about the effects of "over"-concentration on hard science and the lack of incentives for collaboration, noting that while "few would question the desirability of increasing funding for science research in universitiesmany of the challenges faced by modern societies and many of the opportunities available to the UK economy are not associated with the hard sciences. There is considerable need to build our understanding of society, communities and social problems in order to inform policy in a wide range of areas that affect the quality of life and promote social cohesion. (For example), one of the great strengths of the UK economy is its cultural industries—an area that has been neglected in research funding . . . Distribution of research funding by subject (should) be driven by a well informed understanding of the needs of the economy and society and (should) not continue to be driven merely by the historical patterns of research described by the RAE".

39. On collaboration, CMU stated that "a large part of the research done in universities is not "hard science" research and does not require the high levels of infrastructure investment" (though even in the arts the use of specialist IT equipment is growing). In most areas the case for enforced or coordinated collaboration is less clear and the benefit of competition between universities is perhaps greater.

40. Nevertheless a framework of support and a funding system which encourages pooling of effort and the sharing of new ideas across the sector may be beneficial. In the arts, humanities, social science, business and management and the non-experimental human and physical sciences the establishment of national centres like the NBER (National Bureau for Economic Research) and others in the US or the CNRS in France, may provide a useful model of collaboration. Such centres could, at a regional or national level, bring together physically and virtually the best researchers from right across the country regardless of which university they teach in. Such centres need not have any permanent research staff but could recruit university teachers seconded full-time or part-time for say, one semester up to, say 5 years.

41. On the proposition that universities are "overtrading" and the present volume of research activity is not sustainable, CMU argued that further concentration of funding would result in "less research at a higher cost" and argued for "a dynamic research sector that would allow universities which are able to deliver value for money (lower direct costs and overhead costs) to compete for research project funding".

Research in Modern Universities

42. The social and economic impact of research in 35 Universities (primarily but not exclusively CMU Members) was assessed in an independent survey undertaken by the international consultancy firm, Arthur D. Little (ADL) and published in May 2006.⁵⁵ The Arthur D Little report concluded that:

"The research base of institutions of the type broadly represented by the Participating Universities (PUs) represents an important, distinct and valuable component of the wider UK research base. It is a component which, while smaller than that of the research-intensives, adds to the diversity, accessibility and knowledge transfer capability of UK higher education. It is in many respects complementary, not merely additional, to the work of the research-intensive universities.

Building on a modest investment in research from the funding councils and the research councils, the Participating Universities attract very substantial additional contract research from a diverse range of customers. The scale of this leverage effect, compared to that at other universities, is striking. It is over two and half times as great as for other Higher Education Institutions (HEIs) with respect to contract research from UK public bodies; over twice as great with respect to UK industry; and four times as great with respect to EU funding."

43. The ADL report highlighted the strong role played by modern universities in "supporting the regional regeneration and economic development agendas . . . the physical location of many of the Universities in urban areas where there are no research-intensive Higher Education Institutions (HEIs) enables them to make a contribution, within a local and regional context, that would not be otherwise provided. (These) Universities play an important role in helping to ensure the necessary skills supply, both of graduates trained through specific research experience, and of those whose undergraduate teaching has benefited from being undertaken in an institution with a vibrant research community able to attract high quality academic staff."

55 "A report into the social and economic impact of publicly funded research in 35 universities", Arthur D Little Ltd, May 2006.

44. The report further concluded that modern universities used "a modest publicly funded research base to attract very substantial additional contract research from a diverse range of customers" with a significantly greater multiplier effect (Table 1):

Table 1

FUNDING COUNCIL INVESTMENT TO PUS,* RUSSELL GROUP AND 1994 GROUP HEIS

	Funding Council Investment	<i>"Multiplier"</i> ⁵⁶
Russell Group	£794,647,255	1.77
1994 Group	£195,205,139	1.18
PUs*	£57,135,924	3.03

Source: HESA.

* the 35 Participating Universities in the research project.

45. Figure 1 shows the breakdown of research income into the standard categories used by the Higher Education Statistical Agency (HESA) as proportions of the total. The Research Council grant funding accounts for a much smaller proportion of research and contract income for modern universities than for other HEIs, reflecting the largely applied emphasis of their research portfolios.

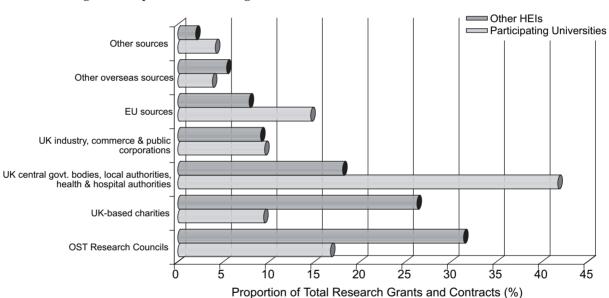


Figure 1: Proportion of research grant and contract income in PU and other HEIs

Applied research and research contracts in modern universities

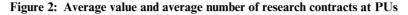
46. The Arthur D. Little Report concluded that:

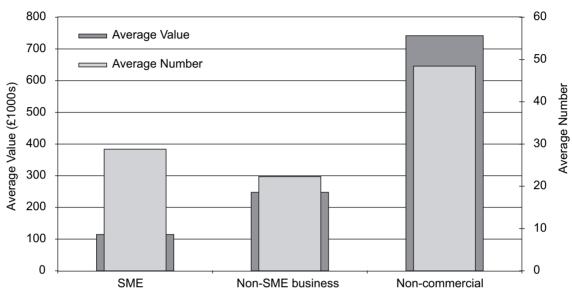
"in the public and private sectors, much research is commissioned (from modern universities), initially at least, for the customer's internal purposes. This means that in many instances researchers are precluded from publishing the results of their research in peer-reviewed academic journals and elsewhere because of undertakings of confidentiality—commercial and otherwise. This can result in these Universities attracting less attention and winning less esteem for their research than they might merit. In addition, much of the research carried out . . . is "applied" and the outputs of such research can take unconventional forms which do not lend themselves to traditional peer-review forms of academic audit."

- 47. These Universities were also found to:
 - be highly effective in attracting EU funding to UK
 - have research relationships with multinational and national industries as well as small and medium-sized enterprises (SMEs)
 - be particularly well placed to provide the necessary research base for emerging industries

⁵⁶ The "multiplier" is derived by dividing the Research Grants & Contracts (RG&C) Income by the Funding Council investment (QR, PhD allocation, capability funding) for each member institution within a group, and then taking the average value for that group.

- have established research collaborations with national and international industry with the Universities (as a group) having research contracts with many leading R&D investors including the top 10 UK R&D spenders listed in the 2005 DTI R&D Scoreboard
- have won a substantial number of contracts with larger businesses and that the average value is substantial, at approximately £250,000. (The largely applied research portfolio of the Universities made them "particularly well suited to working with the end-users of their research output"—see Figure 2.)





Research Contracts

Source: Arthur D. Little analysis of HESA data.

Regional Regeneration, economic development and research

48. The study gathered "substantial evidence pointing to the leading role that is played (by modern universities) in the support of regional economic development." Analysis of data from the 2005 "Higher Education—Business and the Community" survey yields a clear and consistent message—that (these) Universities see the regional and sub-regional dimensions of their interaction with business and the community as highly significant with contributions to regional agendas cited as:

- support of SMEs through access to specialist facilities.
- continuing Professional Development and more general consultancies.
- provision of incubator facilities and innovation services.
- support for "cluster" schemes in industries such as textiles, digital media and food production.
- promoting of social policy initiatives in areas such as diversity awareness, domestic violence, children's needs and employment.
- developing public and mental health services.
- promoting community based arts and cultural events such as dance, cinema and theatre.
- assisting regional tourism and heritage activities; and
- collaborating in urban regeneration projects.

Modern universities and Knowledge Transfer Partnerships

49. The Universities were also assessed as performing "exceptionally well in research-based links to SMEs as reflected in high degree of participation in Knowledge Transfer Partnerships (KTPs)". It was noted that "the applied aspects of (their) research base are particularly valuable to SMEs, which lack in-house R&D capabilities and which benefit from mechanisms such as consultancy, training services and Knowledge Transfer Partnerships (KTPs)". The performance of these Universities in KTPs compares very favourably with that of both the Russell Group and 1994 Group. Table 4 shows that 35% of the income from KTPs is spent at (these) Universities (£9 million out of a total of £25.7 million).

Table 4

	Average number of current KTPs	Average KTP income (£1000s)
PUs	9	258
Russell Group	10	151
1994 Group	7	194
All HEIs excluding PUs	5	123

AVERAGE NUMBERS OF KTP PROJECTS FOR RUSSELL GROUP, 1994 and PUs

Source: HESA data.

50. Crucially, the Arthur D. Little Report concluded that "all the KTPs are dependent on the research portfolio of the University involved and any reduction in their research activity would undermine the capacity of these Universities to deliver the current level of knowledge transfer".

51. The ADL Report concluded by stating that the study "clearly demonstrated that the research capability of the Participating Universities represents an important component of the broader UK research portfolio and is a key contributor to its diversity and breadth. Their research is complementary to, rather than a smaller scale and less prestigious version of, the research carried out at the research-intensive institutions.

Overall, the Participating Universities contribute a breadth and diversity to the UK academic research community which would be hard to achieve given the strong disciplinary structure and research focus in the research-intensive universities. This is clearly of huge value to a wide range of customers and users both in large and small business and in the public sector, at local, regional, national and (in the case of multi-national companies and EU collaborations) international level. These institutions complement the major research-intensive universities in building and sustaining for the UK a research capability of excellence and relevance, constituting a national asset of enormous significance."

Effects and review of the Research Assessment Exercise

52. Notwithstanding the ADL and other reports eg from the Institute of Fiscal Studies⁵⁷ indicating the importance to the UK of a retaining research capacity and a dynamic research base, it is feasible for universities to be carrying out research at a national level ie of national significance, but to receive no Funding Council Quality-related (QR) funding, notwithstanding the role that DfES, the Funding Council and Ministers have all acknowledged is played by QR funding. The latter provides "a foundation allowing University leaders to take strategic decisions about the research activities of their own institutions. It funds the basic research infrastructure—including the salary costs of permanent academic staff, support staff, equipment and libraries—that gives institutions the base from which to undertake research ... QR must continue to support research capacity and capability; it should support long-term research; and it should enable speculative research "(para. 2.11 & 3.7 DfES Consultation, "Reform of the Research Assessment Exercise").

53. HEFCE's decision following the 2001 RAE to provide QR funding for only 5 / 5^* departments notwithstanding improvements in quality across the sector, reduced further the number of universities in receipt of QR funding.

54. Accordingly, modern universities welcomed the Government's decision to conduct a consultation on the reform of the RAE (May–Oct 2006) and submitted evidence that argued that the success of any new system should be determined by a broad definition of quality and judged against a number of criteria including:

- the responsiveness of any new system to commercial urgency;
- the link between research capacity, innovation and teaching;
- future requirements for advanced graduate level skills;
- the need to promote trans-disciplinary approaches which transcend the boundaries of conventional academic disciplines;
- regional economic regeneration; and
- the contribution of the HE sector itself to exports and the inter-relationship of the latter with HEI research capacity.

55. In advocating that evaluation of any new method should be judged against these criteria, CMU also drew attention to the EU Commission Communication "Delivering on the modernisation agenda for universities". This identifies the need for more money for R&D, places economic and social value on higher education, research and innovation, improved quality of teaching and closer links between education and business.

⁵⁷ "University research and the location of business R&D", Abramovsky, Harrison & Simpson, IFS, May 2006.

56. Notwithstanding concerns about the consequences for applied research and research capacity of the current RAE method (which is largely a retrospective process), the DfES / Funding Council response to the consultation has, by and large, preserved the status quo at least for the next 5 years.

57. However, the objectives of the 2004 10-year Investment Framework for Science and Innovation stressed the importance of business-university collaboration, a world class research base, effective knowledge transfer and the creation of social and economic value from public and private investments. It remains CMU's view that in order to meet these challenges, a more dynamic funding system is required in which quality, infrastructure, research capacity and applied and trans-disciplinary research are supported. Both the public and private sectors require research capacity and applied research (and not just knowledge transfer support and interchange) from modern universities. Over-reliance on a small number of research-intensive institutions will limit capacity and place the UK at a disadvantage both globally and regionally. Bearing in mind the outcome of the RAE consultation, CMU has argued that the Spending Review should support the inclusion of a specific stream of funding for research infrastructure and research capacity and that these principles should also be promoted in future Funding Council settlements.

Research infrastructure and capacity: base-line research funding

58. The principle advocated by DfES and the Funding Council that QR should support a basic research infrastructure leads axiomatically to the premise that there should be an element of base-line funding within QR to support that infrastructure for all universities, including a proportion of the salary costs of permanent academic staff, support staff, equipment and libraries. Whilst, probably, forming only a small proportion⁵⁸ of total research funding, such funding would:

- make explicit the desire to support research infrastructure;
- support the role of universities as teaching and research institutions;
- allow universities to be in a position to bid for research work supported from other funding sources;
- support research capacity, applied research and linked activities;
- contribute to the achievement of quality; and
- counter some of the consequences of increased concentration and the inequities in the student resource that have arisen.

Inequities for students

59. There are also consequences for students of current public policy investment decisions in relation to research and research concentration. These relate to the principle of research-informed teaching and curricula and the student experience (although it should be noted that in modern universities students are more likely to be taught not only in small groups but also by qualified academic staff rather than postgraduate students).⁵⁹ Crucially, a significant differential in the institutional student resource has been created as a result of both the failure to expand higher education on the principle of base-line funding for research and teaching in all universities and as the result of increased concentration.

60. The differential in value and funding between research and teaching which now exists has been exacerbated by Funding Council settlements. For example the Secretary of State's letter to HEFCE for the 2006–07 academic year provided for an uplift of 8% for research (revenue and capital). However, once growth in numbers had been taken into account, the uplift for teaching was 2.5%. This confirms a pattern of HEFCE funding settlements which act to the obvious disadvantage of universities which receive less QR funds.

61. The institutional disparities what have been created by the RAE and the failure to afford equal value to teaching in terms of public investment are startling. The University of Edinburgh has three times the turnover of the University of East London but the same number of students. Oxford, Cambridge and their colleges have a combined turn-over of £650 million and support 17,500 (fte) students. Bristol and Nottingham, with turnovers of £250 million, support combined student numbers of 16000. This compares, for example, with some modern universities which have 20,000 + (fte) students and annual turnovers of circa £125 million. Table 5, the index of teaching and research income per weighted fte student for 2004–05, illustrates the point.

⁵⁸ At current funding levels even 10% of QR money would result in almost £140m for infrastructure support.

⁵⁹ "The academic experience of students in English higher education institutions", HEPI, Nov 2006.

Table 5

INDEX OF TEACHING AND RESEARCH INCOME PER WEIGHTED FTE STUDENT 2004-05

Imperial College of Science, Technology and Medicine	247%
The University of Oxford	236%
The University of Cambridge	222%
University College London	207%
London School of Economics & Political Science	193%
Institute of Education	184%
The University of Edinburgh	152%
King's College London	143%
The School of Pharmacy	141%
Median	74%
University of Worcester	57%
The Nottingham Trent University	57%
Newman College of Higher Education	56%
The University of Wales, Lampeter	55%
Trinity College, Carmarthen	55%
York St College	54%
The University of Huddersfield	53%

NB: Percentages are of the mean averages, the table shows the median value in each case. Source: Brown and Ramsden, 2006.

62. These figures also need to be considered alongside the more socially and culturally inclusive student profile of modern universities. The outcome is that those universities which are the most inclusive and recruit the most disadvantaged students are the least well funded, creating an inequity in the student resource which should be unacceptable in public policy terms, bearing in mind in addition the increasing contribution required of students and graduates to their higher education.

63. The Committee is asked to consider the socio-economic benefits, including for students and of the UK, of sustaining both research capacity throughout the sector and the applied research undertaken in modern universities and is requested in particular to consider the merits of base-line research funding for all universities.

Pattern of public expenditure on education 1997–2007—the funding of teaching in higher education

64. Modern universities have welcomed the value placed on education since 1997 and in particular, the investment committed since 2001. The reasons provided by the Government for the pattern of investment which has emerged in which the school sector and further education have been prioritised over higher education, are well documented. The consequences in relation to public investment by education sector and student funding have been tracked by and will be well known to the Education and Skills Committee. The effects are illustrated in Tables 6–8:

Table 6

REAL TERMS FUNDING PER STUDENT/PUPIL, 1998–99 to 2003–04 (1999–2000 = 100)

	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05 plans	2005–06 plans
Schools	96	100	107	111	115	119	124	130
FE	93	100	104	112	113	120	122	127
HE	101	100	100	100	101	104	105	105

Source: Departmental Report 2005, Department for Education and Skills, Cm 6522, London: TSO, Tables 12.5 (derived from figures given), 12.6 and 12.7. Figures for 1998–99 derived from Departmental Report 2004, Tables 2.5, 2.6 and 2.7.

Table 7

							Change 2000–01 to
	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2005–06
Schools (DfES)	4,918	5,870	8,849	9,344	10,151	10,981	+123%
FE, Adult	5,674	6,587	7,104	7,773	7,927	8,394	+48%
Higher Education	6,541	6,545	6,680	6,959	7,191	7,529	+15%
Other	1,258	1,754	2,339	2,657	2,467	2,801	+123%
Total (DfES)	18,389	20,756	24,572	26,733	27,736	29,705	+62%
Total (all education)	39,837	43,741	45,438	49,686	52,419	55,021	+ 38%

EDUCATION EXPENDITURE (REVENUE AND CAPITAL FUNDING), BY SUB-SECTOR, 2000–01 to 2005–06, ENGLAND

Adapted from HM Treasury (2006) Public Expenditure Statistical Analyses 2006, CM 6811, table 3.1

Table 8

REAL TERMS FUNDING PER STUDENT/PUPIL, 2001-02 to 2007-08

	2001–02	2002–03	2003–04	2004–05	2005–06 (plans)	2006–07 (plans)	2007–08 (plans)
Schools	100	104	109	113	120	124	129
FE	100	100	108	106	117	116	117
HE	100	100	102	102	105	106	107

Source: DfES (2006) Departmental report, CM 6812, tables 8.4, 8.7 and 8.8. Numbers in italics derived from stepped time series shown in tables.

Growth in Student Numbers in Higher Education

65. In the period tracked by the Tables 6–8 (1997–2007), expansion of student numbers in higher education has been largely driven (as it was in the previous decade) by modern universities. It has been supported and enhanced by the commitment of these universities to widening participation. This commitment is confirmed in all official statistics. However, as Tables 6–8 confirm, in spite of growth in student numbers, real term increases in public funding per student in higher education has been substantially less than that applied to or projected for schools and further education.

Introduction of Variable Tuition Fees, Bursaries and Part-time Provision

66. It can be argued that the introduction of variable tuition fees in England will improve the funding of teaching. However, the cost of providing income-contingent loans to full-time undergraduate students in England from 2006 is accounted for "off-balance" sheet with the clear intention by Government of maximising recovery during the 25 year loan period post-graduation. In any case, income derived from the levying of variable tuition fees is heavily moderated in modern universities by commitments to bursary support as a result of the diverse and widening participation student profile of these universities and the fact that part-time students are unable to access income-contingent loans under the 2004 HE Act. Moreover, at the time of the introduction of variable fees for full-time students in England, Members of Parliament and universities argued that increased co-payment by graduates should not be at the expense of further public investment in the student resource.

67. Modern universities have been reluctant to charge pro-rata of the increased full-time tuition fees to part-time students because the latter (unlike full-time students from 2006) have to continue to pay fees upfront. Universities fear (justifiably according to recent research for UUK)⁶⁰ that in many cases an increase in the tuition fee for part-time students will damage access and the market for part-time provision. As a result universities are not receiving even pro-rata income from admitting part-time students even though the resourcing of part-time study is in administrative and teaching terms more expensive than full-time students. The UUK evidence confirms that part-time students are unable to pay upfront even pro-rata of the £3000

⁶⁰ "Part-time students in higher education: supporting higher-level skills & lifelong learning", Prof Claire Callender, pub UUK, Oct 2006.

per annum tuition fee received by universities for full-time students and repaid by the latter on an incomecontingent basis after graduation. The Education and Skills Committee heard evidence on the anticipated "unintended consequences" for those universities with significant numbers of part-time students of the HE Act 2004, on 23 February 2005 (Appendix B^{61}).

68. In November 2005, the Government recognised the need for some institutional support for universities and made marginal improvements in the part-time student support package. However, these measures are entirely inadequate.

69. Unless institutional support for universities with a significant cohort of part-time students is extended into the next Spending Review period and the state support package for part-time students is improved, there is the very real prospect that part-time provision will become increasingly uneconomic for both universities and students, notwithstanding the fact that flexible provision has proved attractive to widening participation students. Universities will have no option but to withdraw from part-time provision if the latter remains disadvantaged in terms of funding and the unit of resource.

70. The Committee is invited to consider this further bearing in mind the need to both protect and promote the part-time market in the period up to and including the fee review in England. Specific proposals for part-time student support appear at paras 88 and 89 but their introduction would not obviate from the need for institutional support.

Demography—increasing number of 18-year-olds

71. Demographic trends tracked in the Treasury's analysis of the CSR^{62} confirm that during the next five years the number of 16–18-year-olds actually increases and that the proportion of young people in the population remains more or less the same during the next decade.

Priorities for future HE expansion

72. The Government has suggested that during this period the primary area of expansion and public investment will be in foundation degrees and employer engagement initiatives. There has to be concern that such an approach fails to recognise that:

- there will be an increased number of 18-year-olds for the first five years.
- neither part-time nor full-time mature students are necessarily engaged in permanent employment or by employers willing or in a position to support their higher education studies.
- access by mature students as full-time undergraduates may be undermined.

73. Mature entry undergraduates are part of the widening participation cohort which the Government values. (Male applicants in their early twenties go some way to addressing the gender imbalance.) There is already concern that the "study now, pay later" regime may be less attractive to mature applicants and UCAS figures have indicated that this was one of the most significant areas of decline in 2006.⁶³ Accordingly, over-reliance on foundation degrees and employer initiatives—particularly during the next five years—may be counter-productive and counter-intuitive to the widening participation agenda that the Government has promoted.

74. The Committee may wish to consider further the Government proposals to expand higher education numbers through foundation degrees and employer initiatives, particularly bearing in mind that the Leitch report has recommended that increased investment in level four skills should be funded by individuals and employers (and by implication not be subject to increased public investment).

75. Against this background, modern universities consider that the differential which has emerged in public investment in the student unit of resource in higher education between 1997–2007 (which follows from a decade when the unit of resources declined and a period during the 1980s when the polytechnics were themselves funded less equitably than universities) must be addressed by funding research capacity through the following funding priorities:

A. FULLY FUNDED GROWTH IN STUDENT NUMBERS WITH NO FURTHER PRESUMPTIONS RE: CO-PAYMENT EITHER BY STUDENTS OR EMPLOYERS BETWEEN 2007 AND 2012

76. Modern universities are in the forefront of employer engagement and working collaboratively on the development of foundation degrees and the skills agenda. However, the latter are not a substitute for funding growth in full-time student numbers, particularly during a period when the number of young people will increase and given the Treasury's own demographic predictions that the overall population in England will increase and that the proportion of young people will remain more or less stable.

⁶¹ Not printed. See Education and Skills Committee, Oral and Written Evidence, *Tuition Fees and Student Bursaries*, 23 February 2005, HC369-i, Session 2004–05

^{62 &}quot;Long-term opportunities and challenges for the UK", pub 29 Nov 2006.

⁶³ Parliamentary answer to Dari Taylor MP by Bill Rammell MP, 21 June 2006—decline in applications from over 24 year olds: 5.4%.

77. The Government is committed to supporting the education of a graduate workforce (one of the stated objectives of the CSR). Accordingly, teaching and the unit of resource for teaching need to be placed on an equal value to research. The 2007 spending review and Funding Council settlements should address the disparity in the pattern of public investment in education which has emerged.

78. This differentiation (in value and in funding of different parts of the education sector and between research and teaching) has acted to the disadvantage of students in modern universities, notwithstanding their more representative profile in terms of socio-economic group, diversity and ethnicity.

79. The Committee is asked to consider whether it is sustainable for the Government to rely solely on copayment by students and/or future voluntary co-payment by employers, to increase investment in higher education. The 2007 Spending Review and future Funding Council priorities undoubtedly provide opportunities to address the funding of the unit of resource for teaching. This in turn would assist in addressing not only disparity student resource but also support the delivery of the graduate, professional and skilled workforce which is a CSR objective.

B. SUPPORT FOR WIDENING PARTICIPATION AND RETENTION BY FULLY FUNDING:

(i) The teaching of the current level and number of widening participation students

(ii) A substantial and targeted uplift in spending related to an agreed and improved target / aspiration for increased participation in the next five years (to 2012)

80. The most recent HESA figures (July 2006 for 2004) indicated a slight decline in participation by the 18–30 age group which has hovered at 42–43%. However, the Performance Indicators confirm once again that modern universities are a great success story in offering new opportunities to students and that they are key drivers of access to the graduate and technical skills which the economy needs in the English Regions and in Scotland and Wales, thus meeting key Treasury and Government objectives for the labour force, regeneration and inclusion.

81. DfES's own "narrative" on social mobility "Narrowing Social Class Educational Attainment Gaps" (which provided the background materials for the previous Secretary of State's speech to IPPR, 26 April 2006) has few specific aspirations for HE but accepts the principle that targeted and universal measures are required to address differential achievements by socio-economic group. "Widening Participation" is a targeted measure in higher education but is grossly under-funded.

82. In 2005 HEFCE estimated that in England, universities were under-funded by £90–100 million per annum for the current level of participation by under-represented groups. A HEFCE study similarly assessed the cost of widening participation to be + 35%. Currently, universities receive + 20% from HEFCE for widening participation students. Although described as "a premium" by HEFCE, the amount provided is not a premium since it does not cover cost.

83. Widening participation is not just about balancing the student profile of older universities through relatively small increases in numbers of students recruited at eighteen from under-represented groups (welcome though that might be). Many of these universities have no current aspirations to expand undergraduate numbers. Rather widening participation is about motivating communities, inspiring and making it possible for individuals to participate as mature students and with non-traditional qualifications as well as through qualifications achieved at eighteen and providing the teaching and institutional support to ensure that these students succeed.

84. Any new aspirations for level 4 skills set by the Leitch Review should not be allowed to fudge the need to fully fund a participation target in higher education in the 2007 Spending Review period.

85. Bearing in mind the Government's objectives (graduate and technical labour force, economic regeneration, and social inclusion), DfES and the Treasury should accept the added economic and social value of fully funding the widening and deepening of participation. The added value of this approach should be based on a comparison of the added economic value of students from non-traditional backgrounds / with non-traditional qualifications participating in HE compared to these students not being involved at all. There are also clear regional benefits as a result of the activities and the work of universities which have a regional and local focus eg in terms of the recruitment of students.

Value-Added Performance Indicators

86. CMU and Universities such as Wolverhampton have confirmed in submissions to HEFCE, Government Ministers and the Permanent Secretary⁶⁴ that value-added performance indicators would be particularly useful in presenting and monitoring the contribution of those institutions working more extensively in the widening access field to the overall effectiveness of the sector in delivering national

⁶⁴ Letters to Bill Rammell MP & David Bell from Prof Caroline Gipps, 24 Oct & 17 Nov 2006.

objectives and in informing funding regimes. HEFCE Performance Indicators are also used by the press to construct the University League Tables. However, to date DfES officials have suggested that this would be a major project and have given no commitment to the development of value-added measures.

87. The Committee is invited to consider the merits of the development and application of value-added performance indicators by the Government for the higher education sector.

C. Improve and Extend the State Student Support Package for Part-time Undergraduate Students by Increasing Earnings Entitlement of Students and Lowering Current 50% Study Threshold

88. Even in advance of the UUK Report, the 2006 HESA Performance Indicators confirm the analysis of modern universities that on average, part-time undergraduate students study 2.4 modules per annum (each module equivalent to 14.3% of fte) ie an average 35-36% of fte per annum. However, the part-time state support package is means-tested and only available for 50% fte. Only students whose income is less than £15,345 in the last full tax year qualify for grants. There is a need to review the part-time student support package so that eligibility is triggered at a lower threshold than 50% of study and entitlement to earned income is increased.

89. Part-time students are frequently also mature students. The recent HEA research study (Changing Fee Regimes and their Impact on Student Debt: June 2006) concluded that older people, particularly those aged 25–39 and new to higher education were more price-sensitive to increases in HECS in Australia and that nearly 17,000 fewer mature student applications were lodged each year from 1997 onwards in that country. While the evidence on the full impact on university enrolments of the new funding regimes in 2006 has yet to be published, the UUK Report reaffirms the issue of price-sensitivity for part-time students. Accordingly, at least until the fees review there is a continuing need to address the inequity in institutional funding/income which arises for institutions which have a significant part-time student profile.

Investment in the part-time student support package and institutional investment would complement the Government's progression and widening participation agenda

Improve and extend the Childcare Support Package for full-time and part-time students

90. There is a also a need to review further and again to improve eligibility to the student childcare support package. This would assist in particular part-time and mature students.

Future Funding—review of variable fees for full-time students

91. Modern universities are of the view that it is crucial for the effects of variable fees for full-time students in England to be the subject to a review that is evidence-based and includes a full assessment of the present scheme and the likely impact of any amending proposals. In particular, evidence should take into account impact upon:

- the full student cohort ie full and part-time students;
- those who were qualified but did not pursue applications;
- institutional funding across the sector;
- institutional, individual and public funding implications of bursary support;
- the public debt;
- cost-benefit analysis in terms of public investment; and
- administrative, collection and repayment systems.

92. The review should include a full equality impact assessment of the outcomes of the current scheme and the likely impact of any alternative proposals, be guided by the fact that participation and public investment in higher education in Britain lag significantly behind that in other OECD countries and be informed by the need to improve participation.

93. Future funding and investment policies also need to take account of the fact that historic public funding regimes continue to perpetuate differential state funding of British universities with consequences and inequity for students and limitation of the higher education sector's UK and international capacity.

Endowments

94. It should also be noted that future funding policies which rely exclusively on private investment and / or endowments will risk simply perpetuating institutional and student inequity (see Table 9 below).

Table 9

University of Cambridge	£40.9 million
University of Oxford	£23.9 million
University of Manchester	£12.3 million
University of Edinburgh	£12.3 million
Average	£1.76 million
University of Worcester	£0.16 million
Anglia Ruskin University	£0.15 million
University of Chester	£0.12 million
Liverpool Hope University	£0.04 million

ENDOWMENT INCOME AND INTEREST

Source: RSM Robson Rhoades, 2006.

University Title and Foundation Degrees

95. Modern universities have expressed reservations about the extension of university title to private providers. However, there are anomalies and a further review of criteria for title could helpfully be undertaken and could incorporate the proposal to extend foundation-degree awarding powers to further education colleges which has been included without consultation with higher education providers, as Clause 19 in the Further and Education and Training Bill. Subsequent government consultation has focused on the operation of the extension of foundation-degree awarding powers rather than the principle.

96. As previously outlined, modern universities have been active in promoting and delivering foundation degrees (relatively new qualifications introduced in 2001) including in conjunction with further education colleges. Support from and collaborations with universities have provided the basis for successful learner progression from foundation degree to honour degree programmes (as evidenced by the QAA) and this has been backed by joint capital projects (described by Lord Sawyer and others in debate at Second Reading in the House of Lords on 13 December 2006).

97. Evidence submitted to the Committee in relation to its Inquiry on Bologna outlined the reasons why modern universities consider that the Government's proposal to be outwith the Bologna Process. In any case, modern universities do not consider Clause 19 of the FE & Training Bill as tabled to be a helpful basis upon which to progress the widening participation, access and employer engagement which it was envisaged that foundation degrees would support (Appendix C).⁶⁵ Clause 19 could be helpfully remitted to a wider review of university title and governance arrangements rather than progressed in the current legislation.

CONCLUSION

98. Modern universities regard the Committee's wide-ranging Inquiry as an important opportunity to consider key aspects of public policy and funding regimes and the future sustainability of the higher education sector. Accordingly, representatives from CMU and CMU Member universities should be pleased to be called to give oral evidence on the issues and key questions raised in this Evidence.

Appendix A

HEIS WITH HIGHEST PERCENTAGE OF STUDENT ADMISSIONS FROM STATE SCHOOLS AND COLLEGES (2005–06)

- 1. Middlesex
- 2. TVU
- 3. Wolverhampton
- 4. Luton (now Bedfordshire)
- 5. Sunderland
- 6. Teesside
- 7. Huddersfield

⁶⁵ CMU Briefing Note "The Further Education and Training Bill (Clause 19), Second Reading: House of Lords, Wednesday 13 December 2006".

- 8. Bolton
- 9. Staffordshire
- 10. Lincoln
- 11. London South Bank
- 12. UCE
- 13. Derby
- 14. Herfordshire
- 15. UEL
- 16. London Metropolitan
- 17. UCLan
- 18. Anglia Ruskin
- 19. Greenwich
- 20. Salford
- 21. De Montfort
- 22. Westminster

HEIS WITH HIGHEST PERCENTAGE OF STUDENT ADMISSIONS FROM LOW-PARTICIPATION NEIGHBOURHOODS (2005–06)

- 1. Bolton
- 2. Sunderland
- 3. Teesside
- 4. Wolverhampton
- 5. Liverpool John Moores
- 6. Huddersfield
- 7. Staffordshire
- 8. Salford
- 9. Derby
- 10. UEL
- 11. London South Bank
- 12. UCLan
- 13. Northumbria
- 14. Coventry
- 15. Manchester Metropolitan
- 16. Sheffield Hallam
- 17. UCE
- 18. Lincoln

HEIS WITH HIGHEST PERCENTAGE OF STUDENT ADMISSIONS FROM SOCIO-ECONOMIC CLASSES 4, 5, 6 & 7 (2005–06)

- 1. Bradford
- 2. Wolverhampton
- 3. Greenwich
- 4. Luton (now Bedfordshire)
- 5. Middlesex
- 6. London Metropolitan
- 7. Westminster
- 8. Bolton
- 9. Oxford Brookes
- 10. UEL
- 11. Teesside
- 12. Coventry
- 13. Derby
- 14. London South Bank

- 15. De Montfort
- 16. City
- 17. Hertfordshire
- 18. Aston
- 19. UCE
- 20. Huddersfield
- 21. Sunderland
- 22. Kingston
- 23. Brunel

HEIS WITH HIGHEST PERCENTAGE OF PART-TIME STUDENTS

- 1. OU
- 2. Teesside
- 3. Anglia Ruskin
- 4. City
- 5. Warwick
- 6. Sunderland
- 7. TVU
- 8. London South Bank
- 9. Bolton
- 10. Lancaster
- 11. Luton (now Bedfordshire)
- 12. Hull
- 13. Westminster
- 14. UCLan
- 15. Keele
- 16. Wolverhampton
- 17. Leeds Met
- 18. Huddersfield
- 19. East Anglia
- 20. UCE
- 21. London Metropolitan
- 22. Lincoln

APPENDIX C

THE FURTHER EDUCATION AND TRAINING BILL (CLAUSE 19)

SECOND READING: HOUSE OF LORDS, WEDNESDAY 13 DECEMBER 2006

Clause 19 provides for the application to the Privy Council by further education colleges for foundation degree awarding powers. Currently the Privy Council has the power, under section 76 of the Further and Higher Education Act 1992, to make orders enabling higher education institutions to grant either taught or research degree awarding powers, or both. Clause 19 amends this section of the 1992 act to create a third category of degree awarding powers relating to foundation degrees only. Under the terms of the 1992 Act, further education colleges would be permitted to grant awards on behalf of other institutions—ie under the Bill as currently drafted, further education colleges would not only be able to grant their own foundation degrees, but also validate foundation degrees delivered in other institutions.

The Development of Foundation Degrees and the role of Universities

Foundation degrees are a new type of degree, first delivered in 2001. They were always envisaged as being developed and delivered by colleges, universities and employers. Universities have been in the forefront of promoting the development and delivery of foundation degrees and they have done so precisely because they were envisaged as a higher education qualification.

Crucially universities have validated foundation degrees and the website of the DfES currently says that foundation degrees are "validated by universities to ensure that they meet the standards of higher education".

Notwithstanding this, Clause 19 of the FE and Training Bill has been inserted into the FE and Training Bill without any consultation with universities.

Why is University involvement crucial for students?

University involvement has been crucial for students because it has ensured a progression route from foundation to honours degrees.

As the Department's own website says, university validation has been vital in providing a guarantee for students that foundation degrees had "value" and could be "badged" as higher education qualifications.

What have Universities delivered?

Universities have worked to:

- ensure that appropriate resources have been available where HE / foundation degree students study in FE colleges
- guarantee quality for students through validation. In a few cases, this has meant restructuring
 provision and partnerships with colleges to ensure that teaching and course provision meet QAA
 standards
- ensure compatibility between foundation and honours degrees and a seamless basis of progression for students

Universities have :

- developed partnership and collaborative working with colleges and employers
- provided staff resources (including university staff teaching on some foundation degree programmes)
- used resources made available by the Funding Council for capital investment (both current and in the pipeline)
- underpinned the quality assurance framework for foundation degrees with the considerable resources which all universities already devote to quality assurance, thereby not only ensuring quality compatible with the reputation of UK higher education, but also delivering economies of scale

Why has this been important?

It was never intended that foundation degrees would be 2 year "stand alone" qualifications. The whole idea was to ensure that there was student progression and compatibility with honours degree programmes.

This is crucial not only for students but also to secure the relationship and reputation of British higher education qualifications within the Bologna Process and in the international partnerships and international recruitment with which British universities are involved.

The Problems with Clause 19

There is a real prospect that student progression and the lifelong learning networks being established between education providers will be damaged and university underpinning of student resources for foundation degrees will be lost.

The importance of "badging" foundation degrees as a higher education qualification through university validation will be lost as will the input of universities through their staff and quality assurance resources.

The future of foundation degrees as a higher education qualification has been placed into further doubt by the publication of the Leitch Report. This proposes that Sector Skills Councils are given responsibility for approving all NVQ Level 1–5 vocational qualifications AND all foundation degrees in England. According to Leitch, without SSC approval, no public funding will be available for foundation degrees. The Leitch Report is also silent on student progression and makes no reference to the current link between foundation and honours degree programmes.

Universities have partnership relationships with a whole range of further education colleges. Clause 19 means that education providers will become competitors rather than collaborators in student progression and there is a real prospect that the expansion of foundation degree programmes and widening participation will be put at risk.

The reputation of British higher educational qualifications will be placed at risk. Clause 19 transfers foundation degree awarding powers away from universities and breaks the link between HE study in FE and university validation and provision.

It is deeply disappointing that neither the principle, the implications nor the mechanics of the proposed extension of foundation degree awarding powers have been discussed with universities, including those which are currently involved in partnership arrangements. Such a lack of consultation is entirely unhelpful in progressing the widening participation agenda upon which there is cross–party agreement.

December 2006

Memorandum submitted by Conservatoires UK

1. Purpose

To highlight the work of the UK's conservatoires and place them as key players in building the future of higher education in the 21st century.

2. BACKGROUND: THE UK CONSERVATOIRES

The nine UK conservatoires are a major element in performing arts at higher education level. Based in the six cities of Birmingham, Cardiff, Leeds, London, Glasgow and Manchester, they train some 5,000 musicians at undergraduate, postgraduate and research levels. This compares with a total population of students on all HE music courses in the UK of 23,000 (figures from the conservatoires and the Higher Education Statistics Agency HESA). The conservatoires therefore train almost one in four (22%) of all the UK's HE music students.

In addition, five of the nine conservatoires train over 900 drama or dance students. This means that the proportion of all performing arts HE students at conservatoires is around one in seven (14%).

The global nature of conservatoires is reflected in the fact that, overall, a third of students come from countries other than the UK. The proportion attending each conservatoire ranges from 12% to 44%. Several conservatoires cater for students from some 50 countries; overall, over 75 countries are represented in the conservatoires. Graduates of UK conservatoires perform worldwide and work in the global music industries.

THE NINE UK CONSERVATOIRES

Guildhall School of Music & Drama (GSMD) Leeds College of Music (LCM) Royal Academy of Music (RAM) Royal College of Music (RCM) Royal Northern College of Music (RNCM) Royal Scottish Academy of Music & Drama (RSAMD) Royal Welsh College of Music & Drama (RWCMD) Trinity College of Music (TCM)/Laban Centre (Trinity Laban) UCE Birmingham Conservatoire (with Birmingham School of Acting)

Between them, the conservatoires offer around 100 music courses embracing over 70 different types of instrument and ten types of voice across a range of traditional and contemporary genres from different cultures; as well as composition, conducting and opera repetiteur; plus courses in other areas of study covering music technology and production; artistic, cultural or creative leadership, music therapy and community music, musicology and music recording.

The drama and dance departments and schools within, or in partnership with, the nine conservatoires offer courses that include acting and voice, dance and choreography, dance science, movement and production, stage management and technical theatre, arts management, theatre design, and digital film and television.

Conservatoires also provide a range of other courses, often in partnership with other institutions, such as the RNCM PGCE course with Specialist Strings, Wind and Percussion Teaching in collaboration with Manchester Metropolitan University, and a forthcoming QTS undergraduate course also with MMU. Trinity has links with the Bhavan Institute to offer a BMus (Hons) in Indian Classical Music.

They all have junior departments for young musicians aged between three and 18, which form part of the DfES Music & Dance Scheme's programme of Centres for Advanced Training (CATs) at the pre-18 stage of learning. Several thousand children and young people—and a growing number of adults—are embraced

by the work of the junior departments, by the conservatoires' education, outreach and community programmes, and by partnerships with other agencies working with young musicians. Through such work, the conservatoires open themselves up to a much broader range of young people, providing them with music-making and learning opportunities, developing their musical potential at an earlier age, and making resources and expertise more available to them.

3. BACKGROUND: THE WORK OF CONSERVATOIRES UK

Conservatoires UK is an umbrella organisation, comprising the nine conservatoires, set up in 2005 to "further the advancement of higher and further education in the UK in the fields of music and the performing arts". As a key part of this, it has established and maintains the CUKAS admissions process to facilitate applications to such HE establishments and assist applicants gain access to them.

Conservatoires UK is in the process of establishing itself as a more effective professional organisation that initially can "speak with a clear and authoritative voice for the business of advanced professional music training; reposition the conservatoire sector to reflect changing needs and employment patterns in the music profession; and achieve greater visibility through the provision of leadership and a more influential voice".

This process has led Conservatoires UK to adopt a wider mission, which is to "promote and support the highest quality advanced professional training in music and the performing arts in the UK; promote access to excellence in music and the performing arts for all; and advocate and lobby with a powerful single voice on behalf of the needs and aspirations of conservatoires and those who learn, teach and research in them".

Since 2005, Conservatoires UK has therefore been developing its role, on behalf of the conservatoires, to embrace a set of aims and activities more appropriate to the dynamic and global nature of higher education and of the creative industries and economies to which its graduates will contribute. These aims and activities include:

- Repositioning the conservatoire sector to meet the changing needs and employment patterns of the music and performing arts professions, the wider creative industries and cultural economy, and of those who work in them.
- Leading debate and promoting policy on music education and training at pre- and post-18 levels, on developing training for music teaching, on future funding for conservatoires, and on future options for the conservatoire sector.
- Promoting the activities, and the cultural and economic value, of conservatoires throughout the
 education and training sectors, government and the wider political spectrum, the music and
 creative industries, and to the wider public.
- Working with government departments and agencies responsible for funding, training and skills, curriculum and qualifications to ensure the aims and needs of the sector are met in these areas.
- Working with the music and creative industries to ensure the aspirations and needs of graduates and of these industries are best served, and to enhance students' employability.

Conservatoires UK is providing more information about the conservatoire sector, which includes:

- Establishing an evidence base for conservatoires by researching, explaining and disseminating information and statistics on their profile, constituency and resources; as well as building on the statistical information collected through the CUKAS admissions process.
- Providing informed policy analysis on the future of conservatoires, and of training in music and the performing arts, in the higher education sector.

It also sees a greater collaborative role for the performing arts institutions within the higher education sector. Conservatoires UK is therefore working to:

- Encourage, develop and facilitate widespread collaborations within and between member institutions—and with others offering advanced professional training in the performing arts—at all levels and across different activities, including research, teaching and learning, management, and back-up services.
- Support and help to shape music education at pre-tertiary level by establishing partnerships and projects, and by increasing participation.
- Promote the conservatoires' role as trainers of music teachers up to QTS through initial training and professional development.
- Promote wider participation in conservatoire activities and greater access to and sharing of their resources.

4. Conservatoires Within a Future Higher Education Sector:

Some key issues

The nine UK conservatoires are at the heart of education, training and creativity in the performing arts primarily music, but for drama and dance as well. They play a crucial role in the higher education sector, and increasingly across the whole of education, formal and non-formal. They are international centres of excellence for the performing arts. Each has its own distinctive dual approach of providing the highest quality advanced professional training to their students, and of developing access to excellence in the performing arts for all.

Over the last ten years, the conservatoires have changed dramatically in terms of what they offer and how they, and their students and graduates, are helping to transform the cultural and creative landscape. They are offering a broader and more dynamic curriculum geared to the needs of their students and of the creative industries in which most will work; and have a more explicit commitment to widening access to training—for example, through the new admissions process CUKAS.

This process of change is accelerating as conservatoires continue to adapt and innovate to meet the challenges, and take up the opportunities, presented by the burgeoning creative industries and cultural economy of the UK in the 21st century. With many of their graduates also working internationally, the conservatoires reflect the increasingly global nature of the higher education sector in terms of creativity and business activity—perhaps more than any other part of that sector.

All these changes are opening up opportunities for the conservatoires, along with other partners, to play a wider, more innovative and more influential role not just within higher education, but across the education sector as a whole and within their local and regional communities.

In this introductory paper, we highlight four of the key issues that we consider crucial to the conservatoires' role within the future sustainability of the higher education sector:

- 1. Guaranteeing high-quality professional training and maximising employability to match student aspirations and industry needs within the cultural and creative economy.
- 2. Sustaining diversity of mission and of institutional structures across the conservatoire sector.
- 3. Fulfilling the promise of wider participation in terms of the young people who enter conservatoires as students and of those who engage with the conservatoires through their involvement with schools and communities.
- 4. Underpinning conservatoires' role as significant contributors to cultural life regionally, nationally and internationally.

Employability

Conservatoire students say they want an experience that provides them with the multiple skills to fit them for the challenges of making a living both through performance of the highest quality, and within education and the creative and cultural industries of the global economy. That is what the conservatoires aim to give them. For they do not just train their students for the classical music world of employment, but also provide them with the wide range of skills, experience and understanding that they need in the multi-task and multigenre creative and cultural economy. Conservatoire graduates have already taken a leading role in the development of a worldwide market for European music. The ability of the conservatoires to continue to adapt and innovate their employability offer requires close and effective partnerships with the creative and cultural industries and with government agencies, linked to a mutual understanding and empathy with what each—conservatoire, industry and government—actually does and can achieve together.

Sustaining diversity

A key factor in ensuring the conservatoire sector can meet the challenge of graduate employability is the diverse nature of each institution's offer and character combined with a growing collaboration within, and increasingly beyond, the sector itself. This can only be sustained and enhanced through a greater flexibility in the funding and organisational structure of higher education, and a wider understanding of the breadth and complexity of today's conservatoire sector.

Widening participation

As the role, nature and content of conservatoires continue to develop and change, they will more readily be able to attract and cater for young people from the spread of ethnic and socio-economic groups. While this process is already underway, the issue of widening participation remains a challenge for the conservatoires to differing degrees—as it does for the higher education sector as a whole.

The nature of developing interest, talent and creativity in music means that the issue of widening participation at further and higher education needs to be addressed at the primary—and even pre-school—stage of children's education and experience, and through ensuring an equality in opportunity and a

continuity of provision. This is recognised in the aims and agenda of the Music Manifesto, set out in its report *Making Every Child's Music Matter* (October 2006), and in the Roberts report on *Nurturing Creativity in Young People* (DCMS, July 2006), both of which the conservatoires individually and collectively support.

One challenge for the conservatoire sector is the lack of detailed and long-term statistical evidence on its applicants, students and graduates. This is currently being addressed through the CUKAS admissions process and through a more determined collective approach by Conservatoires UK to establish an evidence base for the conservatoire sector.

Contributing to cultural and civic life

At the same time, the conservatoires are engaged in widening their reach through the work they do with other music agencies, particularly at pre-18 level and within their local and regional schools and communities. They also act in a civic role as regional arts centres, interacting with city- and regionally-based music industries and other arts venues, companies and organisations. This is all a growing part of the conservatoires' self-appointed remit. They see it to be inextricable with the purpose of providing a high-quality advanced professional music training. Such work is a two-way process as students link together with schools and communities, industries and venues in a benign circle of mutual benefit.

These collaborations both strengthen the higher education sector and open up its expertise, resources and creativity to many more people. Expanding this vital area of work, particularly in the conservatoire sector, requires a greater level of awareness and support from government and its cultural agencies about the potential of conservatoires to provide these opportunities.

5. MOVING FORWARD

The conservatoires are working to fulfil the aspirations of maintaining the highest quality of learning and performance, ensuring greater access to excellence, nurturing creativity, and providing a learning experience that fits their students for the global cultural and creative economy.

They want a higher education funding and organisational structure that enables them to teach and do research to the highest standards; to work with a wider range of talented young musicians from across the genres; to reach out to local and regional communities; and to develop their specific, innovative approaches to supporting those young people who will become the creative leaders within the global economy of the 21st century.

Therefore, they look to government to devise and encourage a higher education structure and funding process that provide the appropriate level and type of resources; support innovative approaches to teaching, learning and research; and offer the flexibility to sustain, develop and expand the diverse nature of the UK's conservatoires.

April 2007

Memorandum submitted by James Derounian⁶⁶

Thank you for this opportunity to comment on the above. I have 25 years combined practice and academic experience and would make the following observations:

The Role of Universities Over the Next 5–10 Years

What do students want from universities?

I assume that the NUS and student bodies will be approached directly, to seek their direct input as "stakeholders"? From my perspective and experience (over 15 years) as a committed lecturer and teacher, students (in the main) seek a purposeful experience of higher education; one that both helps them progress pre-existing desires but also opens up new career possibilities and interests.

⁶⁶ Senior Lecturer in Community Development and Local Governance, University Teaching Fellow, University of Gloucestershire, Department of Social and Natural Sciences, Cheltenham.

What should the student experience involve?

I strongly endorse the "active" approach to teaching and learning as practised, and now extended, through our University of Gloucestershire, Centre of Excellence in Active Learning (CeAL) in Geography, Environment and Related Disciplines http://www.glos.ac.uk/ceal/. In particular I commend learning by "doing" and regular reflection. The student experience should represent a "supported challenge"; an opportunity to grow through active engagement with current theory, practice, live issues, projects and practitioners.

Engagement in society and democratic debate, and producing active citizens?

I think this is a critical area and responsibility for higher education (HE); which ties together the Government's aim to widen participation with current concerns over the "democratic deficit". There are many aspects to this point—first the role that universities should play in contributing to their local economies and communities (eg using local contractors; contributing to local project development through expertise, knowledge and contacts); equally "live" project working for students—whereby they gain from "real life" exposure related to their chosen subject, and local communities (must) gain too from student inputs to such projects, programmes, policies, research, consultancy etc. There must surely be an opportunity to link the secondary school "Citizenship" curriculum to what is on offer via HE.

Students should be encouraged through "academic assertiveness" to be active citizens. (A concept championed by Jenny Moon at the University of Bournemouth).

UNIVERSITY FUNDING

Is the current funding system fit for purpose? Is the purpose clear?

If the purpose is to widen access (and in particular to encourage people from poorer, less confident etc backgrounds to enter higher education) then I don't see the current funding system as "fit for purpose". Whether it is a matter of fact or perception, it seems fundamentally flawed to expect those with least, to saddle themselves with loan/debt in the hope or expectation that they will earn more than they otherwise would (without the HE experience and qualifications). This seems to be wilfully coercing people to abandon their understandable wariness; and entering in to certain debt for uncertain payback.

How important is "flexible learning to the future of HE"?

As a recent external examiner for the University of the Highlands and Islands (Millennium Institute), and as a longstanding practitioner of "blended learning" (distance learning using WebCT, internet, telephone and e-mail "tutorials", residential schools, local tutors, hard copy module guides etc) I believe that flexible learning and the systems to support this are crucial in a world of vocational, part-time and "mature" students. In particular we would be pleased to share our experiences of delivering "local policy and community development" courses, as detailed above, to the Committee in the form of oral evidence.

November 2006

Memorandum submitted by Paul Double, City Remembrancer, Guildhall

I noted with interest the Committee's announcement, shortly before the House prorogued, about plans for inquiries into Higher Education. The City of London has a growing interest in this field in the context of maintaining the City's position as a leading world financial and business centre. The City recognises the fact that universities and higher education institutions are a key pillar of the knowledge economy and provide one of the dynamics for innovation through research and development. As with the City, the best universities compete globally. In this context, I thought it might be useful to set out some background to the City's interests in this area. I appreciate that this note does not necessarily follow the question and answer format contained in the Committee's call for evidence but I hope that it may nonetheless be helpful as background.

Factors contributing to London's leading position as a financial centre include a reputation for openness, with easy access to global markets and an environment attractive to overseas firms. The provision of leading edge education and training services in the UK has been central to maintaining this reputation and is key to the development of professional competences that will sustain London's position in the future. UK education and training services are internationally recognised in opening up career opportunities in financial and professional services in London and the UK.

Recent research published by the City of London Corporation⁶⁷ has shown that the financial and related business services (FRBS) sector is increasingly leaning towards recruitment of foreign graduates. This includes both overseas students studying in the UK's higher education institutions (HEIs) and students from

⁶⁷ Graduate Skills and Recruitment in the City, Alpha Generation Financial Training Limited et al., published by the City of London Corporation, September 2006.

non-UK HEIs. Language skills are an obvious consideration and are seen as an advantage in an international business City, but overseas graduates are also seen as attractive for their diverse business experience. It is estimated that over half the workforce in the financial and related business services sector employed in the City of London come from outside the UK and the opportunities available in the City are attractive internationally for those seeking to learn and to gain experience in this growing sector. Those that remain in the City are an important driver of its economic success.

Research commissioned by the City of London Corporation has shown that the availability of skilled personnel is ranked as the single most important factor in maintaining the competitiveness of the City.⁶⁸ London has also been cited separately as the best place in the world to go for valuable educational qualifications.⁶⁹ The growing educational export market already earns huge benefits for the UK, both economically and culturally. There is increasing overseas interest in obtaining high quality, internationally portable, UK qualifications. There is a strong push already by UK professional bodies, business schools and training organisations to provide, or facilitate, the necessary training to deliver professional qualifications in a range of overseas markets. Other countries including the US, Canada and Australia are already active in promoting their national commercial interests in this sphere. There are arguments to suggest that there is an opportunity here for the UK to do more and to succeed better.

In recognition of this, the present Lord Mayor, Alderman John Stuttard, has chosen skills as the central theme for his mayoralty during 2006–07, focusing particularly on the City as the centre of excellence for professional education, training and qualifications. This initiative—*City of London*—*City of Learning*—intends to raise awareness of the quality and portability of UK qualifications through promotional events during the Lord Mayor's visits overseas and when he receives senior overseas visitors at Mansion House during the year. An integral element of the initiative is the development of an internet-based database linked to websites of key professional bodies, universities and training providers. This will be accessible through a range of sites (UK Government and City institutions), not least through UK missions and British Council offices overseas.

Alongside the Lord Mayor's initiative, the City Corporation has sought to reflect this growing interest in skills and training through its annual research programme and, in addition to those reports already mentioned, included a specific section on the competitive position of London's higher education institutions in its flagship annual report.⁷⁰ Section 7.2 of the report seems particularly relevant to the inquiry although section 7.1 on London's skills needs may also be of interest to the Committee.

The research found some evidence that the competitive environment faced by UK universities is starting to toughen as a consequence of a falling population in the prime student age group, the possible freeing up of the tuition fee environment, the possibility that some high profile institutions will "go private", and the impact of what some commentators have called the "de-localisation" of university functions on the back of web related developments.

As you will know, there is no single measure that can effectively capture the competitive abilities of a university or higher education institution. There are however a range of league tables from a variety of sources that provide insights into the strengths (and weaknesses) of individual institutions. Oxford Economic Forecasting found, in its research, that the UK scores well on the quality of its universities. While the United States dominates the league tables in terms of measures of attractiveness to foreign students, quality of research and levels of income, the UK tends to occupy second place, ahead of the other large developed economies. This is explored in more detail in the report.

December 2006

Memorandum submitted by the Engineering Professors' Council (EPC)

The role of Universities over the Next 5–10 years

What do students want from Universities?

(1) Engineering is a profession that is increasingly being practised in a global context. Students therefore want degrees that are internationally recognised and provide the skills and knowledge necessary to enable them to compete in a very competitive international labour market. EPC welcomes the companion Inquiry by the Education and Skills Committee into the issues raised by the Bologna process and hopes that the Committee will act to minimise the possibility of UK degrees being perceived as in anyway not inferior to their international competitors.

⁶⁸ The Competitive Position of London as a Global Financial Centre, Z/Yen Limited, published by the City of London Corporation, November 2005.

⁶⁹ Anholt—GMI City Brands Index, http://www.citybrandsindex.com/, December 2005.

⁷⁰ London's Place in the UK Economy, 2006–07, Oxford Economic Forecasting, published by the City of London Corporation, November 2006. This is an annual report which seeks to highlight the importance of London's wealth and tax generating capabilities in relation to the rest of the UK. The report gives a clear message to policy makers that London's continued growth and high productivity are critical for the future health of the nation.

(2) Engineering is also a rapidly developing profession involving solving contemporary problems, conceiving and making new products and artifacts that depend for their efficacy on advanced science. Students need exposure to the latest thinking as part of their taught programmes and this of necessity requires a continuing link between research and teaching in a modern university. They also need access to state of the art equipment, software and laboratories. These cannot be provided through the research activity alone and must therefore be independently and properly funded by HEFCE. EPC believes that historical approaches to the costing of engineering teaching, based, for example, on TRAC methodology, have been fundamentally flawed and have thus produced misleading answers. The EPC welcomes the recent announcement by HEFCE of enhanced funding for most science and some other departments but cannot understand why the majority of engineering departments have been excluded from similar considerations. It also regrets that this funding appears to have been allocated for a limited time only. There is an inherent difference in the costs of teaching engineering when compared with arts and social sciences and there is no reason to believe that this difference will diminish with time.

(3) Students want certainty that the technical content of the degree programmes on offer is relevant to their career aspirations and that the content is being delivered well by staff who are themselves competent engineers. This requires an appropriate and attractive pay and career structure for academics. Students require trust in the assessment system to provide a fair reflection of their ability and the work that they put into their studies. UK HE Engineering Departments are fortunate in having EC (UK) provide an infrastructure in which professional bodies can provide accreditation to ensure these characteristics.

(4) Students want an environment in which they can mature, both intellectually and in other ways. Universities should nurture an experience which is broad, intellectual in intent and challenging in content. Quality assurance procedures which intensify assessment and promote a culture of "box ticking" do not necessarily help to achieve this.

(5) International students have essentially the same requirements as UK students, particularly in respect of international comparability. That said, the major component of the costs of overseas student study in the UK is living expenses and so international students particularly wish for degrees of the shortest possible duration.

What do employers want from Graduates?

(6) Employers will generally argue that they want to recruit high quality staff, capable of working on their own initiative on practical engineering problems as soon as possible. In EPC's experience, the major negative weakness displayed by UK graduates is a lack of experience in using state of the art equipment. This results from the inadequate funding accorded to Engineering Departments over the last two decades. Industry also encourages Universities to promote more opportunities for Students to develop "life skills" and most departments have responded by providing opportunities for developing group working, report writing and presentation skills as part of their teaching and learning activities.

(7) Other skills employers suggest are missing include creativity in design and entrepreneurial skills. EPC believes that the joy of engineering design is very poorly communicated to potential entrants to the profession and is interested in ways to correct this. EPC members are heavily committed to the teaching of design and to encouraging creativity as part of the growing number of design courses. Entrepreneurial skills are more difficult to teach and require a practical experiential approach. Professional body accreditation demands that students be given an appreciation of the industrial context of their work, but converting that into practical business skills is a specialist activity best taken forward in conjunction with an organisation which is itself business active.

(8) Industrialists have, in the past, expressed a desire to understand what it is that a graduate has learned at University. This request was the basis for the early work of the EPC in preparing a common framework for learning outcomes from an engineering degree. This work was later developed by the Engineering Council EC (UK), most professional bodies and within the Bologna discussions and, in its modified form, has now achieved international acceptance. EPC's work in this area continues with further consideration now being given to assessment of learning outcomes.

(9) Learning outcomes are particularly important in the context of international comparability and Bologna. A recent study by the Royal Academy of Engineering⁷¹ has shown that globally active engineering employers are satisfied with the quality of UK graduates and do not prefer the graduates from more overtly compliant European degree programmes.

What should government and Society more broadly want from HE?

(10) It is suggested that there should not be a significant difference between the requirements of Government and those of Society. The consultation paper directs attention towards a number of answers to this very broad question. EPC would agree that all of these are desirable and pass no further comment upon them at this stage.

⁷¹ Educating Engineers for the 21st century: and Industry View, Royal Academy of Engineering, March 2006.

(11) A factor missing from much policy thinking in this regard is the concept of the HE sector providing the Nation's intellectual capital reserves. This capital is drawn upon in a myriad of different ways that historically were often referred to as "scholarship". They included, by way of selected examples, the maintenance of standards for intellectual rigour and independence, the provision of expert witnessing services, consultancy and advice for industry, contributions to government activities including direct advice to Government Departments, service in various committees or non-Governmental organisations and response to Inquiries such as this. These aspects of academic life remain important to the smooth operation of the Nation's business but are not overtly valued, or often even recognised, by the Policy framework.

UNIVERSITY FUNDING

1. Is the current funding system fit for purpose? Is the purpose clear?

We are concerned about the current funding model for engineering teaching—historic underfunding of research has been recognised via JIF, SRIF and now fEC, but teaching infrastructure has been equally neglected and there has been no equivalent funding stream. EPC is commissioning research on teaching costs and we would like to present these to the committee when the data are available.

If the Government believes that it is in the national interest to support strategically important subjects such as engineering, then it is imperative that they do not wait until there is a desperate shortage of graduates and/or departments are in danger of failing or closing.

2. What are the principles on which university funding should be based?

University funding for undergraduate teaching should be based on the Robbins principle that all who are capable of benefiting should have the opportunity of higher education. This is appropriate both for the development of the individual and the economic needs of the country. When the principle was first proposed, it is probable that the number who could benefit exceeded the requirements of the economy; as the requirements for a highly skilled workforce have increased, this is no longer the case so it is important to fund the maximum number who can benefit from higher education. National economic needs dictate that encouragement is required for students to enter science and engineering courses. This means that these courses must be resourced appropriately (see #1) so that they can be made attractive; bursaries, fee reductions etc are also required.

Postgraduate education and research in universities is a vital part of the economy and full economic costing (fEC) is a significant step in the direction of ensuring that it is properly funded. Though it must be said that industry is not embracing fEC with any enthusiasm. The nation needs top quality research so it is more important to ensure that this is fully funded than to attempt to spread research funds thinly across the sector with the result that funding is inadequate everywhere. The RAE has the potential to provide a mechanism for achieving this goal, but it is questionable whether the current system (or its proposed replacement) will achieve the desired selectivity.

3. Should the £3,000 cap on student fees be lifted after 2009 and what might be the consequences for universities and for students including part-time students?

Either the costs identified in #1 should be fully funded by government or the cap on fees should be lifted to allow universities to meet their costs, otherwise the quality of education will decline. If the cap is removed it is essential that a bursary system is introduced so that entry to more expensive courses is based on ability to benefit from the course rather than ability to pay.

4. What should the Government be funding in HE and by what means?

The Government should be funding undergraduate and postgraduate teaching and research. The ideal is for all funding to come centrally from HEFC and the research councils but if this is politically unrealistic it is better for students to make a contribution to costs via fees than for the sector to be underfunded, resulting in declining standards.

5. Should central funding be used as a lever to achieve Government policy aims? Is the balance between core or block funding and policy directed funding correct at present?

As the main paymaster it is appropriate for the government to use central funding to achieve policy aims; one example is the need to attract students into shortage subjects as discussed in #2. However, it is very important that universities have predictable funding to allow long term planning so the rate of change of funding must be limited.

6. Should research funding be based on selection of "quality"? How should "quality" be defined and assessed? How might this drive behaviour across the sector?

If the UK is to remain internationally competitive, then we must ensure that we fund research of the highest quality at a level to ensure sustainability. However, the assessment of quality needs to be based on true international benchmarks; the process of "peer review" in a climate of intense competition has tended to become "competitor review".

The problem with metrics-based assessment of quality is that it may tend to create perverse incentives and drive behaviour towards meeting the best performance indicators instead of a true reflection of internationally-competitive quality. Also, there is a danger that metrics-based assessment may lead to "salami slicing" if activities were funded in proportion to the measured performance. (see also #2 above). EPC has consistently opposed a purely metrics based system preferring to measure actual output standards.

7. How can leading research universities reach internationally competitive levels of funding? Should limited central Government funding be directed elsewhere?

To reach internationally competitive levels of funding, there is a need for a change of culture in the UK. As mentioned above, the internally competitive climate needs to be replaced by a strategic one. With limited central-government funding in a given subject area, it should not be divided between several activities, none of which will be internationally competitive.

Research in UK universities depends on central-government funding and this funding needs to be applied more strategically. All the evidence seems to show that, in the UK, industry is not the route to fund research.

8. How well do universities manage their finances, and what improvements, if any, need to be made?

Universities, when allowed to, manage their finances well. However, there have been too many funding council "initiatives" in recent years which have made universities operate in accordance with government whims and fashions in order to gain an element of their funding. Also, too large a proportion of the funding is tied to bids for student numbers—that and the inequities of the banding systems (laboratory-based subjects are significantly disadvantaged) has affected the ability of some institutions to manage their budgets.

9. Are some parts of the sector too reliant on income from overseas students?

Partly because of #8 above, some parts of the sector have been dependent on overseas students to maintain a critical mass. The economics of science and engineering requires a minimum level of funding to support the basic infrastructure and laboratory facilities. The UK funding model does not easily allow for that and therefore many institutions have had to rely on international students to maintain numbers above a minimum size for survival. Also, much of the postgraduate research activity depends on students from overseas.

THE STRUCTURE OF THE HE SECTOR

Is the current structure of the HE sector appropriate and sustainable for the future?

The student staff ratio in engineering subjects within universities is creating considerable problems particularly for extended laboratory exercises. The fact that the infrastructure has been sustained from research (QR) funding has lead to considerable deterioration although this is being helpfully addressed through SRIF funding.

The structure of universities has changed with the increasing emphasis on market led businesses. This is entirely appropriate to ensure that universities are financially viable. However, if universities are to lead in producing the higher level skills for the UK economy then there has to be some intervention/direction. For example, it is financially more effective to recruit undergraduates on courses that attract a lower band since more students can be recruited thus increasing the income to the university. This implies that vocational programmes could suffer yet it is those programmes that are producing the higher level skills needed by the UK economy. This is evident from the Leitch report.

Therefore if universities must be financially sustainable they must be part of a sustainable community. The current semi autonomous structure mitigates against that.

How well do structures and funding arrangements fit with "diversity of mission?"

The encouragement of students from disadvantaged backgrounds has to be applauded. However there is a requirement for additional support for these students which have not been matched by appropriate funding. The quality of students is more important than a 50% participation rate.

Extending diversity of mission to cover teaching, research and outreach implies that universities are knowledge generators and disseminators. The link between generation and dissemination is a key to success. Therefore a balance between these three activities must be maintained. Intervention policies and market led principles can threaten that important diverse approach unless a holistic sustainable approach is taken.

Is the current structure and funding affecting growth of HE in FE and part-time study?

Care should be exercised not to dilute the value of qualifications by decoupling FE and part-time study from mainstream university accredited courses. If degrees were to be awarded by FE colleges only, it is likely that they would be regarded as inferior to full time university degrees.

A key component of a student education is the social interaction with people from different cultures, backgrounds and experience. This creates an exciting, innovative and dynamic culture that enhances students" learning. Thus part time student opportunity is important to develop life long learning and allow students to finance their studies but the success of full time learning should not be threatened.

How important are HE in FE and flexible learning to the future of HE? Would this part of the sector grow faster under different structure and funding arrangements?

The shape of HE is intrinsically interwoven with the funding regimes. For example if the UK degrees are to become Bologna compliant, further government funding is essential in order to meet the shortfall that will arise due to either extended courses or the further inclusion of students in summer vacation teaching.

Interaction between FE and HE varies across the UK. Ideally there should be a structured approach through building bridges allowing an integrated approach to education from schools though FE to HE and beyond.

Can, and should, the Government be attempting to shape the structure of the sector? Is the Government's role one of planning, steering or allowing the market to operate?

For engineering courses link with industry is essential. The Government needs to do more than talk about this issue. Encouragement is not enough. Work based learning is being proposed as an answer to a variety of problems. However unless appropriate funding is given for both industrial placements and appropriate assessment of qualifications then this form of further learning will not be appropriate.

The evidence is that allowing the market to operate is leading to closure of science and engineering departments. Yet the country according to the Government needs these higher level technical skills if it is going to be one of the leading economies. This implies that the Government should be planning and steering but in consultation with industry and the universities.

Is there a clear intention behind the balance of post-graduate and under-graduate international students being sought? Is this an area where the market should be managed? Can it be managed?

At the moment international students are subsidising home students. This is simply unsustainable. While the Government under the Prime Minister's initiative wants to see a vast influx of overseas students it should be pointed out very clearly that simply bringing in overseas students is not going to be enough to maintain a viable university sector. It is simply not the right way forward for home students to be subsidised by an influx of overseas students.

This is an area that cannot be managed. There is increasing competition from overseas universities offering courses in English and providing fees. Overseas students will be attract to the UK if the courses we provide are world leading. This implies a different approach from the current one, which is based on income generation.

THE BOLOGNA PROCESS

EXECUTIVE SUMMARY

1. The Engineering Professors' Council (EPC) welcomes this inquiry by the Select Committee.

2. The Bologna Process and its implications for UK higher education are of great importance, and have so far received very little attention in the UK.

3. The EPC overall position on the Bologna Process is that UK engineers work in a global market and therefore have to have an education that is internationally recognised and be Bologna compliant.

4. Within the UK higher education engineering community the overriding issue is whether or not the MEng degree will be universally accepted as Bologna compliant. This is intimately connected to the precise definition of the European Credit Transfer System (ECTS).

5. The EPC hopes that the Committee's inquiry will illuminate the issues involved, clarify the policy decisions which need to be taken, and add a spur to the progress which is urgently required.

Introduction

6. The Engineering Professors' Council (EPC) welcomes this inquiry by the Select Committee. The Bologna Process and its implications for UK higher education are of great importance, and have so far received very little attention in the UK. The EPC hopes that the Committee's inquiry will illuminate the issues and clarify the policy decisions which need to be taken.

7. The Engineering Professors' Council is a professional association for senior academics involved in the higher education of engineering graduates in the UK. The EPC is a subscription organisation, and currently virtually all departments of engineering in UK HEI's are members. The EPC is organised on sectoral lines, and this ensures that the views expressed by EPC are representative of the whole of HE in the UK in engineering. The EPC's mission is to promote excellence in the higher education of graduate engineers. Importantly members of the EPC are engaged in the delivery of the educational base for chartered engineers through programmes accredited by the professional institutions .

8. The EPC became involved in the Bologna Process 5 years ago when it was obvious from our contacts in Europe that many Universities in various Nation States were beginning wide ranging reforms in response to the Bologna Process. Over this time period EPC has been in constant contact with the UUK Europe Unit, the Engineering Council, the ETB, the European Universities Association (EUA), and the various Engineering Institutions representing the sectors of the profession of engineering in the UK.

9. The EPC recently organised a Policy Forum as part of which the issues raised by the Education and Skills Committee were discussed by the delegates. The EPC overall position on the Bologna Process is that UK engineers work in a global market and therefore have to have an education that is internationally recognised and be Bologna compliant. Also engineering programmes in the UK universities will not be attractive to overseas students unless they are Bologna compliant.

10. Within the UK HE engineering community the overriding issue is whether or not the MEng degree will be universally accepted as Bologna compliant. This is intimately connected to the precise definition of the European Credit Transfer System (ECTS).

The specific issues raised by the committee are addressed below:

Implications of the Bologna Process for the UK Higher Education sector: advantages and disadvantages

11. The background to the Bologna Process is that there was considerable concern in the 1990s at governmental level in the EU that Italy, Germany, France and many New Accession States have economically unsustainable, grossly inefficient higher education systems. Also, that the European higher education system was not making a sufficient contribution to the wealth creation process in the EU, and that the EU higher education system was hidebound and resistant to change.

12. Bologna started as an academic process, but this has now been largely subsumed into "In the lead by 2010", which follows from the Lisbon⁷² and Barcelona⁷³ Declarations "to increase the average research investment level from 1.9% of GDP today to 3% of GDP by 2010". This linkage cannot be over emphasised. The EU's motivation is economic competitiveness, not pedagogy. Politically, within the EU there are the "twin pillars" of:

- The European Research Area (ERA);⁷⁴ and
- The European Higher Education Area (EHEA)⁷⁵ and Bologna is seen at the topmost level in the EU as the instrument to integrate the EHEA and ERA.

13. The broad thrust of the Bologna Process to create a transparent European higher education system is to be welcomed. It is now accepted as the template by 45 nation states, and is being "observed" by China, Latin America, Australia and Asian countries. The whole issue of the Bologna Process is under active discussion in the US, which is also concerned about the future shape of its HE system. Therefore, Bologna is fast becoming a world wide standard and as such is of immense future importance for the international credibility of UK higher education qualifications, and hence the mobility of UK graduates.

14. The Bologna Process consists of a first cycle "mobility" degree of 180 credits of the European Credit Transfer System (ECTS), a second cycle degree of 90–120 ECTS with an absolute minimum of 60 ECTS, and a third cycle of as yet unspecified content. If 60 ECTS credits correspond to a typical undergraduate

⁷² www.unesco.org/cpp/uk/declarations/lisbon.pdf

⁷³ www.euromedrights.net/english/barcelona-process/barcelona declaration.html

⁷⁴ ec.europa.eu/research/area.html

⁷⁵ ec.europa.eu/education/policies/educ/higher/higher en.html

year of 30 weeks then within the above definitions referring to the Bologna Process as a "3+2+3" system is misleading. This is only correct if the second cycle is interpreted as an undergraduate year of 30 weeks duration; more will be said on this later.

15. The Bologna Process does not pose any difficulties for the vast majority of UK undergraduate degrees linked with postgraduate research degrees of two year's duration. The difficulties arise in "Integrated Masters degrees" awarded in science and engineering, which are of four years duration, and so do not fit readily into the Bologna framework. Similar difficulties are also evident in Medicine and Architecture.

16. The Integrated MEng degree is of four undergraduate years duration ie 4 x 30 weeks study, which corresponds to 240 ECTS, and is the absolute minimum for a Bologna involving the first two cycles. Therein lies the major stumbling block, because many in Europe and Asia consider this to be "lightweight" or "minimalist", which is not a position UK HEI's wish to be in as it has global overtones in terms of the perceived quality of UK engineering degrees. This has knock-on effects in terms of the outward mobility of our engineering graduates, and the inward mobility of overseas students wishing to study in the UK.

17. Additional difficulties are involved in the progression route through Bologna, in that entry to the first cycle is on national qualifications and so does not pose any problems. Entry to the second cycle is dependent on completion of a Bologna first cycle degree (again not a problem), but entry to the third cycle is dependent on completion of a Bologna second cycle degree. If the MEng is not recognised as Bologna compliant those graduates will face difficulties obtaining direct entry to overseas PhD programmes; there is anecdotal evidence that this is already happening.

18. Within engineering the position is further complicated by professional accreditation. In the UK the profession of engineering is regulated by the Engineering Council which prescribes the qualifications necessary to become a Chartered or Incorporated Engineer (CEng or IEng) in a document called UK-SPEC.⁷⁶ UK-SPEC is Bologna compliant in that it specifies the exemplars for progression to a CEng as an approved Masters degree or an Integrated MEng. Therefore an MEng degree is satisfactory for progression to an CEng, but may not be considered a fully Bologna compliant second cycle degree for further study overseas.

19. The professional mobility of UK engineering graduates is currently safeguarded by a series of international agreements such as the Washington Accord⁷⁷ and the Sydney Accord,⁷⁸ and so any changes to the status quo could well give difficulties in that area. Any admission of inequality of MEng degrees could have serious repercussions for international accreditation agreements. It could also have knock-on effects in FEANI (European Federation of National Engineering Associations).⁷⁹

20. The implementation of the Bologna Process is being monitored by the "Trends group" of the EUA. The BERGEN Trends IV "stocktaking" exercise concluded that: "some fields of study remain outside the two-cycle system in a number of countries: in particular, medicine and related fields, engineering, architecture and law . . . while the model of a four-year "Integrated Masters" also exists in the UK. It is difficult to see how this model in its present form could be integrated as a second cycle qualification to the overarching European higher education qualifications framework".

21. The UK was also dealt a further blow when $CESAER^{80}$ and $SEFI^{81}$ concluded that: "The 3 + 2 model has become a standard reference in engineering. This should not exclude other possible paths towards the second-level degree, such as an integrated 5-year curriculum or a 4+2 or a 4+1 model".

22. In addition to the difficulties with the MEng most taught MSc courses in the UK are of one year duration, BUT this one year encompasses typically 45 weeks of study, which depending on the definition of one ECTS could be 75 or 90 ECTSs. Many Universities are interpreting this period as 75 ECTSs according to the ECTS User Guide. This confusion is currently causing major problems for planning in the HE sector and needs to be dealt with as a matter of considerable urgency (see Agenda for the 2007 Meeting below). Therefore a UK "one year" Masters Degree is may be Bologna compliant on an ECTS basis, but is again seen as lightweight on a time served basis. It is therefore essential that Bologna is referred to in terms of ECTS linked to Learning Outcomes (LO's) and NOT time served.

23. As we appear to be in some difficulties with regard to the issue of whether the integrated Master degrees, MEng etc. are Bologna compliant or not, a "defence document" was produced by Universities UK, in collaboration with the Engineering Council UK (ECUK), and the EPC. The MEng at present is clearly not a 3+2 Bologna compliant degree because it is a first degree. A partial solution would be to award both a BEng followed by an MEng degree, which would then give a two cycle degree route and go some way to obviating the difficulties with Bologna.

24. A further strategy being explored in some higher education institutions in the UK is that of enhancing the MEng by adding in extra credits. For example, an extra 30 credits in the shape of a credit-bearing industrial placement. This gives 90 credits and so is Bologna compliant.

⁷⁶ www.engc.org.uk/

⁷⁷ www.washingtonaccord.org/

⁷⁸ www.engineersaustralia.org.au/member-services/international/international-activities/sydney-accord.cfm

⁷⁹ www.feani.org/

⁸⁰ www.cesaer.org/

⁸¹ www.sefi.be/

25. Therefore overall the EPC position on the Bologna Process is that UK engineering graduates should be globally mobile, and UK degrees in engineering should be internationally recognised and be Bologna compliant. There is concern that the MEng is not an international brand, and if this requires additional study, described in terms of ECTS, for full Bologna compliance the EPC position is that these changes should be implemented with the appropriate additional resources to enable that change to be effected by 2010.

The agenda for discussion at the 2007 meeting in London-clarifying the UK position

26. A recent EU Directive, *Delivering on the Modernisation Agenda for Universities: Education, research and innovation,* lists the following changes required in order to better align educational outcomes with the needs of the "Knowledge Society":⁸²

- A major effort should be made to achieve the core Bologna reforms by 2010.
- An EU Directive on the recognition of professional qualifications has made it simpler and quicker to have qualifications for professional practice recognised across national borders.

27. From the issues raised in the preceding paragraphs EPC considers that the agenda for the 2007 meeting should concentrate on:

- Clarifying the ECTS as a measure of academic activity:
 - a. Is 60 ECTS equivalent to an undergraduate year of 30 weeks study?
 - b. Is a postgraduate year of 45 weeks duration equivalent to 75 or 90 ECTS?
- Clarifying the status of the professional Masters Degrees (the MEng, MPhys and MChem), so that the way forward is clear and planning can commence.
- Enhance the move towards the universal adoption of learning outcomes, which would assist employers and universities to understand the standards graduates achieve, time served does not.
- Ensuring that the European quality assurance system does not result in an overarching European body resulting in excessive bureaucracy and over regulation

Answers to these questions need addressing with the utmost urgency because planning and development in the UK towards Bologna is at present severely impeded (2010 is very close in academic planning terms), and most HE Institutions are adopting a "wait and see" approach.

The implications of a three-phase structure of higher education awards for to one-year Masters and short undergraduate courses (HNCs, HNDs, and Foundation Degrees)

28. Within the UK the HNCs, HNDs and Foundation Degrees are an absolutely essential part of the educational base and the widening participation agenda both as qualifications in their own right, and also as entry qualifications to Bologna recognised degree programmes. As entry to Bologna compliant degrees is based on national qualifications, it is not considered that these qualifications pose any problems in the context of Bologna as they can be included in the entry routes to 1st cycle degree provided they are given the appropriate ECTS credit rating.

Awareness and engagement in the Bologna Process within HEIs

29. As will be clear from the above there are a number of difficulties for the UK HE engineering sector in implementing Bologna. The Europe Unit of UUK⁸³ has been working tirelessly to find a way forward for the UK in this morass, and ECUK has also been constantly engaged behind the scenes. However, few Vice Chancellor's have as yet become involved.

30. The UK now holds the chair of the Bologna Follow Up Group (BFUG)⁸⁴ for the next period, so increased efforts by Vice-Chancellors, UUK and the DfES is needed in order to achieve some meaningful progress over the next period, and so that the UK higher education sector can plan appropriately.

31. From a survey of EPC members it is apparent that there is a general awareness of Bologna in UK HE institutions, but the level of awareness varies from just a general awareness to some universities who are actually moving forward in implementing Bologna. However, the vast majority are doing nothing and simply waiting to receive a firm steer.

⁸² www.coimbra-group.be/DOCUMENTS/comuniv2006_en.pdf

⁸³ www.universitiesuk.ac.uk

⁸⁴ www.bologna-bergen2005.no/EN/BASIC/BFUG.HTM

Opportunities to enhance the mobility of students from the UK

32. For graduates in general Bologna should present an unparalleled opportunity for increased mobility, both outward from and inward to the UK, because notionally all the systems with be homogeneous. For engineering, many UK engineers already work overseas, and there is an increasing trend for this to occur. Therefore, it is essential that UK degrees in engineering should be internationally recognised ie Bologna compliant.

33. Currently many overseas students do not consider the relevance of the MEng because their country does not recognise the qualification. Therefore, enhancing the MEng degree to be Bologna compliant should also increase the number of overseas students seeking that qualification.

The possible implementation of a European Credit Transfer System (ECTS) and a focus on learning outcomes and competencies

34. Currently one of the biggest problems in actually implementing Bologna within the UK is that the exact value of an ECTS is as yet not specified. As was said earlier if it is interpreted such that one undergraduate year of 30 weeks corresponds to 60 ECTS, then a postgraduate year of 46 weeks could correspond to 90 ECTS, and "one year" MSc's then become Bologna compliant. This definition would therefore satisfy the vast majority of UK HE qualifications. However, the ECTS User Guide⁸⁵ states that a one year course only corresponds to 75 ECTS—this requires urgent clarification.

35. To enhance an MEng to be Bologna compliant requires a further 30 ECTS, which can be provided by increasing the duration of MEng projects or by Work Based Learning (WBL). Work Based Learning will become a much greater component of UK higher education in future, particularly if the Leitch⁸⁶ and Langland⁸⁷ proposals are implemented.

36. The Engineering Professors' Council commenced work on Learning Outcomes (LO's) in 1997 and produced five seminal reports between 2000 and 2002⁸⁸. Since that time we have consistently championed and further developed this approach, which has culminated in the QAA Output Standards, and the specification of Learning Outcomes in UK-SPEC. This system is now in universal use within UK higher education, and forms the basis of the accreditation of UK engineering degrees by the Engineering Council.

37. The Bologna signatories are now moving progressively to a learning outcomes approach, which when linked to levels through the Dublin Descriptors⁸⁹ (levels of attainment after the first, second and third cycles), forms a complete system for the definition of outputs. This will again be a major rationalisation of the methods of defining outputs from degree systems on an international basis.

38. The EPC considers that a learning outcomes approach to the specification of competences is vital in assessing outputs from learning programmes in general, and the specification of engineering competences in particular. Furthermore, the definition of a Bologna compliant degree programme should be couched in terms of first or second cycle based on appropriately defined ECTSs, and the output specified in terms of learning outcomes and not on the basis of time served.

Quality Assurance systems in HE (teaching and research): the compatibility of UK proposals and Bologna

39. At the Bologna Process ministerial summit in Bergen in 2005, Ministers adopted a report setting out European Standards and Guidelines for Quality Assurance in the EHEA. The Standards and Guidelines were produced by the European Association for Quality Assurance (ENQA) in cooperation with the European University Association (EUA), the European Association for Institutions in Higher Education (EURASHE) and the National Union of Students in Europe (ESIB)—the so-called "E4 Group"⁹⁰.

40. EPC welcomes the approach adopted by the E4 Group that it would be inappropriate to develop detailed procedures for quality assurance at European level as originally requested by Ministers in Berlin in 2003. The Standards and Guidelines therefore leave signatory countries to determine their own quality assurance arrangements.

41. EPC believes that the European Standards and Guidelines are, on the whole, compatible with UK quality assurance arrangements and have the potential to support the development of a quality culture and mutual trust in European HE. The QAA is working to incorporate them into the UK's existing institutional review processes.

42. EPC hopes that the Standards and Guidelines will not create an additional layer of evaluation or bureaucratic burden for UK HEI's. Also if the European Register for quality assurance agencies is implemented it will be vital that it does not become another regulatory tool or ranking instrument.

⁸⁵ ec.europa.eu/education/programmes/socrates/ects/guide

⁸⁶ www.hm-treasury.gov.uk/leitch

⁸⁷ www.dfes.gov.uk/hegateway/hereform/gatewaystotheprofessions/index.cfm

⁸⁸ www.epc.ac.uk/publications/standards/

⁸⁹ www.europeunit.ac.uk/resources/E-04-17.pdf

⁹⁰ www.universitiesuk.ac.uk

Degree classification reform in light of Bologna

43. Delegates at the recent EPC Policy Forum in London were virtually unanimous in supporting the view of the Burgess Group⁹¹ that the present system of honours classification used in the UK is no longer fit for purpose, and needs reform.

44. In keeping with its view of the importance of international transparency, EPC considers that the nature of reform should consider the possible benefits of a degree award that is understood internationally—for example a Grade Point Average (GPA) system. Such an approach is used by some UK universities and most of the rest of the world. It is internationally recognised and understood, it has a transcript, and gives an overall summative single number that can be used as a guide to the quality of the degree.

45. Reforming our degree classification system to support the Bologna Process, is seen as a major complementary advance which could further the international recognition of UK degrees, and enhance the attractiveness of UK higher education in the overseas student market.

The broader impact of Bologna across Europe: a more standardised Europe and the consequences for the UK's position in the global market for HE (Bologna and the second phase of the Prime Ministers Initiative for International Education (PMI 2)).

46. With the whole of European higher education becoming homogenised through the Bologna Process, and possibly the world, then the perceived benefits of a UK higher education qualification is likely to be eroded, as many systems will converge towards the UK system (for example there is an increasing number of universities in Europe offering second cycle degrees taught in English). Overseas students will then be faced with many more HEI's offering degrees which are indistinguishable from ours, and so the competition faced by the UK will become very much greater.

47. With international competition becoming fiercer, and based on largely undifferentiated products in terms of the higher educational process, then the emphasis will be on the perceived quality of the degree offerings. The Trendence survey⁹² (a survey of students in Bologna signatory countries) has shown that over 50% of students in those countries are intending to move directly from the first to the second cycle Bologna degrees. One of the primary influences on the choice of country in which to study is the perceived quality of the degrees on offer. Therefore, the perceived quality of UK degrees is of paramount importance to achieve the ambitious targets set out in PMI2, and the degrees offered in the UK must be fully Bologna compliant, as HEI's do not want to be seen to be awarding "minimalist" degrees.

48. Finally, as is widely recognised, the UK higher education system is chronically under funded in comparison to our major international competitors by around 30-50%, depending on the source chosen. In a recent press statement the UK Chancellor acknowledged this, but appears to see the way forward as deregulating fees. This will have a major effect on the international competitiveness of UK higher education, and could adversely impinge on the targets set in PMI2.

49. EPC considers that all political parties should recognise that if the UK wishes to be a key competitor in the knowledge economies of the 21st century, a properly funded engineering higher education system, with a professional cadre that is internationally recognised and competitive is central to such aspirations.

December 2006

Memorandum submitted by the General Optical Council (GOC)

The General Optical Council (GOC) is the statutory regulatory body for opticians and optometrists in the United Kingdom (UK). A person may not practice as an optician or optometrists in the UK unless registered with the GOC.

The GOC notes that the Education and Skills Committee has announced that it will be undertaking an inquiry into the Bologna Process. The Committee is also undertaking an additional inquiry into the future sustainability of the higher education sector

This constitutes the GOC's written submissions to both inquiries

In June 2006, the GOC confirmed the following policy statement on Bologna:

"In order to safeguard the standards of optometry and ophthalmic dispensing in the United Kingdom, and so as to enhance student mobility, the General Optical Council wishes to conform to the spirit of the Bologna Agreement. The Council will therefore take all steps necessary to amend its Rules and Regulations to enable it to proactively adopt the principles of the Bologna

⁹¹ www.universitiesuk.ac.uk

⁹² www.efmd.org/attachments/tmpl

Agreement. The Council recognises that the first steps will be to investigate and resolve any barriers, caused by the GOC's current Rules and Regulation, to the free mobility of optometry and ophthalmic dispensing students within Europe".

Since June a project plan has been agreed and the following work schedule is being pursued:

A review of the core curriculum for the undergraduate training of optometrists. (The core curriculum for the training of dispensing opticians has recently been reviewed and updated. The Group had a copy available to them.)

It has been agreed that to enable the free movement of professionals the GOC will need a mechanism to assess the fit between the competencies possessed by the migrating professional and the scope of practice in the host country or profession. For comparisons of competencies to be meaningful the Project Group agreed that the first point in the work plan would need to be a review of the UK optometry core curriculum. As the eight UK optometry training universities will be most affected by any change to the curriculum the universities have started work on this part of the project.

 Possible benchmarking of the revised UK core curricula against other EEA national training curricula.

An exercise is underway to prepare a summary of the current knowledge of the optical and optometric scope of practice in the major EEA countries.

 The Project Group to consider the extent to which the revised UK optometry undergraduate curriculum constitutes the syllabus for the professional qualifying examination Part 1 for entry to the UK register.

It has been resolved to consider this point during the review of the UK optometry core curriculum.

The Project Group to consider the extent to which the revised syllabus for the European Diploma
of the European Committee on Optometry and Optics (ECOO) should be taken into account when
reviewing the UK curriculum.

It has been resolved to consider this point during the review of the UK optometry core curriculum.

- A review of the GOC Rules on the Testing of Sight while training as an optometrist
- A visit to the Utrecht University in the Netherlands
- A visit to the optometry course in the Republic of Ireland

Work scheduled for later in 2007.

FUTURE SUSTAINABILITY OF THE HIGHER EDUCATION SECTOR

The GOC derives its powers from the Opticians Act 1989. Under Section 13(1) of the Act, the GOC has a duty of the Council to keep themselves informed of the nature of the instruction given by any approved training establishment to persons training as optometrists or dispensing opticians and of the assessments on the results of which approved qualifications are granted.

For the purposes of their duty under subsection 13 (1) the Council may appoint persons to visit approved training establishments and to attend at the assessments held by the bodies which grant approved qualifications.

During its Visits, the GOC looks in detail at a university's provision for the training of Optometrists and Dispensing Opticians, bearing in mind the main concern of the Council is the protection of the public. In order to ensure this within training programmes, the Council has laid down a minimum set of conditions under which an Optometry programme must be delivered, and recognises certain special cost factors which must be met. These include:

- the necessity of running a University based clinic which admits real patients from the community;
- a required staff/student ratio of 1:4 in the clinical supervision of these patients;
- a close specification of the curriculum to be offered and the necessary equipment to deliver a set
 of core competencies for each student; and
- there is a necessity that students receive training in techniques that reflect contemporary standards of practise, to achieve this, equipment must be available which represents this level of technology.

There is evidence that the unit of resource currently available to the Optometry Departments in the UK HE sector is not sufficient to deliver these conditions satisfactorily. The GOC has previously made representations for a higher unit of funding for the final year of training in optometry programmes, during which the clinical experience is provided within the University's internal optometry clinics.

December 2006

Memorandum submitted by GuildHE

INTRODUCTION

1. GuildHE (formerly SCOP) is a recognised representative organisation within the higher education sector. It is the key advocate for the importance of institutional diversity within the higher education sector. GuildHE is an inclusive body, with members across higher education colleges, specialist institutions and universities. Between them, our members educate about a quarter of a million higher education students. Other key characteristics are briefly set out below:

- most member HEIs are smaller than the average university;
- they include many institutions which have a specialist mission or subject;
- they include major and world-class providers in art and design, music and the performing arts, agriculture, education and the health professions (for example, the specialist HEIs provide 28.8% of all Agricultural Sciences students, 21.3% of all Creative Arts students and 12.5% of all Education students);
- they embody communities of practice, with a clear commitment to high quality teaching enriched by research and knowledge exchange; and
- they make a particular contribution to local community capacity-building thus contributing to social and economic regeneration.

2. GuildHE welcomes the opportunity to contribute to the Education and Skills Committee's inquiry into the future sustainability of the higher education sector. This evidence is also submitted on behalf of our sub-association, UKADIA (the UK Arts and Design Institutions Association). It highlights key principles and draws on agreed GuildHE and UKADIA policy views and statements. In particular, we have focused on our vision for the future shape and development of the sector over the next few years. We would hope to have the opportunity to supplement this contribution with oral evidence early in 2007.

OUR VISION FOR HIGHER EDUCATION

3. GuildHE has a vision for higher education in which a sustainable, diverse and dynamic higher education sector plays a full part in the development of a well-educated and socially inclusive nation, enhances the UK's economic competitiveness, and fosters cultural engagement, knowledge creation and exchange in a global context.

4. To deliver this, we need a system built on recognition of the excellent provision that already exists across a rich and diverse range of higher education institutions and other providers. We need a system that does not typecast or put institutions into fixed hierarchies, is more firmly grounded on institutional business planning and encourages greater collaboration and complementarity. We also need a system that recognises and rewards high quality teaching, research and knowledge exchange activities, wherever they occur, and across all institutions in the sector.

5. Our vision means a system with effective collaboration and alliances with other sectors (including schools, further education, business and the community). Higher education cannot see itself as a world apart from the rest of the education sector or the wider community. Higher education also needs to be properly accountable, with effective, but streamlined, frameworks for regulation and accountability which focus explicitly on outcomes, alongside good quality public information.

6. Government policy from the HE White Paper⁹³ onwards has highlighted the need to acknowledge and celebrate diversity within the sector, with institutions identifying and playing to their strengths. GuildHE's established policy lines broadly complement this view. In addition, we would strongly emphasise the complexity of the sector and the need for it to remain dynamic, open to change and innovation. Indeed, the smaller and specialist institutions represented by GuildHE embody these qualities. Any attempt to limit and overly define the pattern and role of institutions could lead to future decline and ossification, and will not be in the interests of students, the economy or society more generally. It would also deny choice to students.

7. In our response to the HE White Paper, we identified the following core features as essential to sustain a healthy and dynamic system of higher education:

- firstly, our higher education sector needs to remain an integrated system with key common values and shared principles, offering a designated range of provision to defined higher education standards;
- we need a system based on dynamic diversity, with institutions continuing to evolve and develop in response to the growing and changing needs of students, employers and the wider community;

- we need a system which is characterised and distinguished by the fact that its staff are engaged in research and scholarship both because of their inherent value and to underpin teaching and other activities;
- we need a system with sufficient public investment for its core activities of teaching, scholarship and research and to ensure that all students capable of benefiting from higher education are able to do so.

FUNDING

8. GuildHE supports the principle that public funding for higher education should be directed to support the core strategic aims of supporting high quality teaching, research and knowledge transfer activities via the block grant and across all publicly-designated institutions within the HE sector. Given the recent introduction of variable tuition fees and new student support arrangements, it is timely that the Higher Education Funding Council for England is part way through a major review of the current teaching funding methodology. An increasingly significant role for HEFCE and other HE funding bodies will be to ensure that strategically important outcomes for higher education and the country as a whole are protected in the public interest. It will be important, therefore, to find an acceptable balance between investing in strategic objectives, responding to potential market volatility, building a sustainable sector and respecting institutional diversity and autonomy.

9. Within the overall methodology for teaching funding, there is a compelling case for continued, targeted allocations for smaller and specialist HEIs, recognising the distinctive contributions and specialised environments which they bring to the HE sector. Such allocations need to be transparent and to be based on genuine differences in teaching methods, particularly within subjects which require more individual tuition, have major infrastructure costs or are deemed to be strategically important to the economy and overall quality of life.

10. GuildHE continues to support the Dearing principle that students should make some form of meanstested contribution towards the cost of their higher education underpinned by robust financial support for students from poorer and disadvantaged backgrounds. We have welcomed the reintroduction of targeted maintenance grants which we first called for in our 2002 submission to the Spending Review.

11. The Government's review of the impact of differential tuition fees in 2009 will need to assess whether participation in higher education, particularly by students from under-represented groups, has been adversely affected by the new arrangements. No decision on raising the current fee cap above £3,000, or removing it entirely, should be taken until the review has analysed the evidence of impact to date.

12. While many smaller and specialist institutions would be able to charge a higher fee in a more differentiated market, there are concerns about the possible effects of market failure. For example, it might be relatively easy for visual and performing arts institutions to charge higher fees if the cap were raised or removed, but this might come with the risk of limiting access to these institutions for students from under-represented or disadvantaged groups. Many of these institutions do not wish to return to a situation where their programmes are largely filled with students from affluent backgrounds.

13. GuildHE's submission to the recent DfES consultation on research assessment and funding emphasised that any future processes should:

- identify genuine excellence, wherever it exists, within mechanisms which are as fair and transparent
 as possible, and take account of the critical role of peer review within the assessment process;
- be based on a broader definition of research, taking greater account of contributions in applied and multi-disciplinary research areas and the links between research, knowledge transfer, teaching and professional practice;
- be developmental and responsive to improvements in performance over time;
- ensure that new and emerging research areas receive the necessary support to develop and thrive;
- be broadly consistent in the approach used across all disciplines (with variation in detail or weighting to reflect the nature of individual disciplines); and
- provide a baseline allocation for all higher education institutions in recognition of the need to invest in research capacity across the sector. This allocation could be calculated using either student or staff FTEs and would be particularly important for new and developing institutions and emerging disciplines within the HE sector.

14. The recent DfES announcement sets out a new framework for research assessment and funding which aligns with many of the points outlined in paragraph 12. We remain concerned, however, that further attention should be given to investment in broader research capacity across all HEIs and we continue to call for a baseline allocation for all institutions.

Structure

15. One of the great strengths of the UK higher education sector is the diverse range of excellent and autonomous institutions within it. GuildHE would not support any attempt to introduce centralised planning for the sector, although we recognise that the wider public interest may sometimes require funding bodies to steer or facilitate particular developments. We feel that this should be on the basis of providing incentives for HEIs and potential students to engage in particular activities or subjects.

16. We believe that the sector needs to continue to develop more flexible and innovative approaches to learning at the HE level. The recommendations in the Leitch Review⁹⁴ for over 40% of the adult population to be qualified at Level 4 or above and for shifting the balance of intermediate skills from Level 2 to Level 3 are particularly welcome. While the delivery of higher education in further education colleges is one means for facilitating growth and new types of provision, it is not the only one. In the context of GuildHE members, we would wish to emphasise the distinctive strengths of smaller and specialist HEIs. Collectively, they represent a major concentration of "practice"—in teaching, research and knowledge exchange. They often hold exceptional links to their respective worlds of work. They have an important role in applied and near-market research. They make major use of professional practitioners bringing added benefits to the vitality of the curriculum, the attraction and retention of staff, employability and the employment of graduates.

17. Many specialist institutions also excel in providing high quality higher and further education within the one institution. This is a particular characteristic of specialist art and design colleges and the agriculture/land-based institutions. Some of these institutions are located within the HE sector—others within the FE sector—but they have a very particular commitment to delivering progression opportunities within a specialist environment from post-16 to postgraduate levels.

18. GuildHE is supportive of the role of further education colleges (FECs) in delivering higher education. We believe that all FECs providing HE should provide some kind of strategic HE policy statement which is proportionate to the level of engagement of a particular institution and its relationship with HEFCE. There is also a strong case for bringing all higher-level programmes under the strategic direction of a single funding agency (ie: HEFCE).

19. It is important to signal that higher education in FECs should not be expected to conform to a single model of provision. While much of the HE delivered in FE might be seen as closely aligned to higher level skills and employer engagement, there are also many examples of provision in FECs delivering to a broader, academic objective. Similarly, many HEIs are contributing significantly to higher level skills and employer engagement through a wide variety of innovative programmes alongside knowledge transfer and research activities.

20. A number of FECs will continue to reach the 55% higher education threshold which qualifies them to transfer from the FE to the HE sector. Our view is that there should be a different and more intensive strategic engagement between the funding council and an FEC which is clearly on a trajectory to move into the HE sector.

CONCLUDING POINTS

21. In conclusion, we would wish to reiterate the following key points:

- Distinctive and specialist HEIs make a major contribution to diversity and high quality provision within the higher education sector; there is also further potential for growth in such institutions to support widening participation;
- They offer a valued alternative for many students to studying in one of the large, general HEIs.
 The recent published analysis of the 2005 National Student Survey results⁹⁵ identifies that students in smaller HEIs generally have a higher level of overall satisfaction;
- Smaller and specialist HEIs offer distinctive environments for teaching, research and knowledge transfer within communities of practice. As such they are effective guardians of particular specialist subjects and
- practice-based approaches within higher education. They make a vital contribution to the dynamism and diversity of the higher education sector;
- the higher education sector is complex and needs it to remain dynamic, open to change and innovation. Any attempt to limit or prescribe the pattern and role of institutions could lead to future decline and ossification, and would not be in the interests of students, the economy or society more generally.

December 2006

⁹⁴ Prosperity for all in the global economy—world class skills, Leitch Review final report, HM Treasury, December 2006.

⁹⁵ The National Student Survey 2005: Findings: A report to HEFCE by Paula Surridge, Department of Sociology, University of Bristol, HEFCE, November 2006.

Memorandum submitted by the Heads of Chemistry UK (HCUK)

The Heads of Chemistry UK (HCUK) is the body that represents the interests of departments engaged in chemical education, scholarship and research in universities and similar institutions throughout the United Kingdom. Through its Standing Committee, the HCUK has considered the consultation paper carefully and the response from the Royal Society of Chemistry (RSC).

The HCUK supports the Royal Society of Chemistry (RSC) response fully, and would emphasise the following.

UNIVERSITY FUNDING

Qu. 4. IS THE CURRENT FUNDING SYSTEM FIT FOR PURPOSE? IS THE PURPOSE CLEAR?

RSC response:

The purpose is clear, but the current system is not fit for purpose. There is insufficient resource overall and the relative funding between subjects is inappropriate.

The current system is too geared to what universities wish to provide and what 18-year-olds wish to "purchase". The mechanisms for ensuring that national needs are met are either not appropriate or insufficiently used.

HCUK agree that the mechanisms for ensuring that national needs are met are either not appropriate or insufficiently used but that universities should also retain their autonomy. The only way of achieving both is to provide a system which rewards university commitment to key disciplines otherwise universities may justifiably follow resource rather than national need.

Qu. 6. Should the £3,000 Cap on Student Fees be Lifted After 2009 and What Might be the Consequences for Universities and for Students, Including Part-time Students?

RSC response:

No comment.

HCUK recognises that lifting of the cap on student fees may be potentially beneficial to institutions in England but that it could create a significant funding gap between institutions in different parts of the UK. The effects on participation would need very close monitoring.

December 2006

Memorandum submitted by the Higher Education Academy

INTRODUCTION

The Higher Education Academy

1. The Higher Education Academy is an independent organisation funded by grants from the four UK higher education funding bodies, subscriptions from higher education institutions, and grant and contract income for specific initiatives. The Academy supports higher education institutions, discipline groups and all staff in their work to enhance the student learning experience.

2. The Academy works at a strategic level with senior staff in HEIs and other staff in higher education who contribute to the student learning experience and undertakes research and inquiry to provide an evidence base for good policy and practice in learning and teaching. At the heart of the Academy's work is our network of Subject Centres, based in institutions across the UK and working with around 85% of university and college-based HE departments. Each Centre focuses on the development needs of teaching staff in specific academic disciplines throughout the UK.

3. The Academy is a centre for evidence-informed practice in higher education and the UK's focal point for enhancing teaching and student learning in higher education. We advise and assist HEIs, subjects and individuals through our extensive dissemination and research activities, including funded projects on issues of central importance to teaching and student learning. We provide a place to share, broker and network examples of good practice in managing the quality of the student learning experience and encouraging effective teaching and assessment for an increasingly diverse student population.

Evidence to the Select Committee

4. The Academy's evidence to the Select Committee inquiry focuses on those questions raised by the Committee that relate most directly to the student learning experience. It is important to note that there are no black and white answers to many of the issues raised. Our evidence draws on the experience of different subject centres working with different discipline groups, on the evidence drawn from our work with institutions and on the results of research carried out or commissioned by the Academy.

We would be happy to supplement our written memorandum by providing oral evidence to the Committee's inquiry.

THE ROLE OF UNIVERSITIES OVER THE NEXT 5-10 YEARS

What do students want from universities: what should the student experience involve?

Research evidence

5. There is a considerable volume of research evidence on what students want from universities. The Higher Education Academy has funded or commissioned research on a number of related issues, including:

Changing Fee Regimes and Their Impact on Student Attitudes to Higher Education

Nick Foskett, David Roberts and Felix Maringe

August 2006

This research provides evidence of the impact of the introduction of fees on the decision-making of young people about higher education admission and on the shape and organisation of the higher education undergraduate market place. The research was based on a study of the response of HE institutions in England to the new fee model in terms of their operational processes and admissions policies and practices; a study of what potential applicants know and understand about the new fee regime and how this is impacting on their decisions about application and on the their expectations about the nature and value of higher education; and a study of the implementation of established variable fee regimes in Australia and New Zealand to inform understanding of the possible impact in England.

- 6. The main findings are summarised below:
 - 1. Potential students had a broad knowledge of the new fees system, and most knew that they do not have to pay fees upfront and can get loans. However, most had little knowledge of the detailed issues related to funding their study, such as the institutional support available to them in the form of grants, bursaries and scholarships
 - 2. Students are likely to be rational about the proposed fees increase in 2006, expecting that they will translate into better services and support for them during their years of study
 - 3. They are unlikely to base their decision to go to university primarily on the issue of fees; some are strongly inclined towards accessing careers first and using HE as a career enhancement strategy rather than as career finding strategy
 - 4. There does not seem to be any substantial evidence from Australia and New Zealand that suggests that increasing fees reduces participation in HE
 - 5. There is a likelihood of greater local participation in HE as a strategy to cushion students from increased costs of study. Alongside this will be a strong likelihood of parental involvement in the decision-making of their children about going to university.
 - 6. Universities are moving to expand international and postgraduate taught degrees, partly as a result of fears that the undergraduate market will now decline, and of a predictable decline in the school-leaver cohort. However, Masters places may be difficult to fill, as future graduates seek a break from debt and feel the need to start earning more rapidly.
 - 7. Blended learning and accredited Continuing Professional Development are likely to be key areas for future expansion as students move away from the traditional model of immediate progression to full-time postgraduate education, in favour of a more flexible "earn as you learn" lifestyle.
 - 8. The undergraduates just above the threshold for financial support are likely to suffer from the impact of higher fees. Universities predict that the heaviest burden will fall on the middle-class students, who will be exempt from grants and bursaries, but mandated to pay the full fee.
 - 9. Student advisers and counsellors are predicting more complaints from UK students who will regard themselves as customers with rights and higher expectations. Tensions between international students and home students are also likely to rise, following Australian examples.
 - 10. HEIs are likely to put extra resources from "top-up fees" into their estate and to improve student services.

11. In England, the cap on fees has also inflated the pricing market, as the effect of peer pressure and the assumption that the cap would be a benchmark of "good quality" has driven nearly every HEI to price all its undergraduate degree courses at £3,000, irrespective of the cost of teaching or the career prospects associated with the degree.

Full details are available on the Higher Education Academy at www.heacademy.ac.uk/4407.htm

First Year Experience

Mantz Yorke and Bernard Longden

First phase report to be published late 2006.

- 7. The aims of this research are:
 - 1. To survey first-year, full-time students from a wide range of institutional types and subject areas about their perceptions of this initial experience of higher education.
 - 2. To investigate the reasons of those who do not return for a second year in the same institution.
 - 3. To compare the reasons for non-completion with those given in previous studies.
 - 4. To explore the possibility of a connection between the results obtained from (1) and (2).
- 8. The first phase report has not yet been published. However preliminary findings are as below:
 - 1. 80% of students were happy with their choice of subject and the majority were confident that it would lead to a graduate level job.
 - 2. the more students know about their institutions and courses before enrolling, the less likely they are to consider dropping out.
 - 3. the likelihood of withdrawal was considerably affected by two key factors: students' prior knowledge of their institution and their course, and how stimulating they felt their teaching to be. 41% of students who knew little or nothing about their course before enrolment had thought of withdrawing, compared with 25% of those who knew a moderate amount or a lot.
 - 4. While on the whole students seemed to be coping with their academic workloads, a third of respondents found academic work harder than they had expected it to be, and 38% found difficulty in balancing academic and other commitments.
 - 5. Teaching was generally seen as supportive, and students felt stimulated in their learning.
 - 6. Staff were generally perceived as friendly: in most subject areas a majority of students said that at least two members of staff knew them by name.
 - 7. Most students thought that the feedback they received supported their learning, but in around onethird of the subject areas they did not think it was sufficiently prompt.
 - 8. 72% were confident that their programme would lead to an appropriate graduate-level job.
 - 9. For more than one-third of respondents, motivation levels had not been as high as they felt they might have been. Just under one-third had not done the expected background reading, and only one in ten had done any reading beyond the programme's requirements. Just over half of the respondents had missed some formally-timetabled sessions.
 - 10. The majority of students (57%) said that they needed to undertake paid employment to help fund their studies. Worry about financing was a concern to a similar majority (58%).
 - 11. The survey did not find any marked differences according to gender, nor between students from managerial/professional backgrounds and those from supervisory/technical/manual backgrounds, nor between those who were the first in their immediate family to go into HE and those who were not. These findings suggest that students from "widening participation" backgrounds are experiencing HE in much the same way as their more privileged peers. Differences according to ethnicity were also small and mainly showed lower levels of engagement in the social aspects of HE.
 - 12. Students from outside Europe gave broadly similar responses to home and EU students, except that they had a slightly lower engagement in the social side of HE. Non-UK students were slightly less satisfied with student support services than UK students. They also tended to keep to themselves to a greater extent than UK students (especially so in the case of the non-European students).

Full details are available on the Higher Education Academy website at www.heacademy.ac.uk/ FYEsurvey.htm

THE POSTGRADUATE RESEARCH EXPERIENCE SURVEY (IN PILOT PHASE)

9. The Postgraduate Research Experience Survey (PRES) is a continuous service made available to all HE institutions that have postgraduate research students. It is intended to help institutions enhance the quality of postgraduate research degree provision by collecting feedback from current research students in a systematic and user-friendly way.

10. The Academy has developed PRES for use by any HE institution in the UK that wishes to use it. It is generic in nature, but allows HE institutions to add some specific questions of their own if they wish to. The system allows comparison of the institutional results with the overall results.

11. The pilot phase involved eight institutions The main administration of PRES will take place in February–March 2007.

12. For full details please visit the Higher Education Academy website at http://www.heacademy.ac.uk/ 3919.htm

TAUGHT MASTERS PROGRAMMES EXPERIENCE SURVEY

13. The purpose of this survey is to gain feedback from students studying on taught Masters programmes in the UK on their experience of their courses. The results will help institutions to revise and improve their taught Masters programmes, inform the choices of future applicants to higher education and contribute to public accountability.

14. This survey is not a census of HEIs, but will be based on a representative sample of HEIs who are willing to take part. The main objectives are:

- 1. Conducting a scoping exercise of all taught Masters programmes in the UK (using HESA data) and developing a typology of those programmes, which can inform the HE sector
- 2. Taking into account the specific nature of the student experience and teaching, learning and assessment styles on taught Masters programmes
- 3. Providing a firm understanding of the level of overall student satisfaction on taught Masters programmes
- 4. Providing more specific and comparative analysis of international and domestic students on these programmes
- 5. Developing robust conclusions and recommendations for improvement and quality enhancement of these programmes
- 6. The web survey will be set up during the autumn term and will be launched at the start of 2007 for around three months.

For full details please visit the Higher Education Academy website at http://www.heacademy.ac.uk/ 4876.htm

THE NATIONAL STUDENT SURVEY: SUPPORTING INSTITUTIONS

15. The National Student Survey is a survey of students' experience. It gives the opportunity to look at students' experiences of their courses and the quality of their learning, and how we can improve these.

16. The Higher Education Academy is working with the sector to develop understanding of how students' perceptions of their experiences at university should be interpreted in relation to their previous experiences, dispositions and learning activities so that changes in policy and practice can be based on reliable evidence. In particular:

- 1. We are taking a lead role in identifying how the Ipsos MORI NSS dissemination website (intended for internal use in institutions and students' unions), and feedback to HEIs more generally, can be developed to serve them better.
- 2. At HEIs' request we are working with a number of individual institutions to support them in using the results of the NSS to improve the student learning experience.
- 3. We have commissioned a study on the ways in which universities are using the NSS results and website in their own procedures for improving the student learning experience.
- 4. At the request of the Higher Education Funding Council for England (HEFCE), we are working with Ipsos MORI to develop and piloting a "bank" of optional extra questions that HEIs may wish to add for their own use in the 2007 online survey. We will also be testing the validity of these new questions, which relate to the "learning community" and "intellectual motivation".

Views on the student experience

17. There has been debate about the need to treat students more like customers in an era of increasing fees: to meet their needs for good teaching, high quality services and facilities that are available ubiquitously and 24/7. This plays to the notion of a university education as a means to creating employable, skills-rich graduates.

18. The traditional opposing view is the idea of higher education as generating a culture of tolerance and transmitting the values of civilisation. Both views have been turned to the extrinsic purpose of serving a country's needs, by fuelling the knowledge economy, or by creating a better cultivated and well-balanced population.

19. Neither view equates with what students themselves report. They have a complicated set of requirements including flexibility, autonomy, relevance, a good learning experience, stimulation, employability and value for money. Most graduates remember the more ordered thought processes they learned, the wonder of acquiring a body of knowledge, learning to question received wisdom, and the motivation they acquired to learn through the rest of their lives.

20. Within these broad trends, students of different subjects report different experiences. For example, the 2006 Economics Network Student Survey found that among the most frequently mentioned aspects of the course were the quality of staff and lecturers, variety of modules to study and future job prospects.

"Some of the lecturers are really good, they encourage you to learn and understand and are very good at explaining difficult concepts". The answers are very similar to the ones given in the 2004 survey. The quality of teaching staff is given as a crucial factor in the students' continuing satisfaction with the course—"Bad lecturers: should be trained. I am not choosing some of the modules next year specifically because of who is teaching them".

21. The student experience should be transformative, so that they gain a new perspective on the work and acquire new ways of analysing and thinking. Students taking part in the 2006 Economics Network Student Survey were asked how their course had changed them: "For the better. I look at everything in the world, and think economics. It changes the way you think, into a more rigorous, analytical mindset" or "It made me realise that there's a great deal of pleasure in actually understanding something".

22. Universities and academics have a role in helping students to engage with the material they are learning so that we derive the outcomes students, academics and employers seek. This way of thinking underlies the view of improving student learning represented in the UK's National Student Survey and the Australian Course Experience Questionnaire. These are not measures of satisfaction so much as windows into how our designs for learning are experienced by students. From these insights we assemble the practical measures we may take to enhance the quality of their experiences.

What do employers want from graduates?

23. Evidence presents a mixed and sometimes confused picture—the short answer may be that employers do not really know what they want from graduates, or that universities do not see it as their role to provide "job ready" graduates.

24. The Academy's Subject Centre for History, Classics and Archaeology expresses this neatly:

"I know what employers should want, but that's different".

Subject Centres are very struck by the multiplicity of employer interests; and that they are struck too by the extent of self-employment pursued by the most enterprising graduates, for example in Archaeology where a large proportion of graduates start their own businesses.

25. The Academy's Centre for Education in the Built Environment reports lively debates between employers, academics and professional bodies about the perceived gap between what employers expect of a new graduate and what they get. Some university schools are responsive to the signals coming through such discussions; others claim that their job is to educate, not to train in skills. The Centre points out that curriculum change is costly because of regulation by the professions, university quality control and staff overload. It suggests that the government could give a stronger lead in encouraging vocational subjects to develop a more judicious blend of science and application, education and specialist skills.

26. The Academy's Centre for Economics suggests that employers look for graduates with the ability to analyse and solve problems, either individually or in team, using generic skills and, where appropriate, subject-specific skills. It identifies a critical element as being able to move from the theoretical, hypothetical world of stylised models and generalisations to the real world of ill-defined issues and imperfect information. It also identifies a common theme: the ability to communicate: presentational skills, team-working skills and simple literacy are all vital.

27. The Academy Subject Centre for Medicine, Dentistry and Veterinary Medicine points out that in its subjects a university education is the only route to professional registration. Graduates in these subjects are assured, through rigorous quality monitoring by the professional and statutory bodies, as "fit to practise". The Centre reports that employers would prefer greater flexibility over commissioning educational places,

a view that is contested by many other groups as damagingly short-term. Adequate planning of healthcare resourcing requires much greater input than short term commissioning could achieve, since programmes typically take five years to complete.

28. The Academy's experience from working with universities and colleges across the UK is that institutions have embraced the skills agenda, recognising the key part they have to play both in preparing the technical and professional workforce of the future, but also in terms of continuing professional development. There are far more higher level vocational qualifications now in universities of all types than in the past, including vocational degrees, Foundation degrees, professional qualifications, HNC/Ds, and postgraduate qualifications.

29. The Academy has stimulated considerable engagement between its Subject Centres and Sector Skills Councils in order to, for example, create vocational progression frameworks, influence the shape of the new specialist diplomas at level 3 and of Foundation Degrees, accredit industry skills, find willing employers to engage in HE curriculum design, and produce shared resources for vocational learning, research industry competences and employer expectations. This has been particularly successful in the subject areas of Art, Design and Media, and in Construction. We have embarked on a pump priming development project to test out the implementation of the Sector Skills Agreements, through the Subject Centres, in their academic departments. We are also actively supporting entrepreneurial and enterprise education through our close work with the National Council for Graduate Entrepreneurship, and twenty-two of our twenty-four Subject Centres have been developing methods and materials for this area of learning.

30. Recent policy documents such as the Leitch Review tend to underplay the extent to which higher education institutions are already engaging employers in curriculum design and learning outcomes. The undergraduate curriculum frequently includes placements, projects, skills and enterprise modules, simulations and other work-related components to generate higher level skills. Extra-curricular activities are also widely supported, such as volunteering and work experience, for which credit or additional certification is frequently available. The development of Personal Development Planning (PDP), now a requirement for all HEIs, has helped bring all these elements together to assist individuals in their career planning.

31. Employers are increasingly seeking graduates who are able to work in international and multicultural environments. Internationalisation of the curriculum, which is being actively supported by the Higher Education Academy, is an important component of being able to provide graduates with the appropriate knowledge and skills.

What should the government, and society more broadly, want from higher education?

32. A strength of the UK higher education system is its diversity. There is nothing wrong in Government giving a steer to higher education, but it should be wary of direct intervention and should give out consistent messages. There is a case for directly incentivising learners to take up priority subjects.

33. There is huge good will and professionalism in higher education that needs to be nurtured. Cynicism needs to be countered by recognising and respecting academic freedom while engaging academics in a debate about the merits of innovation and change. This is often done most effectively at subject level, where there is most buy-in from academics.

34. There is no distinction between an enterprising nation and its higher education sector. The nation quite reasonably expects its educated people to be innovative and risk-taking. These are precisely the characteristics of the academic process in higher education: all our research is based upon the taking of a risk which sometimes succeeds, receives peer acceptance, is published and enters the mainstream of knowledge. By participating in higher education, students are nurtured in a culture of rational risk-taking.

35. The education system should deliver education fit for purpose. That means having the right type of student studying the right type of subject at an appropriate level and proceeding through the higher education programme at an appropriate pace. The mechanisms for delivering the differentiated university missions envisaged in the 2003 White Paper need strengthening. This requires looking at the impact of different funding strands. Research funding is currently the prime motivator as teaching funding is more of a given and is not significantly expanding. The Higher Education Academy is engaged in debate within the sector, and working with the Research Councils, to explore ways of bringing research and teaching closer together.

36. There is no reason why the UK university system should not deliver highly competent engineers, social workers and teachers, in the same way as medical schools deliver junior doctors ready to be let loose on patients. But not all courses are or should be vocational. The system should also deliver the kind of graduates that can replace the staff that teach them. There are no cut and dried distinctions between vocational and non-vocational courses across the piece. Traditional non-vocational programmes produce students with skills to take on a wide variety of jobs, and to pursue a flexible career in an uncertain future. Just because a programme does not lead to admission to a particular professional body does not mean that it does not equip students with the skills necessary for them to flourish in the 21st century environment. Traditional "vocational" programmes can lead students into an academic career.

37. The Academy has recently established a research network on widening participation, intended to improve the relevance, quality and dissemination of widening participation research to a wide audience. Our experience is that universities and colleges are pursuing increased diversity with creativity, vigour and commitment. The research network provides a forum for the exchange of ideas and effective practice and a resource to the whole sector. Please see our website for full details, www.heacademy.ac.uk/wprs.htm

38. A number of subjects report discipline-specific issues arising from widening participation. The Academy Centre for Bioscience suggests that with the change in university entry to bring in a greater proportion of the cohort, universities need a stimulus through all the various funding streams to improve the quality of teaching, learning and the student experience. There is a tension in some subjects between stretching the most able students and spending time and effort on the less intellectually able students and trying to keep down drop-out rates. In subjects such as Biosciences the most able students are the lifeblood of future discovery.

39. There is wide agreement among the Academy Subject Centres and in institutions that higher education should be distinctive from secondary education. The Academy's Subject Centre for History, Classics and Archaeology cautions against blurring the distinctions:

"Greater engagement will lead to a blurring of the line between secondary education and higher education and that will involve an end of, for example, academic judgement in examination and assessment and an extension of more pragmatic learning".

UNIVERSITY FUNDING

40. It will be important in deciding future strategy to take into account the impact of funding on different subject areas. A number of points have been raised by the Academy Subject Centres:

- 1. The current funding model does not reflect the costs of running expensive subjects in Engineering and Science which require well resourced labs and computer equipment. University funding for science departments should enable the provision of the appropriate environments for carrying out internationally competitive research and for the training of science graduates.
- 2. Funding is geared towards full-time, young, undergraduate, on-campus students and does not encourage more flexible operation. There is a case for basing a new system on credit and the relative costs of certain kinds of provision. Student support should favour part-time and full-time equally, provide places for UK students to study at first degree and Masters level, and provide basic infrastructure for teaching and research.
- 3. The great majority of students in higher education are part-time in that they are students who also undertake paid work—and many are workers who study.
- 4. The reliance on income from overseas students provides a challenge to subjects and departments with a high proportion of international students, especially when taught by international graduate teaching assistants from a different country. The Academy Economics Network reports that some research-intensive universities make extensive use of graduate teaching assistants and that this can lead to considerable problems for student learning.
- 5. The Academy Subject Centre for Geography, Earth and Environmental Sciences expresses a concern that high fees will make it difficult to recruit students to the traditional "academic" disciplines.
- 6. The Academy Subject Centre on Medicine, Dentistry and Veterinarian Medicine reports that raising fees would place a potentially damaging conflict of interest on institutions whereby the needs of the student may be seen to outweigh the needs of the patient, their family and and carers, and society at large. Robust arrangements to ensure that students who fail, for example, "professionalism" (who may arguably justify why they should be permitted to graduate, at potential cost to society as a whole) can be adequately educated or dismissed from the course would need to be in place. The RCP/BMA working party on Professionalism (chaired by Dame Carol Black) reported in 2005 the "professional qualities" sought in graduates and practising clinicians, in the wake of the Shipman Inquiry. These recommendations are complex and leave schools at risk of being unable to remove from courses students who do not meet the standard.
- 7. The Academy Centre for Bioscience stresses the importance of linking research to teaching. Students at the undergraduate and postgraduate levels should experience appropriate training which will involve not only receiving up to date knowledge but also becoming accustomed to the research environment of the subject area they have chosen. The university environment should encourage both the learning of facts and also learning the methods of science. Even for graduates who do not continue directly with a career in science such backgrounds are extremely important for engagement in society and democratic debate

41. The focus for the Higher Education Academy in this debate is the student learning experience and how this may be affected by the different funding methodologies and subsequent behaviours of individuals and institutions as they pursue research funding.

42. It is widely argued that the RAE has a damaging impact on institutional and individual motivation to improve the student learning experience. The recent debate on what should replace the RAE from 2008 has deflected attention from an important issue. Separate funding methods for research and teaching lead to differences in behaviours and therefore to different impacts on learning and the student experience.

43. If there is to be a positive relationship between teaching and research, institutional and departmental managers need to view these activities holistically. The current HE climate of audit and league tables militates against this.

44. The Higher Education Academy will be gathering evidence to inform future developments in funding methodologies and:

- 1. Determine the relationships between research and teaching and between research and the student learning experience.
- 2. Determine what impact the different approaches to research assessment have in terms of behaviour and thus the student learning experience.
- 3. Determine the effect of external drivers which influence approaches to teaching and affect the student learning experience.
- 4. Develop a model of working that facilitates the management of research and teaching activities to ensure the enhancement of the student learning experience.

STRUCTURE OF HE

45. The distinctive characteristic of the student experience in higher education is the opportunity it affords to benefit from teaching that is informed by research and professional practice.

46. The recently-established national professional standards for teaching in higher education, developed by the Higher Education Academy, require all academics to demonstrate how their teaching is informed by research and professional practice.

47. The move to increase reliance on HE in FE brings with it a need for investment in staff development for college lecturers, which includes their having the time to engage in this process.

THE BOLOGNA PROCESS

48. The experience of the Higher Education Academy is that:

- Awareness of Bologna varies between disciplines, but overall appears to be low. There are exceptions, for example staff engaged in medical and dental programmes appear to be engaged in the process due to initiatives led by UUK, GuildHE, Council of Deans and the professional bodies, together with thematic networks such as DentEd and Medine.
- Academy Subject Centres in other areas report that delay in implementation and providing guidance is making the lecturers/administrators look incompetent or does not make it easy to progress joint EU degree offering etc. In all this seems to signal that the UK institutions focus more on the Asian market than the EU market, but in the long run there is a concern that this could lead to isolation from neighbours closer by.
- Support for the process also varies, with the strongest advocates citing the benefits of greater student mobility and cautioning against letting other countries get too far ahead in their planning. Those who are less sure most commonly refer to the lack of alignment between the proposed Bologna framework and current degree structures in some subjects.
- 49. A number of issues require further consideration.

JOINT DEGREES

50. There is an issue around "double" and "joint" degrees. The joint degree in which a student attends two universities but is registered for a degree of one of the universities is normal and common practice. Over the last few years as part of the Higher Education Academy's work with the Welsh Assembly Government (related to developing HE links across the Four Motor Regions of Europe plus Wales) we have had regular requests, especially from Catalonia, for HEIs in Wales to participate in "double" degrees in which students do a single degree programme of, say, 360 credits in our terms but get two separate degrees (one from the Welsh HEI and one from the Catalonian HEI) for the same work. This issue requires further consideration by the QAA.

CHANGES TO DEGREE PATTERNS

51. The UK's most common degree patterns do not entirely agree with the Bologna format in many subject areas, in particular in England.

For example:

52. The Academy Centre for Medicine, Dentistry and Veterinary Medicine highlights a particular issue for consideration in relation to these subjects, which typically follow five year programmes. These programmes are affected by a need to define programmes in terms of degree/Masters which would require awarding of "degree" status to students who were half way through their courses. A key implication of Bologna may require medical, dental and veterinary programmes to move to "graduate entry" only, similar to the US. A major concern with this is the increased cost (it would take seven years higher education for a graduate rather than the current five) and how to classify the medical graduate entry programme.

53. The Academy Subject Centre for Bioscience reports that the funding model for postgraduate studies would need to change significantly in order to accommodate a Bologna-type arrangement. At present the majority of home based PhD students in the Biosciences are funded by Government grants, but MSc courses have on the whole not been funded to any great extent. At present most students enter postgraduate study for PhD immediately after achieving their BSc, and for which they increasingly have to pay and get into debt. There would be a considerable disincentive if they had to pay further for a two-year MSc course before commencing the PhD. Some universities and courses already offer an MSc qualification after four years of undergraduate study. The Bologna Process would require a further year. The fundamental question is whether Government would wish to fund 5 years of postgraduate study rather than the present three years, in order to produce the same number of PhD graduates.

54. The Academy Subject Centre on Materials reports low awareness in that area. The Bologna model would require a change in the structure of programmes in these subjects.

55. The Academy Subject Centre for Engineering recognises as an advantage of Bologna the fact that the recognition of equality of educational qualifications through a European framework will enable graduates to operate more easily in a global market. It reports that awareness in the discipline is low, apart from a general unease that it will kill off the established MEng programme. This currently has 480 UK credits with 120 at Masters level. This does not fit with the proposed framework where a Masters needs 180–240 credits. The MEng is the "gold standard" qualification for the educational base for those wishing to progress to chartered engineer status. It is selective with the majority of students having to achieve at least 2:1 standard before proceeding to the second two years. Employers like the graduates from the MEng. The MEng graduate achieves the learning outcomes for Masters level but not the number of Bologna credits. The Subject Centre cautions against returning to a model that requires time serving as the basis of an award.

56. The proximity of 2010 requires the UK to give firm guidance on what universities need to be doing for compliance. Should they continue with the MEng as it stands or is it necessary to raise the number of credits. There does not appear to be any organisation willing to give this guidance at the moment and this will lead to fragmentation of provision across the UK.. The organisations involved include the Engineering Council, QAA. UUK and DfES. Where will the definitive decisions come from?

57. The Centre for the Built Environment comments on architectural education. The Bologna Declaration foresees that the Masters qualification will become the principal professionally recognised qualification in Europe. This would bring the UK into line with other parts of the world: Masters qualifications now predominate in the USA; all ten professional architecture programmes in Canada are Masters; Australia and New Zealand are committed to restructuring architecture courses into two-tier professional Masters by 2009; and there is a preference for Masters professional qualifications in Asia, where Hong Kong, Singapore and leading Chinese programmes are moving in the same direction.

58. There is consensus world-wide that architectural education should be of five years duration (see UIA/ UNESCO Charter for Architectural Education, June 1996). In the UK where central funding generally precludes support at Masters level, architectural education unhelpfully comprises two undergraduate degrees, typically a three year BA or BSc (Hons), followed by a BArch, Diploma of Architecture or Graduate Diploma (usually separated by at least a year spent in professional experience). This lack of a Masters degree for graduates in architecture has always been seen as an anomaly, undervaluing the exit qualification internationally and disadvantaging those needing a higher qualification for career advancement (eg those wishing to undertake research or enter a career in higher education).

59. A Masters Exit award for UK architecture courses would be generally welcomed by the sector bringing it into line with equivalent professional degrees in equivalent countries. It is clear that Masters professional education is emerging as a common international standard. It would also make UK architecture courses even more attractive to full fee-paying overseas students.

60. If Masters awards in architectural education come into being in the UK, the sector would wish to argue vigorously for the present five year funding regime to remain, given the international acceptance that a professional degree in architecture needs to be at least five years long. There is some precedent for this in the engineering sector with the emergence of the MEng. If funding in the architecture sector is limited to a

three or four year undergraduate degree it is likely to lead to a reduction in the number of professional courses in architecture and a consequent reduction in the number of architecture students qualifying and registering as architects. This would not be in the best interests of the national economy. It could lead to an undersupply of architects and a reliance on qualified personnel from overseas.

STUDENT MOBILITY

61. Student mobility is not a priority in all subject areas. The Academy Centre for Bioscience reports that mobility within Europe is not valued greatly by UK students, even though it might be beneficial in terms of developing students' maturity and language skills (and therefore, employability). Typically in Bioscience a range of subjects is taught and students have wide choices building up to degrees with a "flavour" that suits their future career aspirations. Few British students wish to move around between European universities, and in terms of future career development, Bioscience postgraduates are just as likely to go to the USA for a period of post-doctoral research as to Europe.

QUALITY

62. There are concerns about quality in some subject areas. The main implication is that graduates elsewhere in Europe from dental and veterinary programmes can enter and work in the UK with relatively little experience—the professional bodies in the UK demand significant hours of supervised training, they do not have similar influence elsewhere in Europe. Medicine has a process of "provisional registration" which safeguards patients in medicine.

CONCLUSION

63. The Committee has undertaken a wide-ranging inquiry into Higher Education. It will be important to ensure that the impact on the student experience informs its deliberations and recommendations.

December 2006

Memorandum submitted by the Higher Education Policy Institute (HEPI)

This note offers comments on a number of the issues raised by the Select Committee, and does not attempt to offer a comprehensive or systematic reply to all the issues raised. Nevertheless, it is hoped that it will provide some material and perspectives that the Select Committee will find helpful as it begins its review.

WHAT DO STUDENTS WANT FROM UNIVERSITIES?

If pressed, most students are likely to say that they go to university because that is a necessary step on the way to a better life, and, in particular, a better job. Increasingly, jobs that were previously available to bright young people who had not gone to university are now available only to graduates, leading to what Professor Alison Wolf has described as the "tyranny of numbers".

Certification is important to students, and there is a widespread, and probably accurate, perception that certificates (degrees) from some universities are more valuable in the job market than others—ie there is a hierarchy of esteem. That may be regrettable, and to some extent the effects may be deleterious, but it is a reality . By and large—not in all cases but by and large—students will tend to apply for the most prestigious institutions that they think they are capable of gaining admission to, institutions select the most able students that apply, and employers, believing that in so doing they will be recruiting the most able, favour students from those institutions, thereby creating a vicious (or virtuous) circle that perpetuates the hierarchy of esteem.

There are some changes afoot that may lead to the breaking down of this hierarchy. First, the increasing trend for young people to study near their home may have the effect of reducing the dominance of the hierarchy in decisions about where to study (though the great majority of young students still study away from home); and second, the increasing availability of information about various aspects of the university experience (for example the facilities available to them, the satisfaction of other students, employment outcomes and the amount of teaching they receive, as well as information about quality) may lead to more sophisticated choices. But these developments should not be exaggerated. If it is indeed the case that a degree from one university is more valuable in the job market than another then it is entirely rational that students would prefer to obtain a degree from that university, whatever the facts about the quality of provision. It is difficult to see how this pattern can be broken (if indeed that is thought desirable). It would require the Government to control admissions to universities, and deny freedom of choice to students and of selection to institutions, perhaps (as in other countries) requiring universities to admit on a "catchments area" basis.

The other important thing will be to ensure that more and better information that is relevant to students is available. The HEPI survey earlier this year of the academic experience of students⁹⁶, which among other things provided information about the amount of teaching and private study that was required in different subjects and different universities, was the first of its kind. Surveys like that need to be refined and conducted on a far larger scale to enable better student information to be available. The HEPI survey also revealed that there was a disquietingly high level of dissatisfaction with the accuracy of the information that universities provided about themselves in their prospectuses. It is extremely important that universities do not mis-sell themselves—particularly to overseas students who are more vulnerable in this respect, but whose poor opinions may have extremely damaging effects for the whole system not just the guilty universities.

WHAT SHOULD THE GOVERNMENT AND SOCIETY MORE BROADLY WANT FROM HIGHER EDUCATION?

All over the world universities are seen as key to the emergence of knowledge economies, although there is little understanding or agreement about the precise role that universities play in this. It seems reasonable to conclude that high quality university education and a workforce that includes substantial numbers of graduates are necessary but insufficient conditions for this. Important though they may be, all manner of other conditions need to be satisfied as well—the existence of knowledge-based industries, for example, appropriate fiscal and financial structures, and so on. Subject to that, it is reasonable that the Government should want universities that are capable of producing highly educated people and conducting high quality research. But it is no less important that industry should be able and willing to make use of the highly educated people emerging from university and to exploit the research that is conducted in universities. To have one side of the equation fulfilled without the other will not lead to the societal and economic outcomes that the Government seeks.

It is good that the Select Committee has identified "engagement in society and democratic debate, and producing active citizens" as an element in the role of universities. Public discussion about the role of universities—and the case for public investment—is increasingly dominated by the economic role and economic benefits. While that is understandable it risks missing some of the key benefits of investment in higher education, which do not lend themselves to economic evaluation. Work by the" Wider Benefits Of Learning Group" at the Institute of Education demonstrates very clearly the very substantial non-economic benefits of university education (in terms of health and citizenship). In any sensible discussion these ought to be given an appropriate weight.

The contribution of universities to democratic debate and active citizenship seems particularly important at a time when ethnic, cultural and religious divisions are threatening to fragment society; and it is particularly depressing that universities are regarded as the breeding and recruiting ground for intolerant and fundamentalist doctrines—the very antithesis of what universities ought to stand for. All the evidence, though, is that they are much more likely to be a force for good in this respect than for ill, and the role of universities in upholding liberal, democratic structures is essential.

UNIVERSITY FUNDING

One of the very substantial achievements of the present Government has been that it halted the large and rapid decline in funding per capita that occurred during the 1990s. It needs to be noted though that the decline was only halted in 1998 with the introduction of tuition fees. It was private funding, not public funding, that stabilized the situation. On the other hand, it needs also to be recognised that the two main fears of the opponents of tuition fees have not been realised.

- First, private funding has not, apparently, simply substituted public funding, as many feared.
 Although there is no way of knowing what the level of public funding would otherwise have been,
 public funding per capita has actually increased recently alongside the private funding that has been generated through fees.
- Secondly, there has not apparently been any impact on participation in higher education (although because the poorest students paid no fees under the regime introduced in 1998 introduction of the fee should not have been expected to impact participation by the poorest groups. What might have impacted participation would have been the move from maintenance grants to loans, but that does not appear to have had such an effect). The definitive study of this remains the HEFCE report "Young Participation in Higher Education"⁹⁷, which among other things, showed that following the 1998 reforms there was less turbulence in higher education participation in England than in Scotland (which did not introduce tuition fees).

The 1998 reforms, welcome though they were in introducing the principle that the beneficiaries of higher education should contribute to the cost, were illogical in that they put the cost on the parents of the beneficiaries—not the beneficiaries themselves—and thus necessitated a great deal of fee remission in order to make higher education affordable to the poor.

⁹⁶ "A Dangerous Economy: the wider implications of the proposed reforms to the UK Research Councils' peer review system" HEPI December 2006.

⁹⁷ "Young participation in higher education" HEFCE 2005–03.

The new arrangements introduced this year are among the most progressive in the world.

- First, they are logical in that they put responsibility for repayment squarely with the beneficiary.
- Second, by ensuring that there is no upfront payment, they ensure that nobody is disabled from
 participating in higher education because they cannot afford it.
- Third, by making repayment income-contingent (with no repayments made at earnings below a threshold, and then graduated repayments according to the amount earned) they ensure that higher education is truly affordable.
- Fourth, by ensuring that extensive and generous grants are available (whether called bursaries or grants), they provide positive incentives for students from poor backgrounds to participate in higher education, while nevertheless ensuring that to the extent that they benefit from higher education they subsequently contribute to the cost.
- Finally, the very substantial subsidy that the Government provides for the loans is an imaginative way of using public money. Effectively, by subsidizing the student fee instead of providing grants direct to the institution, public money is being used to gear private money

It took political courage to introduce the current arrangements and by and large the structures are now in place on which to build. The level of the fee that was set initially was too low to create the sort of market that the Government hoped for (though why it wanted to create a market is not clear, and in any case that ought to be a consideration second to ensuring adequate funding for universities), but there is no doubt that the new tuition fees will make a significant difference to the funding of universities.

HEPI calculated some time ago that per capita funding would increase to something like the levels of the early 1990s, and although that may be optimistic the increase will be significant.⁹⁸ The HEPI report on "The prosperity of English universities: income growth and the prospects for new investment"⁹⁹ showed that over the last decade universities have operated in a relatively benign funding environment—largely but not entirely because of the significant increases in research funding provided by the Government—and predicted that these favorable conditions would be likely to continue over the next few years. However, a large part of the increased resources available will be used up by things like salary increases for academic staff and other commitments. Nevertheless, these are all legitimate expenses that contribute to a high-quality university environment.

There seems widespread agreement that the current £3000 cap on the fee should be lifted. That seems right. Although, as has been said, the current level of fee makes a significant difference, it still leaves some universities far short of what they believe they need to earn in order to complete with the very best universities in the world (mainly American) in terms of the salaries they offer and the facilities they can provide. But there are a number of difficult issues that will surround the raising of the fee cap:

- First, are we prepared to accept increased differentiation between universities? The reality is that universities are already substantially differentiated, and it would be quite wrong to argue that allowing some to charge a greater fee than others will create a situation that does not exist already.
- Second, there is a risk that poor students will be put off going to those universities that charge the highest fees. Although it appears that current levels of fee do not create a substantial disincentive, it cannot be assumed that that will be so at higher levels. The problem is that we do not know the fee level at which significant disincentives kick in. It will be essential to ensure that effective arrangements are in place to ensure that higher fees do not lead effectively to discrimination against poor students, and there may be a continuing role for OFFA in this.
- Third, the current arrangements mean that the Government provides a substantial subsidy for the fees that students pay, and for the integrity of the system that needs to continue whatever the fee level. It would be almost unprecedented for the Treasury to offer an open cheque-book to universities without attempting to control the commitment on the public purse that decisions by individual universities will imply—the higher the fee a university charges, or the more students it admits, the larger the Government's subsidy. A way needs to be established of controlling public expenditure while giving universities the ability to charge higher and differential fees. Differential fee levels, incidentally, would also mean that universities that charge higher fees (probably the better off) will receive higher levels of public subsidy than poorer universities that charge lower fees. That may be a difficult political issue, as those universities that are likely to charge higher fees are also those that receive higher levels of research funding from the Government. That is a fact that is inherent in the current system, and it is not suggested that that is a reason for changing it.

December 2006

^{98 &}quot;HE Bill and Statement: Implications of the Government's Proposals" HEPI January 2004.

⁹⁹ "The prosperity of English universities: income growth and the prospects for new investment" HEPI September 2006.

Memorandum submitted by Imperial College Union

PURPOSE

1. Whilst "education for educations sake" may be a noble ideal in a modern and dynamic economy education at all levels, particularly higher education, must be focused on producing graduates who possess skills necessary to drive a knowledge based economy. Competition from emerging economies means that Britain can no longer compete in old manufacturing industries, and must embrace to opportunities present in emerging fields in science, technology and medicine such as nano-technology and stem cell research. In a world of limited means this requires the government to concentrate resources on those institutions and programs which are able to develop which are able to develop in these areas and compete on an international basis.

2. These developments should not adversely affect the experience of students whilst studying at university. It is vital that time spent at university remains a period in which young people can develop emotionally and socially as well as academically if we are to produce graduates who are able to adapt to future challenges. This requires that students should not have to spend all their free hours working to support themselves, but be given time to use extra-curricular activities provided by the university and students union to fully develop their potential.

3. If we wish to live in a society in which students take an active part in decision making and policy then this should be mirrored within universities. Engaging students in the governance of their institution at a fundamental, not superficial, level is a key way in which this can be achieved. Together with academics, students must always be engaged as members of their institution, not merely customers.

FUNDING

4. There can be no doubt that the current level of funding for higher education is unsustainable. As universities continue to lose money on each and every undergraduate student the case for funding the full economic cost of higher education becomes undisputable, leaving only the question of where this funding should be sourced from.

5. It is our view that students have been pushed to a point where further increasing their financial burden is unviable. Student debt is now a significant worry for the majority of students, and increasing this may serve to discourage those with limited financial means from applying to university. This issue is addressed in full by the submission to this inquiry by the National Union of Students.

6. Leading international universities benefit from access to large funding streams which are not ring fenced to any particular area. This often comes from large endowments and as such is not a model that British institutions can adopt in the near future. Instead the Government should be prepared to allow universities that aspire to lead on the international stage to set their own funding priorities.

7. It is impossible to address the funding of higher education without accepting that different institutions and programs of study exist to fulfil radically differing needs and so if equally differing ways. It is also essential to recognise that the beneficiaries of higher education include the individual student, society as a whole and those employing graduates.

8. While the former two categories already contribute toward the costs of higher education the latter has no direct input. It would therefore appear entirely appropriate that the cost of courses which directly benefit a given employer or industry should in part be met those who benefit.

9. This would disproportionately affect those courses which are vocational in nature and, due to the reduced need for student funding, make the same courses more attractive to prospective students. Increased take up of vocational courses would reduce number of students taking courses which are not vocational in nature, thus reducing the need for government funding of these courses.

10. The savings made through this process can then be used to fund disciplines which are of strategic importance to the UK economy at full economic cost, enabling them to compete on the international stage. We should not be afraid to acknowledge that these disciplines will inevitably be mostly based in science, technology and medicine and the institutions which stand to benefit are those which already have a strong presence in these areas.

11. The second strand of funding concerns ensuring students have adequate means to survive whilst at university. Whilst extending the student loan scheme to cover full living costs is not attractive to either government or students (this would only serve to increase the burden of student debt) it is important that loans are increased at the same rate as the cost of living. This is particularly relevant in London: in the period 1998–2003 living costs rose 22% above inflation¹⁰⁰—an increase not matched by student loans. This leads to a shortfall between incoming (including paid work) and outgoing funds of £1492.¹⁰¹

12. This shortfall must be rectified if we are to ensure that nobody is discouraged from applying for a given course or institution because they cannot afford to live away from home.

¹⁰⁰The changing finances of students studying in London (p10), Prof Claire Callender

http://www.london.gov.uk/mayor/education/docs/studentFinancesResearch_mar04.pdf

¹⁰¹The changing finances of students studying in London (p15), Prof Claire Callender http://www.london.gov.uk/mayor/education/docs/studentFinancesResearch mar04.pdf

Structure

13. While the Government should not seek to interfere in the operational management of higher education institutions, it should ensure that resources are directed in a way which supports the stated purpose of higher education. If the government aspires to a high-skill economy, then this necessitates that key areas in science and technology are given priority funding to continue operating. These areas should be determined on the basis of scientific integrity, not the whims of individuals or the latest fad.

14. The recent announcement of ± 75 million extra funding for these strategic subjects is a welcome step, but this level of funding needs to be committed on a continuing basis not as a one-off token gesture.

THE BOLOGNA PROCESS

1. It is all too apparent that the implications of the Bologna Process have not been fully understood by many in government. While the prospect of qualifications which are accepted universally across Europe is both attractive from a political and economic standpoint for Britain and will serve to increase the international career prospects for British graduates, the process of achieving Bologna compliance is far from trivial and could prove damaging to Britain.

2. This threat is most keenly felt within science and engineering disciplines which rely on the four year integrated masters (MSci/MEng etc) to produce graduates of a calibre high enough to progress on to further research or professional work. The fundamental problem is that a four year combined 1st and 2nd cycle degree will always struggle to contain the number of hours required to gain the relevant number of ECTS credits (270 including 60 at masters level). Over a traditional 4 academic year course this amount to over 50 hours of work per week—as well as breaking the EU working time directive this is impossible for students to achieve whilst also undertaking the part time work which is an essential income stream fo many students.

3. It is unfeasible for both higher education institutions and students to increase the time spent on a first degree due to financial constraints, so we believe it is of benefit to the entire UK higher education system that the emphasis shifts from a crude measure of working hours to educational outcomes from a given course of study.

4. However, this requires leadership from the Government which is currently sorely lacking. The lack of leadership is also creating a worrying situation where many institutions are ignoring the implications of Bologna in the vain hope that it will "be alright on the night". This could lead to a system where some degrees are Bologna compliant and other not. While this may be inevitable it is undesirable at it will only serve to damage the widening participation agenda and pose serious questions as to how higher education is funded.

5. In light of the above points it should be stressed that there is serious concern about the uninformed manner in which the decision to join the Bologna Process was made. Government should be keenly aware that making sweeping political gestures without fully consulting those who will be affected (in this instance higher education institutions and students) is not an acceptable way to conduct business.

December 2006

Memorandum submitted by The Institute of Physics

The role of universities over the next 5-10 years

What do students want from universities?

The average student would expect a university education to enable them to embark on a rewarding career path, and provide them with an opportunity to learn more about the world in which they live, through their given subject of study. University degree courses should be both stimulating and interesting in order to engage students, while also providing them with a set of generic skills and must avoid being too narrowly vocational.

A degree in physics meets all of these criteria. Physics higher education trains and equips highly able students with the skills and competencies necessary for them to pursue fulfilling careers that contribute to the nation's wealth and health. Physics education also develops strong intellectual and practical skills, well matched to the evolving needs of employers.

During the course of their study, physics students become conscious of the career value of their training in physics, but above all it is their curiosity and love for the subject that university physics departments need to satisfy, especially if the subject itself is to continue to appeal to young people.

The nature of the benefits accrued from studying physics at university was highlighted in a joint report the Institute published with the Royal Society of Chemistry in January 2005. *The economic benefits of higher education qualifications*,¹⁰² revealed that physics and chemistry graduates in the UK earn more than graduates from most other disciplines.

Over a working life, the average graduate will earn around 23% more than his/her equivalent holding two or more A levels, compared with 30% more for physics and chemistry graduates. The figure of 30% compares between 13–16% for graduates in subjects including psychology, biological sciences, linguistics, and history.

Based on this, it is imperative that an educated student market deciding what degrees to undertake is created. A significant problem facing science, technology, engineering and mathematics (STEM) subjects, and particularly physics, is that students are making ill-informed decisions about their careers at the age of 15. Students at this age, irrespective of whether they are girls, from ethnic minorities etc., are not well-educated consumers. Teachers, parents, careers advisors should be in a position to highlight the benefits and the wide variety of career options that are available from STEM subjects.

What do employers want from graduates?

As part of the Institute's Undergraduate Physics Inquiry¹⁰³ of 2001, a survey was undertaken of the views of employers of physicists. The following views, which are still worth considering, emerged.

There was a high demand for good physics graduates, with some employers having difficulty recruiting. Physicists find employment in a wide range of sectors, often far from what would conventionally be attributed to physics. What is frequently sought is a combination of good technical and analytical skills combined with good team-working and communications skills. In addition to the very strong national demand for physicists with the traditional skills of quantitative analysis, data handling and experimentation, employers are requiring scientists with interdisciplinary skills.

Employers value the following attributes of physics graduates:

- flexibility and versatility to tackle a wide range of technical and non-technical subjects;
- good analytical and problem-solving skills;
- good mathematical and IT skills;
- a good breadth of technical interest and ability;
- a good understanding of fundamentals from which to approach new situations where traditional approaches do not work;
- analytical problem-solving capabilities;
- an ability to grasp concepts quickly and in a quantitative way (more important than knowledge of a particular specialism); and
- an ability "to argue on one's feet".

Employers would also like to see:

- improved social, interpersonal and team-working skills;
- better communication skills, particularly written skills;
- a less academic and more pragmatic approach;
- improved business awareness; and
- a greater awareness that not all problems can be solved by logic alone.

The general view from the survey was that after graduates have been with a company for a few years there is little to distinguish between graduates in physics, electrical engineering, other engineering, mathematics or (to a lesser extent) chemistry. The key issue for employers of physicists appears to be in combining the technical, analytical and problem-solving skills (in which physics and engineering graduates tend to be strong) with the "softer" communication and team-working skills (in which they tend to be weaker).

What should the Government, and society more broadly, want from HE?

The most important aspect of higher education (HE) is to have policies that encourage everyone to make the most of their potential—the country certainly needs a skilled workforce, especially those with an education and understanding of STEM. The Government's initiatives to widen participation, especially to attract more students from lower socio-economic groups, are welcome, as the UK will benefit from a greater cohort of students who choose to study, amongst others, STEM subjects at university. To that end, the

¹⁰²http://www.iop.org/activity/policy/Publications/file_4149.pdf

 $^{^{103}} http://www.iop.org/activity/policy/Projects/Archive/page_6337.html$

¹⁰⁴http://www.stimulatingphysics.org/

Institute is working with HEFCE on a pilot project, *Stimulating Physics*, ¹⁰⁴ which aims to strenghten access to and demand for undergraduate physics degrees. The support for this pilot project is an indication that the Government appreciates the needs of the UK to have a healthy pool of STEM graduates.

The future strength of the STEM base is crucially dependent on the flow of quality young people into it. As highlighted in *SET for Success*¹⁰⁵ : "... graduates and postgraduates in strong numerical subjects, are in increasing demand in the economy—to work in R&D, but also to work in other sectors (such as financial services or ICT) where there is strong demand for their skills." Physicists fall squarely into this category. *SET for Success*, reported that the "disconnect" between the demand for skilled graduates and the declining number of STEM graduates on the other hand, is starting to result in skills shortages.

Therefore, it is imperative, that if the UK wishes to maintain its competitive advantage it will need to maintain a steady flow of STEM, especially, physics graduates, who will not only engage in high quality basic and applied research, such as in the energy sector, but contribute their unique pragmatic, problemsolving and mathematical skills to a wide variety of careers such as law, the finance sector, environmental science, and medical physics. This flow, even though steady at present, is under threat as a consequence of departmental closures, and an ever dwindling number of physics A level students, the crisis in the teaching of physics in schools, and an expansion in the HE market with students choosing a variety of degree subjects (ie drama studies, media studies, etc.), which often do not match the demands of employers. It is difficult to see how society has benefited from this expansion and there should be some evaluation of the long-term career prospects.

In addition, the Government, in terms of taxes and the return on investment, has much to gain by increasing the numbers of students choosing to study STEM subjects. The economic benefits report demonstrated that physics and chemistry graduates pay approximately £135,000 more in tax than those with A levels and £40,000 more than the average graduate during their working lives.

UNIVERSITY FUNDING

Is the current funding system fit for purpose? Is the purpose clear?

The unit of resource provided by the Higher Education Funding Council for England (HEFCE) for teaching, in particular, has not been sufficient to cover the full costs that a laboratory-based STEM subject, such as physics, incurs, resulting in the vast majority of departments operating in deficit, and being kept open due to cross-subsidy from other university cost centres. The prominent difficulty faced by physics at HE is stagnant student numbers. While the overall cohort of undergraduate students has increased, as a consequence of the Government's drive to see 50% of 18–30-year-olds in HE by 2010, the pool of undergraduates reading physics (and astronomy) at university has remained steady, which means that the overall pot of money available to physics has decreased accordingly in real terms. This has led to pressures to recruit more students, to cover the costs of teaching, and where this has not been possible, departmental closures and mergers have occurred (over 20 since 1997).

A study commissioned by the Institute this year has spread light on the nature of the financial pressures being faced by physics departments. The *Study of the Finances of Physics Departments in English Universities*, ¹⁰⁶ concluded that in 2003–04 all of the physics departments surveyed, as part of the study, were in deficit on a full economic costing (FEC) basis (ranging between 16–45% of their total income). In part this reflected their very heavy dependence on public funding and the metrics used to allocate those public funds. The report concluded that the large fixed costs involved in the delivery of the physics undergraduate programme, particularly in maintaining and servicing teaching laboratories mean that sustained recruitment is vital to the financial health of the departments surveyed.

Since 2004–05, the weighting for price band B subjects in HEFCE's teaching funding formula, which includes physics, has been 1.7. Even though, according to recent HEFCE figures¹⁰⁷, this has led to slightly more money per full time equivalent, the unit of resource is still insufficient to reflect the true costs of teaching. As already mentioned, this is partly as a consequence of the overall support per science student having steadily decreased in real terms over many years, due to the expansion in the overall undergraduate cohort. HEFCE has argued that the high unit costs of some laboratory-based STEM are perceived to be a result of under recruitment. But this is far from obvious for physics because:

- physics undergraduate numbers have not fallen (acceptances to undergraduate physics and astronomy were 3085 in 1995, and 3069 in 2005 (UCAS));
- departments have closed and large departments have become even larger leading to efficiency of costing; and
- departments in deficit have severe limits on spending and so their spending will possibly have been lower than one might expect.

¹⁰⁴http://www.stimulatingphysics.org/

¹⁰⁵http://www.hm-treasury.gov.uk/documents/enterprise_and_productivity/research_and_enterprise/ent_res_roberts.cfm
¹⁰⁶http://www.iop.org/activity/policy/Publications/file_6598.pdf

¹⁰⁷http://www.hefce.ac.uk/pubs/hefce/2006/06_47/

The Institute welcomes the efforts made by HEFCE, in particular, to engage with it to increase the market share for physics undergraduate degrees in the pilot project, but it must be understood that this is a long-term solution to the demand-side problem that physics will face. In the short-term there are grave concerns that by the time the long-term measures start to take an effect, the UK's physics university base could be suffering with supply-side problems, as a consequence of further physics department closures, which could be brought about by the forthcoming 2008 Research Assessment Exercise (RAE), for instance.

The Institute's finance report revealed that in 2003–04, the eight physics departments surveyed as part of the study that were able to provide full Transparent Approach to Costing (TRAC) cost data, were all in deficit of around 22% of publicly funded teaching income. This deficit is significantly higher than all subjects across the whole sector, which was broadly in balance in 2003–04. Under the current funding regime, a significant uplift in HEFCE grant would be required, given the fixed undergraduate fee, to bring these physics departments into balance. Physics departments are heavily dependent on public funding for their teaching and research. Most universities use resource-allocation models linked to earned income, so the financial position of physics departments is particularly sensitive to the metrics that underlie the funding allocations of the public funding bodies and to changes in those metrics.

Hence, the Institute has campaigned for HEFCE to reconsider the allocation of its teaching funds for STEM subjects, in particular physics and chemistry. In response to this, the Institute was pleased to note that the decision taken by HEFCE to use TRAC based costing data to underpin key elements within its teaching funding formula, which will report in 2007–08. This means that in addition to the move to use the FEC for individual research projects and the increased funding of project overheads by the research councils in 2006–07, there is a real prospect of an improvement in the financial position of physics departments. Furthermore, the recent announcement from HEFCE, that as of 2007–08 it will allocate an additional £75 million over three years (ie £1,000 per student) to strategically important subjects such as physics, means that while we await the fruits of various initiatives to increase student demand for undergraduate STEM degrees, a financial respite is available to those departments that are under serious financial pressure. Even though HEFCE has argued the contrary, the announcement is an admission that the funding formula for teaching has been inadequate.

However, this news came too late for the University of Reading, which closed its physics department, stating that it had deficits in the region of \pounds 500,000 and money from HEFCE's announcement would only offer, on current student numbers, around \pounds 180,000. Therefore, there could be quite a few departments that could be under the threat of closure, as many are seen as "in debt" in their university models, and there is a need for vigilance as we estimate that at least a dozen are under serious threat of closure.

What are the principles on which university funding should be based?

The Institute is of the view that university funding should be sufficient to allow every university to offer undergraduate provision for core, strategic subjects, such as physics. This certainly is not the case, as so many physics departments have stopped offering undergraduate degree courses, since the removal of the binary divide, mainly due to financial pressures based on a stagnating student demand. Under the current funding environment, it is essentially impossible to run a teaching led physics department without running into serious problems. The dysfunctional character of the HE market is of concern, whereby university funding is determined by student choice, which is almost entirely uninformed by career prospects. As a result, the recent huge expansion of graduates has been in subjects such as media studies, etc. It is difficult to see how this arrangement is benefiting either the student or the economy.

Physics is by its nature a resource-intensive subject to teach, in terms of both teaching staff and laboratory provision. As industry's demands for graduates with a high degree of technical knowledge and expertise increases, it is incumbent upon universities to have modern facilities and equipment. The cost of providing such equipment has risen at a faster rate than inflation. Funding mechanisms should be sufficient to ensure that departments teaching fast-moving disciplines, such as the laboratory-based sciences, are able to move with the times and provide students with the latest equipment to undertake experiments to supplement their teaching.

Should the $\pm 3,000$ cap on student fees be lifted after 2009 and what might be the consequences for universities and for students, including part-time students?

The Institute expressed concern about the effects the introduction of top-up fees, in 2006–07, could have on student demand for laboratory-based STEM subjects, such as physics, especially from under-represented groups. A significant fraction of the undergraduate cohort for these subjects is enrolled on four-year courses, hence further financial pressures exist, which could affect their choice of course. Such pressures also exacerbate recruitment into postgraduate courses. Physics degree applicants could be driven away to cheaper options. This would not be in the national interest, as at the employers' level, there is high market demand for graduates in these subjects.

The prospect of lifting the cap on student fees will put an greater amount of financial pressure on an already fragile student market for high cost subjects, such as physics, as there will be an obvious temptation for universities with high cost subjects, to increase fees to cover increasing costs, especially if the teaching funding formula even after HEFCE's TRAC study is insufficient and/or if student demand remains stagnant or declines. We hope that before any such decision is taken, a robust review will be undertaken to ascertain the impact top-up fees have had on university finances, student finances (ie debt) and whether they have had any significant bearing on student entry onto university degree courses. Any decision to proceed with removing the cap, without serious consideration of these issues, may lead to an increase in the gap between the rich and the poor, and may result in more departments closing due to positive feedback. In addition, there is a danger that higher fees could lead to a market economy that will not work properly unless students know which subjects lead to the best career prospects.

However, according to the Institute's finance report, the introduction of top-up fees should provide some increase in the funding available to physics departments, as long as they can sustain current levels of recruitment. However, the additional sums available from this source for making good structural deficits will at best be modest because most of the additional income will be used for student bursaries, improved academic pay and investment in teaching facilities. The key point from the report is if departments can sustain current levels of recruitment. To help ensure this, the Institute is allocating £1,000 per annum bursaries as of 2006–07 to new enrolments for the duration of their studies.¹⁰⁸

What should the Government be funding in HE and by what means?

The Institute is pleased that the Government has stated its commitment to support the dual support system of funding.¹⁰⁹ Dual support is by far the best mechanism by which university departments can be supported structurally, support their teaching activities, and allowing flexibility to support research activities from the funding councils, while bidding for project money to support basic and applied research from the research councils. However, there is a concern that while the research council leg of the dual support mechanism has grown in recent years, the funding council end has been lagging behind, which has implications in reducing the ability of universities to take more strategic decisions about their research activities. This is something that needs to be addressed.

The Government must continue to invest and support initiatives such as the Science Research Infrastructure Fund (SRIF). The first SRIF round was a £1 billion investment by government (£775 million) and the Wellcome Trust (£225 million), which included an allocation of £675 million of government money to higher education institutions (HEIs) for science research infrastructure.

A panel of international physicists that took part in a second international review of the quality of UK physics and astronomy research in November 2005,¹¹⁰ commented that they saw indications that SRIF has been a great success, and that funds to support research infrastructure needs had been well spent. In addition, this investment had led to an improvement in the morale of the academic workforce, especially amongst PhD students and young lecturers. Therefore, it is imperative that the condition of the physical infrastructure is indeed maintained and never allowed to deteriorate, as was the case in the past. However, the Panel was concerned about what will happen after the third round of SRIF finishes after 2008, as it is imperative that the momentum of funds provided for infrastructure continue at the current level.

Should central funding be used as a lever to achieve government policy aims? Is the balance between core or block-funding and policy-directed funding correct at present?

In terms of the Government's aim to increase the cohort of 18–30-year-olds at university by 2010 to 50%, definitely no. This government initiative has led to an influx of students onto softer courses such as drama studies, while at the same time, the cohort for physics has remained stable. An increased number of overall students has led to additional strains placed upon HEFCE's block grant within HEIs, which has led to teaching resources for physics, and other STEM subjects, being squeezed, as the overall pot size has not been increased sufficiently.

Such government initiatives (especially superficial ones which offer no obvious benefit to the economy) should not be funded via the block grant, and place such a strain on a resource that at best was still not adequate to cover the costs of the teaching of many laboratory-based STEM subjects.

¹⁰⁸http://www.iop.org/aboutus/The_Institute_of_Physics/Support_And_Grants/Undergraduate%20Bursary%20Scheme/ page_5602.html

¹⁰⁹http://www.hm-treasury.gov.uk/budget/budget_06/assoc_docs/bud_bud06_adscience.cfm

¹¹⁰ http://www.iop.org/activity/policy/Projects/International_Review/index.html

Should research funding be based on selection of "quality"? How should quality be defined and assessed? How might this drive behaviour across the sector?

The Institute is of the view that research funding should continue to be funded as measured by the quality of research undertaken over a fixed-time period, via a robust peer review system, supported by an appropriate array of research output metrics, and other measures such as esteem and research environment.

Hence, the Institute was surprised and disappointed at the recent announcement that the RAE will be replaced with a metrics-based system and there will be no more peer review for science, engineering and technology to assess research at universities. The quality of research at university physics departments will now be judged on data such as how much money they receive in grants rather than the quality of their results and papers after research is complete. Citation data, for instance, can vary widely across a discipline, and is sensitive to the numbers working in the sub area. The Institute does not agree with this method. The only system that will have the respect and support of the science community is peer review of research. We are also very surprised to learn that whilst science, engineering and technology will lose peer review assessment, other subjects will keep it. It is not clear why this separation has been made.

There can be no doubt that the RAE has driven up standards and made departments think more strategically about their research activities. The negative impact however, has been the move towards a cycle in appointments which are not sensible—a tendency to poach mid-career staff rather than foster new, young academics. The RAE has also seriously disadvantaged women on career breaks. This is not consistent with the long-term competitiveness of the science base. It is also an unanswered question whether teaching quality has suffered as a result of the RAE.

The Institute is of the view that the RAE following the 2008 exercise should be replaced by a new assessment system that ameliorates the negative effect of only employing established researchers at the expense of younger people with potential. Peer review based on research outputs must be at the heart of the new system. A metrics-based approach, as now proposed by the Government, far from solving existing problems, will create new ones. It will encourage expensive research, reward a high volume of research over high quality research and make curiosity-driven research harder to undertake. Theorists would be particularly hard hit as their research grants tend to be smaller than those of experimentalists. Hence, this needs to be reviewed without delay.

In terms of the forthcoming exercise in 2008, the most crucial issue to the Institute and the physics community is that the RAE must be an absolute measure of quality and not a relative measure between units of assessment. We are concerned that the physics sub-panel plans to "normalise" the final distribution of distributions. Since the RAE began, low-scoring physics departments have closed in relatively large numbers, so the tail of the distribution has been removed, leading to a concentration of quality in the remaining physics departments. This has now reached a level where, if it continues, it will lead to serious problems, for example, physics deserts, ie regions in the UK without physics departments. Many of the remaining ones have actively sought to improve their research capability. Therefore, the overall standard has undoubtedly increased. There is absolutely no justification to impose a predetermined, artificial distribution to the ratings and as a consequence doing further substantial damage to the sustainability of the subject. Hence, some planning is required to ensure a rational distribution of research excellence.

How can leading research universities reach internationally competitive levels of funding? Should limited central-government funding be directed elsewhere?

It is incumbent on such universities to exploit the funding that is available from European Union (EU) initiatives such as the Framework Programmes and over time through the European Research Council, and from private sources such as industry and charities. The Institute's finance study revealed that physics departments are heavily dependent on public funding for their income for teaching and research, but many were securing non-publicly funds for research, hence there is scope for this to be expanded.

However, a concern relates to the problem of the missing part of FEC for charity and EU funding. The principle of transparency in use of funds argues against using funding from one area to subsidise work in other areas. Charity support is not equally distributed over all the sciences, but is concentrated in medical areas. It is good that universities have some freedom in deciding how to use their HEFCE income for strategic developments, but it should not be the norm that quality-related (QR) income "earned" by research excellence, for example, in a physics department could be used to fund the missing FEC for charity-funded medical research. The logical consequence of transparency is that if the government wants universities to get the benefit of charity and EU funding, it should either work with those bodies to get them to pay the full FEC, or it should decide to provide explicit funds to top-up charity and EU grants.

How well do universities manage their finances, and what improvements, if any, need to be made?

A significant number of university physics departments, are in deficit, as shown by the Institute's finance report, and often are cross-subsidised from other university cost centres to keep them afloat. In addition, even though the HEFCE's block grant is allocated based on algorithms, universities have the freedom to allocate funds according to the universities financial or strategic plans and do not necessarily have to adhere to HEFCE's allocation framework. Plus, we know that a lot of university research, and particularly that which is industry funded, is often cross-subsidised from funding streams such as QR, to cover the missing FEC costs. The implementation of FEC and the use of TRAC were introduced to alleviate these problems.

TRAC was developed by JM Consulting Ltd for the Joint for the Joint Costing and Pricing Steering Group representing all HEIs in the UK. It provides a basis for allocating out all of the costs of HEIs to the income generating activities of the HEI. The Government has accepted the TRAC methodology as a basis for the development of a FEC approach to the research it funds through research councils or directly through individual departments. It has also indicated that it would expect universities to price their research contracts with other clients (with the exception of research charities and the EU), where specific conventions apply, using a TRAC FEC approach.

The changes being made to funding methods for teaching and research so that they better reflect the full economic costs of activities are likely to be of particular benefit to physics departments. In addition, TRAC is not only a costing and pricing tool, but is at least as much a management tool for departmental and central managers, so in time, the management of university finances should improve.

Many universities are financially flexible but one should not underestimate the power of the HEFCE subject allocations. Because most physics departments are seen to be in deficit, they are not in position to expand unless the university management is benevolent. Perhaps university funding could be tied to long-term plans, particularly in vulnerable, strategic subjects.

Are some parts of the sector too reliant on income from overseas students?

As concluded from the Institute's finance report, this is an area that physics departments should be exploiting to increase their income. The report concluded that, evidence from those departments that have specialist-taught postgraduate programmes indicates that they can contribute significantly to the financial health of a department. Physics departments therefore need to examine their scope for running niche postgraduate-taught programmes that may be able to command high fees from both home (sponsored) and, particularly, overseas students. However, in general, physics is most certainly not over reliant on overseas students.

THE STRUCTURE OF THE HE SECTOR

Is the current structure of the HE sector appropriate and sustainable for the future?

No, a major problem in the HE sector is that university finances are being driven by student choice, which would be fine if such choice was wholly informed. The recent expansion in participation has had an emphasis, correctly, on the traditionally under-represented groups. However, a side-effect of this emphasis has been that subjects requiring specific skills and knowledge on entry, such as STEM and the modern languages, have not benefited from the increased number of students and their relative (in many cases absolute) market share has decreased sharply. This is illustrated by the fact that in 1995, physics undergraduate entrants made up 1.16% of the total cohort; in 2005 that percentage fell to 0.78%.

The international panel of physicists summed up the state of the HE sector as follows⁹:

"The Panel is deeply concerned to learn that since the abolition of the binary divide between universities and polytechnics, over 30% of the UK's physics and astronomy departments have either closed or merged, resulting in physics ceasing to be an identifiable discipline in a number of UK universities. A continuation of this trend would threaten the UK's ability to produce the volume of physics graduates needed for it to compete on an international basis. The Panel is disturbed to find that the financial health of university departments is to a significant degree dependent on undergraduate numbers, which themselves depend on career choices of young people in the secondary system. This is not a good basis for strategic planning of the science base."

Large areas of the population and industry now have no convenient access to a local university physics department offering teaching or research. As the proportion of students living at home increases, and as industry becomes more dependent upon high-technology knowledge, these regions will suffer from a lack of proximity to university physics. The Government, rightly, is keen on increasing the number of women, ethnic minorities, and lower-social classes in STEM. Among these groups there is a greater likelihood of students choosing to live at home. But, if they live in the East Anglia region, where will they go to study physics? There is currently no undergraduate provision for physics at the University of East Anglia, and the closest university to their region, Cambridge, would not be a realistic proposition for many.

How well do structures and funding arrangements fit with "diversity of mission"?

There seems to be no financial incentive at all to maintain diversity in any strategic sense.

Is the current structure and funding affecting growth of HE in FE and part-time study?

No comment.

How important are HE in FE and flexible learning to the future of HE? Would this part of the sector grow faster under different structure and funding arrangements?

No comment.

Can, and should, the Government be attempting to shape the structure of the sector?

To a certain degree, yes it should. The Government has already highlighted the importance of strategic subjects of national importance, such as physics.¹¹¹ By having done so, it has emphasised the need for the UK to produce graduates in these disciplines in order for it to maintain its competitive advantage.

It is of concern to note that HEFCE has no planning remit, and therefore is unable to intervene when universities choose to close departments, even though it has recently requested vice-chancellors to inform them at an early stage if they are planning any restructuring in disciplines that are deemed strategically important and vulnerable. This is a laudable development, but still renders HEFCE as a "bystander" as the final decision as to whether a department is to be closed still rests with the university. It is surprising that, despite numerous recent reappraisals of the HE sector, there has been no attempt to find out which graduates are best suited to the economy and have the best career opportunities.

Is the Government's role one of planning, steering, or allowing the market to operate?

The Government's role should be that of steering. However, if and when there are problems in the system, such as those linked to the closure of STEM departments, the Government needs to take a stand and have in place a national strategy, whereby it can ascertain the needs and requirements of the nation for certain types of graduates.

The number of closures faced by physics is far too high for the government to sit back and allow the market to operate, with a "survival of the fittest" attitude. Yes, following these closures the output of physics graduates has remained stable, as larger, more financially secure departments have absorbed increased student numbers in their regions. But, the problem could soon reach a bottle-neck where due to a lack of regional provision and students wishing to study more and more at home, graduate numbers could dwindle, which will have a serious impact on the UK's economy.

Should there be areas of government planning within HE—eg for strategic subjects?

Yes, most definitely. As already mentioned, since the current government came to office in 1997, over 20 physics departments have either closed or merged. These closures, mainly due to financial pressures based on a low student market for physics degrees at these HEIs, have occurred randomly and haphazardly, without any thought or planning in terms of regional needs.

It appears that the Government has made a choice that HE in the UK is very broad with a very loose definition of a university, which may not include STEM (out of 129 UK universities,¹¹² only 46 currently have a provision for undergraduate physics degrees). The Government may wish to consider whether a system that, apart from a few vocational subjects like medicine, is based entirely on student choice, is the best for employers and the nation.

The publication of the report, *Strategically important and vulnerable subjects*,¹¹³ commissioned by HEFCE from an advisory group led by Professor Sir Gareth Roberts, was a missed opportunity to announce a national review for the provision of undergraduate STEM programmes. The Institute was disappointed by the advisory group's recommendation that HEFCE cannot and should not attempt to prescribe where subjects should be provided. The Institute does not agree with this position, as HEFCE is providing public funds to universities, and this level of autonomy could only be warranted if universities were attracting private funds to support teaching.

¹¹¹http://www.dfes.gov.uk/pns/DisplayPN.cgi?pn_id = 2004_0209 ¹¹²http://www.universitiesuk.ac.uk/members/

¹¹³http://www.hefce.ac.uk/Pubs/hefce/2005/05 24/

As a consequence of this recommendation, regrettably, the *tatus quo* was maintained and vice-chancellors were provided with no clear guidance on the need to support and sustain STEM subjects within universities. Therefore, we urge the Government to announce a national review of STEM provision alongside next year's Comprehensive Spending Review, as an integral process in the government's lauded 10-year science and innovation strategy.

What levers are available to the Government and how effective are they?

The Government and HEFCE can put pressure on vice-chancellors to do everything in their power to maintain and sustain subjects of national and strategic importance. The £75 million in additional funds announced by HEFCE, will be allocated with the proviso that no institution will be allowed to close a strategic subject (which the funding is aimed to support) while they are in receipt of this funding allocation. This is a step in the right direction.

In terms of student numbers, one option would be to put a cap on the number that can study courses at university that offer poorer career returns, which may tempt more students (with the requisite aptitude) to consider STEM subjects. Related to this, there is an urgent need to improve upon the careers advice that is provided. Careers advice in schools is widely thought to be inadequate and careers advisors are rarely wellversed in STEM subjects. Unsurprisingly, pupils are not able to determine which subject choices are able to provide them with the best career prospects, both in terms of salary and flexibility. Given the general employability of physics graduates and the prospects of an increasingly technological future, it appears surprising that more able students are not taking physics A levels and degrees.

Is there a clear goal for the future shape of the sector? Should there be one?

A clear goal certainly is not apparent. The Government needs to undertake a review of what the UK will need HE to deliver, in terms of its STEM graduate and research output, in order for it to remain as a leading competitor nation, in view of the economic strides being made by China and India. As far as the Institute is concerned, this needs to go further than the recent Leitch Review of skills in the UK, which in its large volume of pages failed to mention STEM specifically in that context.

The Government's 2003 HE white paper¹¹⁴ hinted at the establishment of a two-tier university system, where research would be concentrated in a few centres of excellence. This would undoubtedly boost research effort, but at the expense of separating more strongly than at present those universities with a strong research base from others that might become teaching only universities. Any such move is likely to lead to a large-scale reduction in the provision of physics courses and this approach may not then provide the undergraduates that the country so clearly needs.

Assuming that the Government decides to limit the number of research departments, there could be two models for producing the graduates. One would be simply to increase the intake for the remaining universities. This approach has several problems. It may not be possible to accommodate the students in laboratories and classrooms without substantial new build. In addition, it does not address the problem of regional deserts. The alternative is to create a new class of physics departments that do not carry out research competitive in fundamental physics in the RAE but that can teach physics at the undergraduate level and contribute to research where appropriate to their mission. The problem then would be to find a way of sustaining such departments. One way would be to support their teaching of physics as part of a larger, multidisciplinary unit and with a research remit appropriate to that setting. Such a remit could include applications of physics in support of other subjects and a role in working with regional or national industry, with the support of the Regional Development Agencies. In either case, these departments could offer threeyear Bachelors degrees in their own right, while acting as feeders for the students who wished to complete four-year integrated Masters degrees (eg MPhys/MSci) at the research departments (but all of this is dependent on the impact of the Bologna Declaration). Such students could spend the final two years of their programmes at the research departments. But, this model (and any other model that requires teaching-led departments) will have to be adequately sustained.

Is there a clear intention behind the balance of post-graduate and under-graduate international students being sought? Is this an area where the market should be managed? Can it be managed?

There is no clear intention and, there is probably no need to manage the market. For many university departments, it is the income from the high numbers of international students that helps balance the books. However, the competitiveness of the UK in attracting international students may be diminished if we do not ensure that our STEM degrees are consistent with the European norm that has developed since the Bologna Declaration.

December 2006

Memorandum submitted by the Institution of Civil Engineers (ICE)

INSTITUTION OF CIVIL ENGINEERS

The Institution of Civil Engineers (ICE) is a UK-based international organisation with over 75,000 members ranging from professional civil engineers to students. It is an educational and qualifying body and has charitable status under UK law. Founded in 1818, ICE has become recognised worldwide for its excellence as a centre of learning, as a qualifying body and as a public voice for the profession.

ICE has close links with the HE sector. Jointly with three other professional bodies, as the Joint Board of Moderators, the ICE is involved in accrediting a wide range of degree programmes, involving approximately 10 universities per year, including 4 year MEng, 3 year BEng and foundation years.

Academics are involved in many of the ICE's Committees and hold high level Member positions in the Institution including on Council.

ICE has a student grade of membership: there are 8232 UK-based ICE Student Members (October 2006).

Upon graduation, many of our Student Members transfer to Graduate Member status; there are 13619 UK-based ICE Graduate Members (October 2006). The majority of these are working in the industry, on company-approved training schemes, and working towards professional qualification.

The role of universities over the next 5–10 years

What do students want from universities?

They are looking for challenging and stimulating courses; they want excellent up-to-date education; they are being more "choosy" and making more enquiries when doing their research on where and what to study; they want to increase their existing level of education and more importantly their skill level so that they can secure good, well paid employment.

What do employers want from graduates?

Broadly employers are seeking two types of graduates:

- (a). The conventional competent graduate who is capable of doing well on a typical training scheme (this is probably the majority); and
- (b). Increasingly companies are looking for something extra: they are becoming more interested in recruiting an interesting and exciting graduate with a wide set of skills (for example management skills, the ability to deal with politicians, and to succeed in the commercial environment) capable of learning new techniques and being an innovative thinker.

Generally employers are recruiting both a and b type graduates; all graduates must have underpinning science and maths; a knowledge of, and ability to apply engineering principles and design skills are particularly important.

The challenge faced by HE is knowing what to remove from existing civil engineering degree programmes in order to create the time and space for the new material to equip the graduates of the future described under b.

Good practice is demonstrated where universities with industry links seek to deepen these links, making them more meaningful, which can have spin-offs for delivery of learning in the workplace. A challenge is how to recognize and reward industry for their involvement.

What should government want from HE?

Graduates appropriate for a high skill economy.

Internationally competitive HEIs—this may require a greater level of collaboration on research as the UK currently has only a few such centres.

UNIVERSITY FUNDING

Is the current funding system fit for purpose?

No, it is not fit for purpose in terms of quantum; the UK HE system is under-funded. It does not fit the current demand.

What are the principles on which university funding should be based?

The pendulum has swung too far to the research extreme, with teaching taking a lower priority. Research and teaching should coexist in all HEIs to varying extents; the full economic costing of teaching should be considered on the same basis as that for research. The reduced relative weighting for lab-based subjects has had a serious impact and the weighting for engineering subjects needs to be increased back to the level of other lab-based disciplines such as medicine.

Should the £3,000 cap on student fees be lifted after 2009?

This is a very sensitive area and needs to be dealt with very carefully. There is a serious danger of putting off students. If there is extensive provision of bursaries, removing the cap may be possible. It is important to remember that for research intensive universities, student fee income is a very small part of overall income; however others that are teaching-focused rely more heavily on tuition fees as a major source of income.

What should the Government be funding in HE and by what means?

Government needs to think through more clearly what it wants from the HE sector, and make it clear that it wants to support UK science and technology.

There are some areas where it makes good sense for government to fund—for example climate change research. The mechanism of peer review, for example, in deciding to allocate major EPSRC funding is a good one. It would make good sense for government to consult with the academic community about what they would like to see funded.

See also, the ICE's comments on the Bologna Process and the importance of ongoing government support for recognisable and defensible second cycle qualifications in engineering.

Should central funding be used as a lever to achieve government policy aims?

No. It is extremely important for universities to be independent of government. However, it would be appropriate for government to give clear indications of those areas which it wishes to see supported, as per the reference to climate change research mentioned above.

Should research funding be based on selection of "quality"?

Yes, although we are not quite sure what is meant by high quality research; it is very difficult to define quality in the context of research. There must be a right balance of funding to ensure, for example, that "blue skies" research can be followed through to implementation.

The danger of continuing to support research of high quality is that it is self-perpetuating. Mechanisms need to be established to recognise and support those without a demonstrable track record in research in order to provide opportunities for those other than the leading research HEIs.

How can leading universities reach internationally competitive levels of funding?

By undertaking internationally leading research and working collaboratively. Government can help by providing funding for advanced equipment and excellent laboratories.

How can leading research universities reach internationally competitive levels of funding?

Funding mechanisms should enable greater collaboration with non-UK universities. This needs to be facilitated by UK Government officials liaising with their opposite numbers outside the UK, especially in the US. There are examples (EPSRC and NSF) but it is felt that EPSRC had to concede a lot.

There needs to be a different mind-set in the UK toward funding with an increasing emphasis on securing private funding.

Funding by charities is welcomed, but the disadvantage is that they cannot fund full costs.

In some cases, greater collaboration within a university between academics and central administration would enable better financial planning over the long term.

Are some parts of the sector too reliant on income from overseas students?

The risk of such reliance is very high—some countries such as China and India are looking to establish their own provision so that the demand from those countries may decline. A better question may be "are all parts of the sector sufficiently aware of the risks?" They are probably not. London-based universities are likely to be more attractive to overseas students because of the draw of the capital and therefore need to be especially aware of the risks.

There is a distinction to be made between the type of overseas student ie undergraduates and postgraduates. In some cases, the reliance is on postgraduates, with the consequent higher fee generation This, in part, reflects the poor UK funding regime for home graduate students.

It is in our national interest to provide high quality HE for students from wherever in the world—it gives them and brings to us an important cultural and business perspective.

See also the ICE's response to the Bologna Process¹¹⁵ which highlights the risk of the UK losing its international reputation for HE excellence.

December 2006

Memorandum submitted by The Joint Committee for Psychology in Higher Education

1. Psychology is currently the largest undergraduate science discipline in UK Higher Education. It is also the third largest overall. Therefore, funding decisions that affect Psychology have a substantial impact on the sector as a whole.

2. The Joint Committee is the umbrella group for the three main bodies that represent British Psychology—the British Psychological Society (with over 44,000 members, including academics, students and practitioners), the Experimental Psychology Society (representing over 600 established research scientists), and the Association of Heads of Psychology Departments (representing over staff and students in over 100 Departments in Higher Education Institutions). The Joint Committee welcomes the opportunity to submit evidence to this inquiry. Given the broad scope of the inquiry, we have deliberately focused on issues relating to university funding and the assessment of quality.

3. IS THE CURRENT FUNDING SYSTEM FIT FOR PURPOSE? IS THE PURPOSE CLEAR?

3.1 We believe that UK research and teaching, at least in psychology, continues to suffer from insufficient long-term support. Our own view is that higher education is properly built upon a highly intimate link between the processes of research and scholarship on the one hand; and the activities of learning and teaching on the other. The challenge will be to preserve that link, already under pressure in various ways, and likely to be even more so as universities, in response to the widening participation agenda, seek to increase the participation rate still further.

3.2 Moreover, the operation of the funding formula flies in the face of the work that has been done in UK universities over the last 40 years or so, to ensure that teaching is research-led. In disciplines such as psychology, development of research skills is a fundamental part of learning, and a pre-requisite for professional training. Obtaining a PhD in psychology requires advanced research skills. A PhD is also a *de facto* requirement for becoming a lecturer in psychology in most departments. However, this seems unsustainable if large numbers of departments will no longer have the funding (or opportunity) for staff to conduct research. Ultimately, therefore, although the funding mechanism is supposed to strengthen UK research and teaching, we think there is little evidence of this, and furthermore that it is damaging overall research capacity and teaching.

3.3 In addition, and in particular, we feel that the assumptions underpinning the current fee-banding for psychology (under the HEFCE funding method) do not fully reflect factors that should determine the funding formula.

¹¹⁵Education and Skills Committee, The Bologna Process, Fourth Report of Session 2006–07, HC 205, Ev 102

3.4 The majority of Departments of Psychology in the UK run undergraduate degree courses that are accredited by the British Psychological Society. The criteria for this accreditation require that at least 30% of each year of a typical degree is taken up with laboratory work, including an independent empirical research project in the final year. Almost all psychological research requires human participants, which in turn requires support in terms of suitably controlled laboratory environments, support staff and equipment. Thus, the teaching of psychology involves very significant support in terms of space, personnel, technical expertise and facilities. Psychology is an intensive laboratory-based discipline, as well as the fastest growing subject in science. However many departments are stretched to intolerable levels. Those that do have substantial research income have to subside their teaching from research resources—the under-funding problems needs to be resolved rather than compounded.

3.5 Many of these problems arise from the dependence of the existing funding models used by both HEFCE and HE institutions on historical baselines which serves to penalize expanding disciplines and reward contracting disciplines. It is our strongly held view that the current HEFCE proposal to try to identify actual costs using the TRAC system is entirely undermined by the very low quality of the information that is being fed into TRAC. Further, even if actual costs could be established, given the tight linking between the allocation of funds to disciplines and the HEFCE funding model, relying on these would still perpetuate historical funding levels. A way needs to be found to develop a funding model that responds effectively to both needs and demands.

4. Should research quality be based on selection of "quality"? How should quality be defined and assessed? How might this drive behaviour across the sector?

4.1 We do not object, in principle, to the policy of assessing the quality of research. The RAE provides an important quality mark for UK research. However, the arbitrariness of the funding formula applied following the RAE has resulted in strong perceptions of injustice and in highly unproductive forms of labelling that create self-fulfilling prophecies in terms of recruitment and performance. The funding formula has also resulting in very intensive recruitment and the movement between institutions of research leaders and research role models. For the UK research as a whole, this is a very expensive process and it is questionable whether it produces any noticeable benefit. Indeed it seems likely to deplete the research capacity of the many smaller and less powerful departments. By fostering this movement of highly experienced and outstanding researchers into a smaller number of departments and institutions, the funding formula separates teaching and research so that the latter can take place in fewer locations. Ultimately, we believe this will weaken the teaching of psychology nationally, and consequently our capacity to produce UK trained scholars with sufficient nationally required research skills and international excellence in terms of originality and diversity.

4.2 It also results in discriminatory funding such that excellent researchers in departments with lower RAE ratings receive less financial support for their research than researchers of equal stature in departments with higher ratings. In practice, those lower status departments have much higher teaching loads and student numbers, making it less and less possible to conduct high quality research. Since there is quite a lot of movement of staff immediately before and between RAEs (eg hiring of new staff to match changing student numbers), this means that the funding mechanism privileges some individuals on bases that are largely independent of the quality of their own research. It seems likely that less mobile individuals, and those whose work is tied by geographical location (such as people with families, dependents and also scholars whose research does not fit a mainstream category) are disadvantaged by this system. The consequence is likely to be inefficiency and inaccuracy in the delivery of research support, and unplanned loss of capacity in potentially important areas of research.

4.3 Even if it were possible to justify the denial of research resources for 'national' level research (eg currently in departments rated 3 or below), the continuing increase in the funding differential between 4 and 5 rated departments seems hard to defend on rational grounds. Schools do not invest all their best teachers only in the pupils who already excel, and schools that produced a performance cliff would certainly be castigated for doing so. Yet the rationale for selective funding of research has just such an effect. Departments rated 4 certainly include international quality research. If the aim was to bring about improvements in UK research it could easily be argued that the most effective targeting of additional resources would be to the 4 rated departments rather than those that were already performing at a uniformly high level. There is a further downside to RAE outcomes, namely the stigmatization of large numbers of units of assessment and their members. The increasingly selective distribution of research funding and the political agenda to concentrate research funds into fewer pockets sends the misleading, message that an increasing proportion of UK departments and universities are producing work that is not worthy of international respect. Of course if this message is in fact accurate it would be a testament to the failure of the funding algorithms used following previous RAEs.

4.4 We believe the aim of the research assessment process ought to be to recognise excellence in research—whether it is produced by individuals, groups, departments or institutions. We believe that the selection of funding is best achieved by rewarding excellent research wherever and whenever it appears, but not on the basis of categorisations applied at arbitrary levels of abstraction—namely Units Of Assessment (UOAs). To illustrate this point, it seems likely that a University in which nearly a quarter of research staff were internationally outstanding could have massively different RAE outcomes, public profile, and possibly HEFCE funding depending on the combination of the funding algorithm and whether all of these staff were concentrated in just a quarter of its UOA's or evenly distributed across all of the its UOAs. Thus, although the total proportion of excellent research would be the same, the system of awarding RAE ratings and the funding received and esteem accorded to the University could be radically different. Any new system needs to rectify this type of anomaly.

4.5 In conclusion, we urge that the issues of the types of indicator used, the context in which they are placed, the level of categorization at which they are applied and the funding algorithms that follow all should be given greater consideration in the development of future RAE methodologies.

We hope that these comments stimulate further consideration of the strategic aims of the funding mechanism as well as deeper consideration of its likely consequences. We hope that any future funding arrangements strengthen rather than undermine the national foundation for substantial disciplines such as psychology that are rooted firmly in research led teaching.

EXECUTIVE SUMMARY

- Psychology is currently the largest undergraduate science discipline in UK Higher Education. It
 is also the third largest overall. Therefore, funding decisions that affect Psychology have a
 substantial impact on the sector as a whole.
- We believe that UK research and teaching, at least in psychology, continues to suffer from insufficient long-term support.
- The link between teaching and research is essential and must be strengthened and preserved.
- The operation of the funding formula flies in the face of the work that has been done in UK universities over the last 40 years or so, to ensure that teaching is research-led.
- Although the funding mechanism is supposed to strengthen UK research and teaching, we think there is little evidence of this, and furthermore that it is damaging overall research capacity and teaching.
- The assumptions underpinning the current fee-banding for psychology (under the HEFCE funding method) do not fully reflect factors that should determine the funding formula.
- Psychology is an intensive laboratory-based discipline, as well as the fastest growing subject in science. However many departments are stretched to intolerable levels. Those that do have substantial research income have to subside their teaching from research resources—the underfunding problems needs to be resolved rather than compounded.
- Many of these problems arise from the dependence of the existing funding models used by both HEFCE and HE institutions on historical baselines which serves to penalize expanding disciplines and reward contracting disciplines. A way needs to be found to develop a funding model that responds effectively to both needs and demands.
- We do not object, in principle, to the policy of assessing the quality of research. The RAE provides an important quality mark for UK research. However, the arbitrariness of the funding formula applied following the RAE has resulted in strong perceptions of injustice and in highly unproductive forms of labelling that create self-fulfilling prophecies in terms of recruitment and performance.
- We believe the aim of the research assessment process ought to be to recognise excellence in research—whether it is produced by individuals, groups, departments or institutions.
- We believe that the selection of funding is best achieved by rewarding excellent research wherever and whenever it appears, but not on the basis of categorisations applied at arbitrary levels of abstraction—namely Units Of Assessment (UOAs).
- We urge that the issues of the types of indicator used, the context in which they are placed, the level of categorization at which they are applied and the funding algorithms that follow all should be given greater consideration in the development of future RAE methodologies.

Memorandum submitted by the London Knowledge Lab of the Institute of Education, University of London

INTRODUCTION

1. This response has been prepared by the staff of the London Knowledge Lab at the Institute of Education, University of London.

2. The London Knowledge Lab is a unique collaboration between two of the UK's most prominent centres of world-class research—the Institute of Education and Birkbeck College. The Lab brings together computer and social scientists from a very broad range of fields—education, sociology, culture and media, semiotics, data mining, information management, personalisation and ubiquitous technologies.

3. The ways in which we learn, and what we need to know, are changing. This affects all sectors of education, and especially HE. Our research aims to explore and invent the roles of technology in education, and to understand how technology relates to broader social, economic and cultural factors. This informs our responses to selected questions from the Committee, as outlined here. We would be happy to follow up with further argument and evidence if requested.

THE SELECT COMMITTEE QUESTIONS

What do students want from universities?

4. In short, they need greater flexibility of provision, and responsiveness to their needs and capabilities. Students need to be able to develop the skills and knowledge that will help them to navigate through a world in which they may have multiple careers, and need to retrain, as the UK economic priorities and job market change.

5. If the future size and shape of HE has to cope with 50% participation, as well as lifelong learners, then it will need to offer a more responsive curriculum, flexible teaching methods, and a range of patterns of delivery. Making the curriculum responsive to students' needs, need not make it wholly market-driven, which would undermine the contribution of HE, and decrease its value to students. Flexible teaching methods would add a broader range for the academic and course designer to choose from. Flexible delivery would meet the needs of the wider range of student audiences for HIM.

6. The responsive curriculum means:

- acknowledging the increasing diversity and interdisciplinarity of subject areas
- practitioner/workplace knowledge built into academic study
- greater focus on high-level skills as a learning outcome from HE
- recognition and use of the high-level IT skills students have acquired
- foundational knowledge taught in part through its workplace applications
- negotiating subject areas with student and workplace audiences.
- 7. Flexible teaching means:
 - a shift from the transmission model of teaching towards more resource-based learning, interactive methods and independent, and collaborative study
 - use of learning technologies, with a lower proportion of traditional methods
 - less focus on degree/class, more on profile, portfolio, potential and skills
 - greater focus on individual guidance and support.

8. Different patterns of delivery means:

- part-time and online opportunities
- modular study
- shorter course modules
- interrupted study (to return to the same point at a later stage)
- work-based learning, mixing part-time work with campus-based part-time, and online learning.

9. If every individual is to achieve their learning potential, then the HE system has to be more personalised: it should be possible for every individual to study in the time, place and method that suits their needs. Personalisation is difficult in a "mass" education system, but would be feasible and affordable with proper integration of digital technologies (Laurillard, 2005b).

10. A responsive curriculum is impossible in a mass system that organises learning according to the providers' needs. Digital resources and online conferencing make it possible to differentiate between students in a cohort with respect to their learning needs and preferences. Learning is essentially a social process, and students need to be part of a group, learning collaboratively as well as individually, but they do not have to learn the same thing in the same way, as they do in a lecture, or with a book. We need greater emphasis on student managed learning and personalisation, with academics offering support and guidance

through the process of learning, and inspiration and leadership with respect to understanding complex subject-matter. Learning technologies offer many different ways of making personalisation affordable in the form of a more responsive curriculum and more flexible teaching [see Annex].

11. Students need a much wider range of learning opportunities from HE. Many 18-year-olds are uncertain about what to study, or what kind of career to aim for, making university course choice essentially a lottery. Universities have become much more flexible in their offerings in recent years, but for an even more diverse student population this still needs further development. In comparison with what is currently on offer, students who want a university education, but are uncertain about what to study, need:

- a wider range of shorter courses to try until they discover a focus
- a longer period over which to develop a focus for HE study—much more than three years
- a mix of part-time, full-time, and interrupted study over that period
- a mix of campus-based, home-based and work-based study
- personal guidance on the opportunities available.

12. Greater flexibility need not lead to increasing student transfer between institutions, and if universities take care to serve their alumni well, through flexible online provision of post-graduate study, they will generate expansion in student numbers through this means, as well as through initial participation. Online communication and collaboration environments bridge the boundaries between university study, home, and the workplace.

13. The UK has the technology. Through the JISC, universities have a world-class central support service for digital infrastructure, learning environments and experimental development. There has been sufficient investment in research, pilot studies, and teaching innovation for the sector to know what technology can do, and what it takes to do it. The UK is widely seen as being in advance of other countries with respect to its use of learning technologies.

14. The UK has the means. The Open University provides UK HE with a world-class partner for universities wanting to offer open learning alongside their campus-based offerings. Its maturity and stability place it in a good position to form alliances with campus universities to complement their offerings with a much wider range of study options for learners.

15. The UK does not have the strategy. In order to capitalise on these advantages, to build a system capable of meeting the wide range of students' needs, the effective integration of learning technologies has to become a clear and costed strategic direction across the sector as a whole.

What should the Government, and society more broadly want from HE?

16. This was determined carefully by the Dearing Committee consultation in 1997, and does not obviously need to be altered:

17. "The role of universities is to enable society to make progress through an understanding of itself and its world: in short to sustain a learning society"

18. To achieve this the report set out the four main purposes of higher education as being "personal", "intellectual", "economic" and "social":

- to inspire and enable individuals to develop their capabilities to the highest potential levels throughout life
- to increase knowledge and understanding for their own sake and to foster their application to the benefit of the economy and society
- to serve the needs of an adaptable, sustainable, knowledge-based economy at local, regional and national levels
- to play a major role in shaping a democratic, civilised and inclusive society" (NCIHE, 1997).

19. In particular, there are new skills and patterns of knowledge that employees increasingly need in the workplace, where technology is ubiquitous (Kent, Bakker et al., 2005). Because of this, technology can also be used to support online learning and professional updating by simulating artefacts commonly found (such as charts or graphs), and rebuilding them so that the underlying models become visible, manipulable, and therefore learnable (Noss, Bakker et al., submitted).

Should central funding be used as a lever to achieve government policy aims?

20. To determine "what", yes, but not "how" as that should be devolved to the sector. Government should be responsible for determining the broad principles and ambitious aims for HE. HEFCE and universities should be responsible for planning how to achieve these aims. Government should provide responsive funding for strategic central investment in the sector proposed, with supporting evidence, by the sector for developments that are more cost-effective when carried out on behalf of all institutions, rather than separately. It provides regular updating of physical and digital environments for research, but only the former for teaching. Innovation in teaching has benefited from the existence of the digital infrastructure for

research, but specific teaching and student-oriented provision and updating is also needed. Examples are: a unified open source learning technology infrastructure (for all education sectors to enable easier cross-sector collaboration and learner transitions); digital information systems, tools and environments offering personalised support for learners' journeys through HE; a national reconfiguration of broadcast audiovisual media integrated with online learning, building on the lessons from the historic OU-BBC collaboration.

Is the current structure and funding affecting growth of HE in FE and part-time study? How important are HE in FE and flexible learning to the future of HE?

21. A flourishing HE-in-FE provision is crucial for a truly flexible and responsive system, because it is capable of being adaptive to student needs.

22. Flexible learning and innovation in teaching, with a greater focus on personalisation, will help to address the needs of the very diverse students now entering HE. If students are not learning in the optimal way for them, their time is wasted, and we waste millions of years of working time in our undergraduates every year. The sector has done a lot to make itself accountable for quality of provision, but this does not equate to quality of learning achievement. Flexible learning, with a greater focus on personalisation, is the key to this (for examples see Annex).

23. The structure of funding for teaching and research necessarily affects the ability of the HE sector to innovate in teaching—all discretionary time is devoted to research because it carries financial reward. It is as important to innovate in teaching as in research. New technology can build stronger links between teaching and research, with research outputs available online and accessible for student use. It would be valuable to have stronger incentives for teaching innovation, eg new criteria in research awards relating to how they might feed into teaching programmes, forms of online dissemination of research addressed to student communities, etc.

Can, and should, the Government be attempting to shape the structure of the sector?

24. No, it should model the size, and establish the funding principle to achieve its realisable ambitions for affordable expansion.

Is the Government's role one of planning and steering, or allowing the market to operate?

25. Neither—it is to provide the vision, strategic aims, and principles of funding.

Should there be areas of government planning within HE—eg for strategic subjects?

26. Yes, because, for example, we have a serious shortage of mathematicians, engineers and scientists coming through the system. But intervention has to be strategic and systemic. It would not be sufficient to reduce fees for these courses in order to attract students. No doubt it would, to a degree, but this would not address the fundamental reasons why there is a loss of interest in these subjects. In general, they are badly taught at school-level, and also in much university provision, and the problem is cumulative, as fewer well-qualified teachers come through. In general, to foster strategic subjects, the Government should take a systemic approach, examining all the drivers of student choice and achievement (interest, enjoyment, teaching quality, quality of learning experience, cost, career prospects, etc), and focus intervention on all of them.

27. Technology is changing both what we need to know, and how we come to know it. As the workplace diversifies, graduates working in the knowledge economy need to keep renewing and developing their highlevel skills, eg for information-handling, independent learning, critical thinking, reflective innovation, project management, resource modelling, knowledge management, communication, networking, interpersonal negotiation, design, creativity, time management, and enterprise, and they need the ICT skills to support all these. Foundational knowledge is important, but will need to be continually updated. The curriculum in HE therefore has to differentiate between building foundational knowledge, and using this knowledge-building process as the vehicle for the acquisition of all these high-level skills. This refocus does not require government intervention except to foster debate across the sector. The mismatch between the predominant HE focus on discipline knowledge, and the workplace requirement for high-level knowledge skills, helps to fuel the absence of HE from workforce development (Connor, 2005).

Is there a clear goal for the future shape of the sector? Should there be one?

28. No, because the future environment is too uncertain. Better to focus on building the capability of the sector to learn, and to adapt to its environment. It does this very well in the research field, but much less well in teaching. This response is an attempt to offer an analysis of why, and what might be done.

CRITICAL DEPENDENCIES

29. Academics need to develop a differentiated range of pedagogies appropriate for different types of learning outcome and academic level. A better understanding of the differential benefits and costs of traditional and new technology teaching methods would improve the effectiveness of investment in teaching innovation (Laurillard, 2006a).

30. Academics also need far greater support than they have ever been offered for making the shift towards greater use of e-learning methods and personalised learner support, using the best of traditional methods and digital technologies to provide an optimal mix of learning activities and support (Laurillard, 2005a). This could be accelerated through the JISC programme of e-learning research.

31. Academics need to exhibit in teaching all the characteristics they do in research (training, collaborating, sharing, with a robust R&D methodology), if innovation in teaching is to make the progress needed. Given the effect of the RAE on teaching innovation, we need more imaginative reward systems, modelled on those that work well for research, to motivate the professionalisation of teaching.

32. Alternative approaches to the use of teaching resources, making better use of learning technologies, would include both pedagogic and financial benefits that would service the demands on HE outlined above. However, these would only be realisable if certain conditions were in place: clear strategic management, good project management, sufficient investment, good change management practice, a supportive and engaged academic community, inter-institutional collaboration, and the changes supported by a robust R&D methodology for teaching. None of these are very easy to achieve. They need a well thought-through national strategy as a framework for institutions to address all these issues. Senior managers need support from the Funding Councils if they are to manage the scale of these reforms effectively, and collaboratively. Universities' learning and teaching strategies could be expanded to include a focus on managing the transition to e-learning, resource management, and collaboration (Laurillard, 2002).

33. Any strategic framework developed must emphasise the need for a participatory way forward that engages all parties in the process of change, particularly those who teach and those who learn. Change must come from within the sector, directed by those who understand it, not by relying on external consultants who do not understand the business of HE. (Laurillard, 2001). A strategic framework should recognise the skill base that we have within our universities and use its strengths as well as trying to develop its practices. Many institutional practices are still very traditional, and although they are changing, progress is not fast. Providing digital tools and environments that lower the barriers for lecturers wishing to innovate will accelerate change, led by academics themselves, and ensure that all staff are able to make a valuable contribution as HE rethinks itself for the future (Laurillard, 2006b).

RECOMMENDATIONS

34. The outline above suggests some possible ways of reconfiguring HE to achieve improved quality and flexibility, expansion at reasonable cost, and better management of resources.

Issue	Recommendations	Levers	
Productivity	Invest to improve quality of output in terms of flexibility: HE should offer a wider range of study mix options to students: ft/pt, on/off campus, residential, interrupted study, work-based study, home-based study, etc. This would provide greater assurance that students make optimal choices of course and improve learning outcomes.	HEFCE funding targeted o learners' needs rather tha institutions' needs.	
	Invest to increase numbers at lower unit cost : use e-learning to improve scale at reasonable cost by investing in collaboration across institutions—use LKL expertise to advise on creating an "innovation support unit", which can engage with selected university departments to develop their e-learning business, and build sector knowledge of new pedagogies, new design and production methods, new markets, new patterns of delivery and student support, IPR mechanisms, etc.	Funding flows promote, rathe than undermine institutiona collaboration.	
Academic professionalism	Professionalise teaching: match the support and reward mechanisms in research to motivate staff to become as professional in teaching as they are in research (covering coaching, accreditation, and opportunity to innovate, collaborate, disseminate, and achieve recognition).	HEFCE strategy	

Issue Responsiveness	Recommendations	Levers HEFCE-Industry project to identify appropriate mechanisms for industry contribution		
	Invite industry to form partnership contracts: with learners and courses, contributing funding for limited period contracts for work-based learning, using e-learning to offer negotiated curriculum— shifting industrial training expenditure towards HE, where appropriate.			
Inclusion	Promote online access to university study at school level, and in the workplace: online collaboration across HE, FE and schools would foster the pull- through to post-16 education by engaging learners from all areas, and offering "taster" courses using e- learning to excite their interest.	Matched funding via funding councils and LAs		

Annex

Funding expansion

35. Global demand for higher education is high and can only increase, but it will not pay any price, and there will be many competitors willing to offer a lower price. The UK HE system will not be able to compete on price, but will be able to compete on quality and value for money. Competing on value for money requires that we can afford to offer it at a reasonable price. That means our unit costs must decrease as volumes expand. That in turn means shifting to a different teaching resource model.

36. How could this be achieved without undermining quality? Mainstreaming use of e-learning, properly managed, offers alternative use of the human resource needed for teaching UK HE courses, improves the quality of the learning experience, and supports greater efficiency, and hence lower unit costs. Examples of the ways in which technology can reduce costs while maintaining quality are:

- flexible delivery to students' place of work or home, requiring less physical infrastructure
- independent learning, requiring less labour intensive teaching
- online communication and collaboration, to provide peer group interaction
- FAQ toolkits, to enable online tutors to help larger student groups efficiently
- reusable learning designs, to enable proven good practice to be shared easily
- reusable digital resources to support teaching development and innovation
- online access to e-science materials and digital libraries to support teaching
- interactive formative assessment, to automate personalised feedback
- online marking tools, to make tutor feedback more efficient
- online enrolment and administration of students, to increase administrative efficiency
- personalised information and guidance, to supplement personal tutors
- online diagnostic tools, to guide students' course choices
- online evaluation tools, to provide market research and feedback to academics
- online credit transfer mechanisms, to make institutional collaboration easier
- online access to professional updating to increase HE role in workforce development.

37. There are many other examples. Exploitation of these features of e-learning would yield, long-term, a lower unit cost for a student in higher education. Investment in the transition to this state would have to cover development costs for the software tools and platforms required, and staff time for change management (including staff development).

38. Modelling the effects on distribution of staff time would define the conditions under which a lower unit cost could be achieved through a shift from traditional teaching to e-learning (Laurillard, 2006a). The Open University provides the UK with a unique test-bed for understanding an alternative distribution of teaching resources, human, physical, and virtual. Its maturity and stability mean that it is in a good position to form alliances with campus universities to complement their offerings with a much wider range of study options for learners. But this requires strategic leadership from HEFCE.

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November 2006

Memorandum submitted by the London School of Hygiene and Tropical Medicine

The role of universities over the next 5-10 years

UK Higher Education Institutions (HEIs) make a substantial contribution to the UK economy and to the needs of industry, through their research, teaching and other work. But knowledge transfer must not be considered narrowly in terms of products or services rolled out to industrial partners. The Committee will need to look at the range of HEIs' activities to assess their full contribution to the economy and society. Beyond their work with industry, HEIs provide huge social—and long-term economic—benefits through links that enhance policy and practice: their role in informing NHS policy in the UK and internationally WHO and Public Private Partnerships such as the Global Fund to fight AIDS TB and Malaria , for example, are extremely important in the health sector.

HEFCE's current strategic plan commits it to increasing global engagement between the UK's HE knowledge base and overseas HE and users. The School strongly supports this commitment, and believes that HEIs are uniquely qualified to make a significant contribution to meeting the needs of the developing world. Incentives should be put in place to encourage the fulfilment of these social obligations, and to support HEIs participation in the international development agenda and their contribution to capacity building in the South.

UNIVERSITY FUNDING

The research base provided by HEIs is vital to the competitiveness of the UK economy, and to the wider social benefits noted above. Government funding should continue to be allocated in a way that is selective, and supports excellence. Funding should not be diverted away from leading research universities when more is needed to support international competitiveness, in both basic and applied research.

The School welcomes recent changes to HEFCE's funding formula to give greater recognition to research supported by charities. However further action is needed to implement FEC fully for charity-funded research. This work is highly relevant to policy and practice, and therefore to HEIs' contribution to the UK's economy and society. But institutions do not have the capacity to subsidise grants. If charities are not encouraged to invest in the UK there is a risk that major UK and international sponsors will divert research funds to countries with a more favourable funding environment. This would have serious implications for the UK's research base, particularly in the biomedical sciences

The UK needs to be more entrepreneurial in attracting overseas students, who provide huge benefits to the UK economy. There have been a number of Government initiatives over recent years to support overseas recruitment, but these have not always been co-ordinated with other aspects of Government policy. Potential overseas students should not be hindered from coming to the UK by, for example, changes in Government policy on visa fees.

Government funding needs to be more equitable for all student groups than at present in order to encourage a more diverse and flexible market. In recent years much attention has been given to widening participation at undergraduate level, and this is clearly important for the sector. But in future years it will become increasingly important to support the part-time and postgraduate markets, particularly if the numbers of school leavers entering HE will reduce. Part-time and postgraduate provision will also be essential to support the development of advanced skills in the workforce.

THE STRUCTURE OF THE HE SECTOR

The UK must aspire to be the leading HE provider in Europe and in order to achieve this must be sufficiently flexible in order to be the favoured destination of both UK and EU students.

The diversity of the sector should be supported and encouraged beyond the traditional research/teaching strengths to support and enhance subject specialisms in order to sustain/produce world-class centres.

Public health and prevention subject areas need to be provided with greater support as, despite their importance, they are usually overlooked compared with biomedicine.

December 2006

Memorandum submitted by Ian McNay, Professor Emeritus, Higher Education and Management, University of Greenwich

1. The Committee's timescale for the consultation does not allow for an extended submission. Several PhDs might be needed to do justice to the set of questions. The Committee has already requested and received Higher Education and Human Good, a monograph produced with Jennifer Bone. I am attaching a copy of the final chapter of McNay [2006] *Beyond Mass Higher Education: Building on Experience*,¹¹⁶ which, as the title implies, covered ground common to the committee's concerns, and collated contributions to an ESRC-funded research seminar series. Below, I list several points, mainly about the balance of the inquiry as inferred from the set of questions, or in brief response to some of the questions.

2. Full-time school-leaver undergraduates away from home are a diminishing minority of students. HE is no longer a passage from adolescence to adulthood and there is a need to talk of a diverse set of student experiences [plural]. For most, there is no longer a transfer of identity, nor a change of base community. They have strong, established identities and are looking for development and improvement, not transformation [though some still do have a transformative experience, as my studies of OU students showed]. Such "non-traditional" students are now the majority, and the discourse needs to reflect this, rather than treating them as exceptional. There is not homogeneity within this diverse group either, of course, so the concept of "the student" becomes multi-faceted.

3. In England the 18+ age cohort declines after the end of the decade. Scotland anticipates a 20% reduction by 2025. That will further affect the balance of the student population. Recent growth has been faster among postgraduates than undergraduates and that will continue within a CPD/lifelong learning context when there is a mass output of first degrees. New, high fees will push towards part-time first degree study—note OU trends among those under 21. Participation rates among young full-timers are only sustained by those from minority ethnic groups where different patterns of behaviour prevail. To quote one on student culture—"drink, drink; it's not my cup of tea".

4. So, students want a personal/professional agenda to be met. A draft HEFCE plan some years ago talked of a bespoke experience, a phrase deleted in the final version, but that individualisation is in tune with the current zeitgeist. Older students, and those on CPD programmes will expect a more negotiated curriculum, not a prescription nor even a selection from a provider determined menu.

5. Engagement, then, needs to be not only with schools. A minority of undergraduates enter directly from school. Colleges will be important in the 14–19 curriculum offer, where they do much better than schools in responding to a diversified society, and in providing pathways to HE, perhaps with an extended HE offer within the FE sector [but read Gallacher, Field and others on the Scottish situation]. Employers need engaging, too—see below.

6. The proportion of GDP invested in HE is the same as it was 30 years ago when student numbers were much lower and research activity less developed. The masses paid for the elite through taxation. Now the elite are deemed unwilling to fund the masses and government wants quality on the cheap—or at less than the average of OECD countries. That is not a sustainable position. The money needed to abolish fees for fulltime undergraduates, and to restore means tested grants at 1970s levels, is less than the bonuses paid to a few thousand workers in the City and Canary Wharf, or the employees of a single company—Goldman Sachs. That is a corruption of values in a civilised society with a government rhetorically committed to social equity. Scotland has shown the comparative effect of fees and no fees on participation. The Irish experiment a few years ago produced what England can now anticipate—a widening of the opportunity gap. Concerns over costs to students and their impact are growing stronger in the USA and Canada. Finland, among others, shows that a high tech economy can sustain free HE as the UK committed to in signing the UNESCO charter of economic and social rights. It is one of the ironies of the UK democracy that a majority of English MPs voted against the clause in the Bill that introduced high fees, and a travesty of democracy that they were imposed in Northern Ireland against the unanimous views of all political parties. So, there was no political legitimacy to the policy.

7. Fees would be acceptable if grants were for "fees plus" as they were after Robbins and the Anderson Report. The means testing gradient can be adjusted to avoid subsidising the offspring of the richest. Fees and grants to support part-time first degree students also need urgent attention to avoid discrimination, exclusion and distortion of the market.

8. Recent increases in HE spending have been mainly on research, not teaching nor widening of participation. The emphasis in Access Agreements has moved from bursaries for those in need to scholarships to those who have succeeded. Government funding has gone disproportionately to the already advantaged institutions, without any productivity increase being required in research, whereas the unit for teaching has barely moved and fails to recognise needs of diverse student populations. The double funding of Oxbridge teaching—to colleges on top of the university—should be abolished. As in Australia, universities might be allowed to recruit fully fees funded students beyond their HEFCE contract.

9. RAE and QR have been consulted on recently. My main concern is to give greater recognition to improvement in the quality of life as a quality criterion, to balance the current closed circuit where "impact" is seen as being only on what other academics write about. Fuller recognition of the gearing ratio between state funding and client funding might bring that closer in some cases, but it needs building in also to peer review. Currently, work with such beneficial effects is under-credited and under-rewarded. There is some evidence that work given middle ratings in RAE gives better value for money than that given the highest grades. So, there is an economic case against excessive concentration of funding, where generation of entrepreneurial income for research is lower than in those outside the premier division—the Avis principle of "we try harder".

10. The balance between market dominance, provider autonomy and state control is a difficult one to resolve. Evidence from recent studies, here and in other European countries, suggests that greater institutional autonomy is more effective in entrepreneurial terms. The state cannot steer the provision for millions of students from the centre with short stay ministers and advisors from a narrow range of lived experience [as Sir Toby Weaver said 30 years ago in "Weaver's Law"]. Previous central planning of student numbers has been disastrous. Decisions are better taken—for curriculum provision as well as R + D—closer to the market. The role of government then becomes one of protection—of quality as part of care for the citizen, and of key strategic areas. Its role in research strategy will be greater. But it has lacked consistency and continuity in many arenas, with emphasis on short—term initiatives and confusion and contradiction in messages transmitted—Coffield's damning summary of "101 initiatives and no strategy".

11. The relation between HE and employers needs re-balancing. Employers have shirked responsibilities to invest in capital renewal and employee development since they were warned of the consequences of their failure by Prince Albert in 1851 [see Corelli Barnett's Audit of War]. Their reluctance over sandwich placements, joint work on NVQs and Foundation Degrees, and other issues shows that this continues. They have been excused any role in failure and feel exonerated and free to castigate HE. They need to examine the beam in their own eyes, and need encouragement from Parliament to do so. With a declining youth cohort of new entrants to the labour market, CPD and a wider commitment to lifelong learning will be essential to development of skills for new demands. Employers must play, and pay, their part in that, and policy initiatives may be needed to ensure that they do so.

December 2006

Memorandum submitted by The Medical Schools Council (formerly the Council of Heads of Medical Schools (CHMS))¹¹⁷

CHMS represents the interests and ambitions of UK Medical Schools as they relate to the generation of national health, wealth and knowledge creation through the profession of medicine. As an organisation it occupies a unique position embracing undergraduate medical education, the entirety of health related research and a critical interface with the health service.

THE ROLE OF UNIVERSITIES OVER THE NEXT 10 YEARS

University staff are, by definition, individuals with a personal commitment to search for absolute truths and a drive to uncover the correct—rather than the comfortable answer.

It is a demonstration of a civilized society that public funds are committed to paying individuals simply to think. Occasionally this makes for an uncomfortable relationship with policy makers who are required to press forward a particular government agenda.

Universities historically have had 2 roles—to create new knowledge through research and to transmit that knowledge through teaching. We would add a 3rd role—we live in a knowledge rich society, so information and knowledge management have become and will continue to be a very important role for HE.

The one thing, however, that policy makers can rely on, is that university staff have a focused agenda dedicated to quality. It is imperative for the nation that this unbiased, rigorous and analytical base is supported as a bastion of quality and the search for truth.

Universities are central to the effective delivery of medical education firmly rooted in an environment of enquiry and scholarship. It has been stated that whilst it is possible to train people to do today's task they must be educated for tomorrow's task. In no discipline is this more true than medicine where practitioners must daily cope with complexity, ambiguity and situations of uncertainty. The NHS, as the major employer of medical school graduates requires its doctors to provide:

- patient advocacy.
- accurate diagnosis and clinical reasoning.
- leadership.
- scientific knowledge.
- innovation.
- flexibility.
- empathy and good communication.
- team-working.

Central to CHMS's role is the pro-active exploration of the role of the doctor in the future and the pursuit of educational solutions for workforce requirements that embrace the desired roles—both in the NHS and in the pharmaceutical and devices industries.

CHMS believes that more needs to be done to define the profession specific requirements for the delivery of optimal patient care and to select into each professional cluster those students most able to fulfil these roles. Having articulated the requirements in terms of:

- caring;
- diagnosis;
- therapy;
- innovation; and
- leadership.

more needs to be done to structure the working environment to facilitate the patient journey.

Closer working between universities and schools and between universities and those delivering health care will be vital.

It needs to be appreciated that the timescale from a basic scientific observation to an application with clinical impact can be as long as 50 years and realism must be factored into expectations and the outcomes of research expenditure.

¹¹⁷CHMS changed its name with effect from 17 May 2007.

That being said, the very rigorous peer review of grant applications experienced in the UK has had an undoubted impact and the quality of the output of bio-medical research in the UK is second only to the US internationally—despite the relatively small scale of the investment compared with that of other nations. The quality of education provided by UK universities is demonstrably excellent and deserves continued support.

In terms of the specific questions posed:

What do students want from universities?

Socially and intellectually broadening experience that results in employability.

What should the student experience involve, including for international students?

Transferable skills.

What do employers want from graduates?

Fitness for purpose.

What should the government, and society more broadly, want from HE?

Social and regional accountability; engines for the economy.

UNIVERSITY FUNDING

Is the current funding system fit for purpose? Is the purpose clear?

In health, no. Medical education is by definition expensive because of the time it takes to expose students to patients in the variety of presentations of different pathologies necessary for them to be confident in their diagnostic abilities.

There should be continued (and there is an argument for increased) funding of Higher Education from the public purse. Whilst more generous funding would undoubtedly be welcome and would further stimulate innovation, the relative stability of Funding Council income streams has been welcomed by Medical Schools—particularly when compared with difficulties faced, in the recent past, by colleagues in Schools of Nursing.

The key issue to be resolved centres around funding from DH to cover clinical placements and the Duties of the Secretary of State for Health under the NHS Act to provide such facilities as are necessary for the clinical education of medical and dental students.

The recent drive to delegate decision making to SHAs and the removal of ring fencing from the MPET budget has meant that SHAs have, without the required consultation, slashed education expenditure in order to meet short term financial imperatives.

It is naïve to assume that service imperatives will not take priority over long term educational objectives. If the government has a policy of developing an effective, home-grown medical workforce, steps need to be taken to provide ringfenced funds to create the professionals required.

What are the principles on which university funding should be based?

Evidence of cost.

Should the £3,000 cap on student fees be lifted after 2009 and what might be the consequences for universities and for students, including part-time students?

The full impact of fees on debt averseness needs to be understood if the fee elevation, insensitively introduced, is not to jeopardize widening participation goals. Whilst lifting the fees "cap" will be possible, this is not a preferred option from the students' perspective and it has the potential to undo progress that has been made on widening access.

Should central funding be used as a lever to achieve government policy aims?

It is inevitable but a measure of any society will be its willingness to consider other uses and value universities as generators of non proscribed ideas and culture advancement.

How well do universities manage their finances, and what improvements, if any, need to be made?

They should look at adopting the technologies as are being applied in industry and even in the Health Sector. There is a considerable amount of unnecessary bureaucracy, complex tiers of governance and in an era driven by research excellence, less than adequate attention to the quality of the primary product: undergraduate fulfilment.

In terms of Research funding, CHMS believes that reform of the RAE over the last decade has driven up quality and that rigorous peer review should be the cornerstone of funding allocations. It is essential that all Medical Students be educated in a questioning and research-rich environment and that Medical Schools work closely with local, regional, national and international agencies to develop their research programmes. The increasing concentration of research funds in a small number of worldclass centres seems inevitable. However, we must maintain the ability for centres outside this small group to have access (on a competitive basis) to substantial funding for high quality research.

STRUCTURE OF THE HE SECTOR

The recent expansion in the numbers of Medical Schools means that there is now a good geographical distribution across the UK and that, coupled with immigration from the EU, the number of doctors envisaged by Wanless for 2020 might be achievable albeit with some difficulty as a result of the EUWTD. A challenge remains in securing the funds to permit higher specialist training for the increased student output. Central Planning by Government would be helpful in this area.

Medical students are not fully registered at the point of graduation—this is creating difficulties because of increased numbers of EU graduates for Foundation Year 1 places in the UK. It would be helpful if the Medical Act were amended so that the F1 year was integral to the Medical degree.

There also need to be much better ways for HE to keep pace with the rate of change in the NHS workforce. There needs to be much closer working between DH and DfES, although it is fully accepted that, with plurality of provision, increasing numbers of future medical graduates might not choose the NHS as their main employer.

Is the current structure of the HE sector appropriate and sustainable for the future?

No; more mergers will be necessary to allow the dual demand of international competitiveness in research yet the ability of universities to contribute to regional economies and workforce requirements.

BOLOGNA

CHMS strongly supports the underlying principles of the Bologna Process: enhancement of higher education across Europe; comparability of degrees; improved mobility within Europe of staff and students; promotion of European co-operation in quality assurance; and so on.

However, CHMS is concerned that universal application of the two-cycle (bachelor and master) model to the undergraduate medical degree—and to similar degrees in dentistry and in veterinary medicine—is not appropriate. The UK has led in the development of modern undergraduate medical curricula: see, for example "Tomorrow's Doctors", from the Education Committee of the GMC, recognised Europe-wide as an important and leading statement of principles in medical education.

Almost all medical degrees now follow a curriculum that is designed to be integrated throughout the five or six years of the medical course, and artificially to divide this in two is anti-educational, and regressive. Medical Schools could conceive of a structure which provided for a Bachelors Degree in bio-clinical sciences after 3 years and a Masters level qualifications two years later on achievement of the Primary Medical Qualification and provisional registration with the GMC. UK Medical Schools are entirely opposed to the implementation of a credit transfer system for medicine and a focus solely on outcomes. UK Medical Schools whilst accepting the need to define required outcomes and competencies wish to make clear that doctors are very much more than a string of competencies and that effective diagnostic and clinical reasoning skills can not simple be acquired through rote learning.

In the UK the degree course is integrated both vertically and horizontally over its entire length and it would be impossible to accept students mid-way through the programme. Insensitive adoption of a 3+2 model could result in loss of the essential integration of clinical experience and science which promotes contextualised learning and has been one of the real advances in British Medical Education in recent years. Even if it were possible for medical degrees generally to be cut in two, this would largely be meaningless in the context of Bologna: the "bachelor" element in the course in one university could only lead to the

"master" course being completed in another university if every aspect of the curricula were the same in the two universities, and there is no general need to encourage medical students to switch university in midcourse.

We are aware that a few European countries have introduced a Bologna-style two cycle structure in medicine. For example, this has been done with care in the relatively few medical schools of the Swiss Confederation, and a student now might reasonably be able to do half of his or her medical school course in, say, Zurich, and the remainder in Basel. But this does not make mobility between countries possible.

Other countries have adopted a cruder model than the Swiss. In Denmark, each medical course has arbitrarily been divided in two, with a bachelor degree being awarded at the end of the third year, irrespective of the curriculum or whether there is a natural break at this point in the course. There is no coordination between Danish universities in curricula, and so there can be no mobility at the end of the bachelor degree, even within Demark.

Very large expenditures of time and money have been made in many countries, trying to fit medicine into the two cycle model, and we believe this has generally been an unjustifiable waste of European resources.

The two cycle model is workable, and indeed desirable, in almost all other subjects. There is no evidence that Ministers considered the special position of medicine, dentistry and veterinary medicine at the original Bologna meeting, or at the preceding meeting in the Sorbonne. We believe that if, at the time, this special position had been pointed out to Ministers, they would have considered the exclusion of these subjects from the general two cycle model.

We therefore urge Ministers at the Bologna Process London meeting in May 2007 to agree that "the two cycle model of bachelor and master degrees does not necessarily apply to first degrees in medicine, dentistry and veterinary medicine. It is admissible for these subjects to be studied in an integrated degree, of five or six years with total credits equal to the normal total for a bachelor degree and a master degree taken in sequence".

This position is supported by the World Federation for Medical Education, the Association of Medical Schools in Europe, and by the Association for Medical Education in Europe. The organisations endorse the purpose of the Bologna Declaration and support that medical education as a part of higher education should be fully involved in the Bologna Process. However, the specificity of medical curricula and the current situation of European medical schools must be considered, and it is the opinion that the two-cycle division in a Bachelor and a Master degree would invalidate endeavours to integrate basic and clinical sciences in the medical curriculum.

There is also a related problem with recognition of four-year integrated masters degrees within the Bologna Process. These do not conform to the Bologna model, although UK universities have argued that they meet the second cycle qualification descriptor in the Framework for Qualifications of the EHEA

December 2006

Memorandum submitted by the Mixed Economy Group of Colleges (MEG)

The Mixed Economy Group of Colleges ("MEG") represents colleges making a significant contribution to the delivery of Higher Education, alongside their Further Education offer. All MEG members are constituted as Further Education Corporations (FECS). The MEG Mission Statement is included at the end of this submission.

1. The role of universities over the Next 5–10 years

The terms of reference for this enquiry refer to "the Higher Education sector", of which MEG member colleges, and other colleges, form a part. We therefore believe that the issues arising are more properly addressed in the context of higher education and higher level skills rather than in terms of one particular element of that sector irrespective of how dominant the institutions comprising that part of the sector might be.

The following points are made in response to those raised in the terms of reference:

What do students want from universities? Much of the debate to date about student experience has taken as its start point the traditional three year full time undergraduate experience. Colleges offering Higher education serve the needs of students whose expectations both of the experience and what higher level qualifications can do for them may be different. Although it is always difficult to generalise about so diverse a sector, students choosing to study HE in FECs will have one or more of the following characteristics. They wish to study close to their home to maintain existing social, faith or family links. Students may thus not look to their HE provider for social or sporting facilities but will regard study in the same way their contemporaries regard employment. For many part time employment will not only be an economic necessity but also a means to build a future career in a related field. The internal progression opportunities offered by colleges encourage many students studying vocational qualifications at Level 3 to stay on to continue their studies in the

same field at a higher level. Colleges have a larger proportion of part time students and mature students when compared with other providers. Lower fees may encourage students who would otherwise be debt averse and see this as a reason not to continue their studies. Finally, most students studying in FECs have a clear vocational direction and see higher level qualifications as an important milestone in building a career. MEG therefore believes that there is room for wider definitions of what constitutes an appropriate student experience. The needs of mature students and older learners generally should not be forgotten. The Leitch Report and its consequences will focus attention on the needs of those adults currently in employment. There are others who either plan a return to the workforce or who seek higher qualifications for career development or promotion. Colleges and HEIs must work with employers to ensure that the challenges presented by this group are met. To be truly effective, Lifelong Learning in Higher Education will need to have the flexibility to offer higher level qualifications to adults at the most appropriate time and place for them.

- What do employers want from graduates? As indicated above, colleges have a higher proportion of part time students than most HEIs. They also have long experience in delivering vocational courses and working at local level with employers. MEG members understand the demand from employers not only for high levels of specific skills but also personal development skills such as team working, presentation, customer/colleague awareness and leadership. We believe these "employability skills" have been under developed in many aspects of HE design and delivery. MEG also believes that colleges have a significant part to play in sustaining the skills employers need to make their enterprises efficient and effective, particularly in higher level technical or specialist roles which may not otherwise attract new graduates.
- What should the Government and society want from Higher Education? Given the nature of their curriculum offer, MEG colleges are committed to the delivery of high quality courses at local and regional level. Although some colleges actively recruit internationally, local students and local employers are key markets for all. The college focus on widening participation and work related skills means that research does not figure prominently in the offer as a prime role. MEG understands and supports the role of universities in this important aspect of Higher Education. We believe that the roles are complimentary and not mutually exclusive. Changes to the 14–19 curriculum will require innovative approaches by all providers of HE to ensure that progression pathways are clear and understood by all of those involved. MEG believes that a well ordered and economically successful society needs a higher proportion of its citizens to have the confidence and involvement which higher level skills encourage. We therefore believe that increased participation in higher education will have positive benefits for social inclusion and individual and national prosperity.

2. University funding

Is the current funding system fit for purpose? MEG understands the need to make changes to the funding of higher education by way of increased fees to students and employers. However, there is a risk that fear of debt may discourage individuals from underrepresented groups or those individuals who are the first in their family to consider Higher Education. MEG believes that resources should continue to be targeted in this direction to ensure that the aims of widening participation and social inclusion are fulfilled. Indeed, pressure on those resources may imply a much greater degree of targeting and prioritisation. With regard to fees, it is unlikely that MEG members will seek to increase fees significantly if the cap is removed. Indeed, most members have set fees at a lower level than the current maximum, accompanied by generous bursary schemes. With regard to employed students, MEG would support initiatives to address skill shortages particularly at local and regional level. The conclusions of the Leitch Report reinforce our belief that the need for skills at Level 4 and 5 remains crucial and could be addressed by government initiatives targeted at this level, perhaps by specific actions to encourage employers to support Foundation Degrees. Both individuals and employers should be encouraged to see the cost of higher level skills as an investment and not a burden.

3. The current structure of the HE sector

— Is the current structure of the HE sector appropriate and sustainable? MEG welcomes the proposals in the Further Education and Training Bill to extend the power to award Foundation Degrees to some colleges. We believe that this reflects both the current situation and the need for a more diverse and responsive sector. If granted, the introduction of these powers could see a welcome and sustainable change in the landscape of the HE sector. In this new scenario, existing universities could continue to develop their existing roles in research, overseas recruitment and Honours degree delivery. Colleges and other HEIs which choose to follow a similar pattern, perhaps with college partners, would concentrate on widening participation amongst those for whom the current structure is unattractive and providing flexible industry related learning in the workplace and off the job to encourage individual development. The sector would thus have two complementary segments, each focussing efforts in the area best suited to its mission and ambitions.

- Is the current structure and funding affecting the growth of HE in FE and part-time study? As part of recognising the equal but different role for HE in FE, colleges expect that funding will be fair and that colleges will receive the same funding for the same work. Issues have been raised in the past about the different approaches to capital funding adopted by the two funding bodies. We understand that those bodies are considering how best to address the issue so as to ensure that HE development can be supported by an appropriate level of capital investment. Although MEG members are directly funded by HEFCE for much of their provision, funding is also sourced via "indirect" arrangements with partner universities. MEG supports proposals outlined in a recent consultation exercise undertaken by HEFCE to ensure that all such arrangements are transparent and recognise the contribution of both parties. Many part time students, particularly those who are first time HE learners, will benefit from more flexible models of delivery and hence funding. For example, patterns of work and career seldom follow traditional academic patterns or expectations. Such students may wish to take study breaks as the demands of work put pressure on time and may wish to combine work based learning with off the job elements. A modular or unitised approach is best suited to adapt to these patterns and should be encouraged by changes in the funding and curriculum delivery model.
- How important are HE in FE and flexible learning to the future of HE? MEG members support the development of the role of HE in FE as a vital element in the HE landscape. This development is seen as complimentary to existing provision and not necessarily competing. MEG believes that the challenge for all of those involved is to widen and increase participation and not to compete for market share. With regard to flexible learning, there are real difficulties in using methodologies designed to support traditional patterns of attendance and learning to support the opportunities offered by new Information and Communication Technologies. MEG believes that a review of the funding approach for this aspect of delivery is overdue.
- The role of the Government. MEG believes government has a clear role in supporting wider participation in Higher Education amongst groups currently underrepresented. Given the financial pressures on the system, it is unlikely that a completely unrestricted market would encourage such participation and therefore government intervention should continue, perhaps with the tighter focus referred to above. With regard to employers and skills, the same principle should apply, with targeted intervention in strategic areas.

The Mixed Economy Group would be pleased to provide further information or clarification of any of the points made above.

Appendix 1

MIXED ECONOMY GROUP

Mission statement

"The Mixed Economy Group of colleges represents those Further Education Colleges which have a strategic role in the provision of programmes of Higher Education.

The Group is committed to:

- widening participation in Higher Education amongst groups currently underrepresented.
- promoting the value of vocational Higher Education in raising the aspirations of individuals and meeting the skills needs of the economy.
- working in partnership to develop and deliver high quality, innovative approaches to Higher Education."

The Mixed Economy Group consists of over twenty colleges of Further Education. Members have at least five hundred Full Time Equivalent students following programmes of Higher Education.

December 2006

Memorandum submitted by William Devine, Chief Executive Officer, the National Forum of Engineering Centres (NFEC)

1. EXECUTIVE SUMMARY

i. Make Bologna "think globally": NFEC reserves its position on the committee's parallel inquiry into the impact upon UK HE of the Bologna Process. However, the Select Committee's recommendations will shape the future of HE in the UK, and the resulting structure must be influenced by the outcome of the parallel inquiry into the implications of the Bologna Process for HE in the UK. Bologna should see UK and European HE in the broader context of the global HE market, with particular regard to China, India and Australasia, and to the EU's "regulated by Directive" system of professional qualifications. NFEC wishes simply to urge consistency in the recording of the "professional status" of any engineering course in "Diploma Supplements", and also as between Certificate and Diploma Supplements.

ii. Holistic approach: experience teaches NFEC members that the purpose, funding and structures of HE in FE are best understood holistically. This is because HE in FE is complex involving many individuals and institutions, among them universities, colleges, employers, Sector Skills Development Agency, Sector Skills Councils, National Skills Academies, Quality Assurance Agency for HE, Ofsted/Ali impact on quality assurance, Learning and Skills Council, Higher Education Funding Council for England.

iii. Vocational routes of entry into HE: in engineering and technology, vocational routes of entry into HE at the very least must be viewed as of equal importance to A Levels. Vocational routes are of potentially greater importance: in many cases, they have achieved that position.

iv. Opening up HE in FE: measures that would cut back duplication and waste of public money include:

- Single-quality assurance by Ofsted, informed by QAA
- Single funding: expand the remit of LSC and allocate funds through direct draw-down by FE colleges
- Pilot schemes for Learner Accounts

v. Equality of pay and conditions: if indeed there ever was, there is no longer any case for discrimination against lecturers working in an FE college in matters of pay and conditions. There should be the same structure irrespective of whether a teacher teaches in an FE college or in a university.

vi. Flexibility: content and delivery of teaching should be allowed to vary, reflecting local needs, especially in matters of employment and inward investment.

vii. Diversity and inclusiveness: under the present HE structure, large numbers of able people from ethnic and other large minority groups are excluded. NFEC strongly argues that HE in FE must focus on developing the potential of all UK citizens.

viii. Personal and economic development: HE can no longer be about "one size fits all". For example, research, internationally-acclaimed or otherwise, should not be valued at the expense of an undergraduate provision that is world-class. HE policy from now on should be based on entwining personal development with the need for graduates that add value to the UK economy. This in turn should be a world-class knowledge economy that satisfies both the needs of society and those of self-development. We should move beyond the sterile debate on "needless (allegedly) research versus curriculum". Research and a productive curriculum can co-exist in a system of HE provision whose guiding principle is that its organisations and institutions may be ornamental but must be fit for purpose and should never be clones.

ix. Empowering the individual: The individual learner needs to be developed through a framework of qualifications that meet the needs of the knowledge economy, now and in the future. This is not a binary one or the other situation but an analogue with an infinity of possible models.

x. Quality street: remove the need for FE to be quality-assured by a "parent" university and transfer QAA responsibilities to Ofsted; direct QAA to help establish the new inspection/review requirements.

xi. Why one standard for FE, none for HE? FE has long developed and improved by working to national quality assurance standards. HE is more autonomous and less well-placed to develop a national HE standard, if in fact we need one. If we do not, then why have a national standard for FE?

xii. Not a filter, but a trap: funding for HE in FE should no longer be filtered through a lead university. It is not cost-effective, and it wastes time and administrative energies. Funds should not be needlessly diverted from the learning-process and curriculum-delivery. LSC's remit should be expanded to cover funding HE in FE direct to colleges.

xiii. Government: less is more: Government should not attempt to shape the structure of the sector until it has learned how to listen, facilitate and then walk away. The productive role for Government is not planning, steering, or allowing the market to operate; it is listening, engaging, debating, deciding—and then leaving the sector to grow.

2. INTRODUCTION: NATIONAL FORUM OF ENGINEERING CENTRES (NFEC)

i. This memorandum is submitted on behalf of NFEC by William Devine, Chief Executive Officer, NFEC. To the best of NFEC's knowledge, no comment is made on matters before a court of law, or matters in respect of which court proceedings are imminent.

ii. NEFC's main interest and expertise in the sustainability of the HE sector being to do with the purpose, funding and structures of engineering and technology HE in FE, the remarks that follow should be taken as pertaining to that vital sector.

iii. NFEC members daily demonstrate that, in engineering and technology, HE in FE is successful, as measured by the diversity of the subjects and the people taught, value added, and learner success. Our members and our students do much to make this so, often with scant political or official encouragement or understanding.

iv. NFEC members welcome the present inquiry by the Parliamentary Select Committee. We see this inquiry as further evidence that HE in FE is at last on the way to being recognised and valued for the value HE in FE adds to the mix of individuals, society and the national economy popularly-known as "UK plc".

v. The National Forum of Engineering Centres (NFEC) is an independent advisory body that represents individuals and organisations across the UK committed to the achievement and exchange of best practice in, and to the consistent delivery of, best-quality work-based post-16 and lifelong learning in engineering and technology.

vi. NEFC's main interest and expertise in the sustainability of the HE sector is to do with the purpose, funding and structures of engineering and technology HE in FE. Otherwise, NFEC is primarily concerned with the 14–19 agenda, the 16+ sector and lifelong learning in engineering and technology.

vii. NFEC is not a bureaucracy, but a self-funding, self-help membership body of FE and HE in FE professionals, and a registered charity. Members span the widest-possible range of education and training and providers, including employers, group training providers, professional training companies, specialist schools, and over 80% of FE colleges or departments, especially those active in HE in FE.

viii. Revenue from membership and commercial consultancy enables NFEC to provide its members with practical, problem-solving assistance without charge or at reduced cost. NFEC operates through its six regional organisations, regular regional seminars and a twice-yearly annual conference.

ix. A particular strength of NFEC is its close links with awarding and other bodies in both the engineering industries and professions. Among these are:

- Key Sector Skills Councils such as SEMTA, the Engineering Employers Federation, and the Engineering Council UK; professional institutions
- Organisations in the academic and vocational education infrastructure, among them QAA and QCA, HEFCE and LSC, SSDA, OFSTED
- Awarding Bodies, several of which operate at HE level
- Organisations responsible for quality improvement, such as Subject Centres and Quality Improvement Agency (QIA) and the Learning and Skills Network (LSN)

3. The Select Committee Agenda: a request

i. HE cannot be considered in isolation from the FE and work-based learning sector, and HE cannot be considered only from the perspective of the HEFCE-funded "English" perspective. The environment in which HE in FE functions is becoming increasing convoluted. On the one hand, there are artificial divides between HE- and LSC-funded provision in England, and these erect obstacles to apprentice frameworks that require elements of HE as their "Technical Certificates".

ii. There is also a parallel infrastructure of the Skills for Business network (SSDA and SSTs), National Skills Academies and "Train to Gain". This infrastructure can be valuable means of collaboration and the expression of employers' needs. But there must be clarity about the work being done by QCA on the Qualifications and Credit Framework, the proposed European Qualifications Framework, and the existing Framework for Higher Educational Qualifications and the European Credit Transfer System in HE.

iii. HE provides essential educational routes towards professional qualifications, while professional and industrial bodies set standards on which engineering educational programmes are based. FE provides valuable opportunities to enable a more diverse range of entrants to meet these standards as they progress towards higher qualifications and competence. It is therefore essential that an inquiry of this stature should take a holistic view of the post-compulsory education sector in the UK, including recent and important reviews not immediately directed at HE, such as Foster on FE and Leitch on Skills.

iv. The "educational geography of the UK has become more complex since devolution, for awards, qualifications, frameworks, funding policies and relationships to employment have proliferated across the United Kingdom. It is not clear whether the present inquiry will confine itself to HE in England, or will also look at Northern Ireland, Scotland and Wales. The review will be of greatest value if it seeks the broadest-possible perspective, across the whole of the UK. Many, perhaps most businesses are UK-wide, and national differences in provision and regulation of FE in HE only vex prospective users and sponsors.

v. NFEC respectfully requests the Select Committee to cover the issues raised in 3.i.-3.iv. in both inquiries.

4. The future sustainability of the higher education sector: purpose, funding and structures. Recommendations for action

i. What do students want from universities?

(a) NFEC believes a more informative reply would ensue if the committee were to subsume this question within another and briefer: what do students want? After all, universities are not the only providers of FE. As it stands, the question fails to ask what stakeholders want from other providers of HE-level work, for example in FE, or by industry and professional bodies. In NFEC's experience, what many students (and many employers) want is flexibility, part-time and local access, and ability to combine learning with work and learning at work. All these features are already being provided to great effect by non-university HE providers.

(b) Access, participation and engagement with society increase when there is innovative and flexible provision of HE in FE, enabling people to progress through different levels and aspects of learning at different stages of life. The artificial divisions between funding, contracting and quality assurance models must not continue to divide rather than integrate. In particular, a way should he found to allow the best "HE in FE" providers to give HE qualifications of their own. One suggestion: a "Foundation Degree" with a less-emotive name.

(c) HE, as delivered by universities, colleges, or private providers, or parts of the supporting HE infrastructure, must raise its game.

ii. University funding

(a) This inquiry is into "higher education" but, again, the sub-heading "University funding" bespeaks a narrow preoccupation with the role of universities to the exclusion of those FE institutions, which deliver HE. Funding for "HE in FE" and for work-based HE may differ from that of HE, but there needs to be "joined-up thinking" in the approaches of LSC and HEFCE towards the funding and support of teaching and of learners, in England as throughout the UK.

(b) It is high time, for example, that consistent logic was applied across the piece to the share of the cost that students are expected to pay (for their own career and personal good. The same goes for the shares required of actual and potential employers (for the direct subsidy to their businesses), and for the share contributed the state for the common good. There should be consistency throughout business sectors and the four countries of the UK.

(c) The men and women who do the work in HE in FE say that funding urgently needs to follow students directly. Suitable awards could be made available to FE Colleges and other providers. Before that can happen, however, two logjams in the current system need to be removed. First, HEFCE funding should no longer be channelled through (and "creamed off" en route by) the universities. Second, there must be an end to the present conflict between HEFCE- and LSC-funding of Higher Apprentice Frameworks.

(d) FE has never accepted that "one size fits all"; the same goes for FE in HE, and it is time that one size was not held to fit all in HE either. True academic scholarship must continue where it is done best; equally, however, academic scholarship must now be so funded so that it no longer relegates the teaching of students to a matter of secondary importance.

(e) Equally, some HE must be funded in ways that both match the "skills agenda" and encourage practical, applied research. Funding should encourage "home-grown" talent to progress through to the highest levels of HE- and post-doctoral work. Funding is urgently needed for industrial/academic exchange placements, particularly in the HE areas of the "skills agenda". The system we now have is clearly unbalanced, in the sense that it is neither rational nor effective for present purposes: it certainly may not be relied upon to carry the weight of a new programme aimed at assuring the sustainability of HE, and in particular of HE in FE.

(f) The system in which practitioners currently work frequently works against them. It is overly-reliant upon non-UK national students, especially at doctorate in engineering (over 50%); it is biased in favour of "pure" rather than "applied-and-practice" research; and the present "unjoined-up" system blocks free movement of learners between industry and academia. The UK urgently needs funding to enable more lecturers to work in industry.

iii. The Structure of the HE Sector

(a) The introduction of higher and repayable fees has yet to make much impact in the HE. To begin with, HE is by no means homogenous. Not all universities will charge the full permitted £3000 per year. Indeed, there are already some deliberate "discounts" in the "HE in FE" sub-sector, as well as offsets recoupable through sponsorship or employer-funded and work-based learning. In engineering, there may be a slow return to the model whereby students begin work on an advanced or higher apprenticeship, while gaining phased access to the highest-appropriate levels of HE through Technical Certificates. This is an attractive model to students and HE providers both financially and in terms of opportunity and motivational interest. But many students will be slow to take this route; most are conditioned to accept indebtedness as indivisible

from normal life. Nonetheless, "phased-access" to HE in FE would do much to drive forward the opportunity and diversity, for more students are likely to begin in the "technician"—or "associate professional"—level work, and then progress to full "professional-level" through "bite-size" steps. In turn, progress on this front would increase the importance of HE in FE, and of flexible, part-time and distance learning, as well as of work-based and professional providers.

(b) All HE need not be designed, controlled and structured by and within universities. Neither should it be. Current funding and support arrangements work as much against as in favour of HE. These structures work in pilot- and demonstrator schemes but have yet to be embedded in the culture of mainstream HE. Unless HE adapts, therefore, the "opportunity and diversity" agenda is bound to fail. The need for "intermediate" or "associate professional" skills is stressed by research findings, international comparisons, and Sector Skills Agreements. Without radical change in funding and support structures, however, those needs will not be met.

(c) The Select Committee's Terms of Reference do not mention the impact of other education/training strategies and structures. Yet these have enormous influence upon professional education, especially in Science, Technology, Engineering and Mathematics. Examples of these strategies and structures include those of the Sector Skills Councils and their work on Sector Qualifications Strategies; National Skills Academies, whose new prospectuses target HE; there is also "Train to Gain". We must also consider the role of HE's lower-level structures, among them Higher Nationals, Foundation Degrees, and Technical Certificates in Apprenticeship Frameworks.

(d) The Select Committee's present inquiry is an opportunity to bring to consideration of the future sustainability of HE a quality of which that both HE and HE in FE have long been starved. This quality used to be called "The Vision Thing". For lack of political vision and the will to back it, confusion reigns in many industries, professions and regions of the UK. Disaster threatens if employers alone set the FE and HE in FE agenda, yet that is what is taking place. This committee holds in its hands a long-overdue opportunity to challenge Government-in the shape of the DfES, DTI and other departmental Ministersto stop praising the idea of "joined-up Government thinking", and for a change to start doing some. Two years on, it is it not high time to implement the recommendations of the Foster Report on the future role of FE Colleges? As with Foster, Ministers have also favoured the more-recent Final Report of the Leitch Review of Skills with words of welcome. As with Foster, is Leitch also to be gathering dust two years from now? Even if both Leitch and Foster were dusted off tomorrow, however, we could still end up with the worst of all worlds. That world is the one in which employers, especially those in SMEs, are even more discouraged from backing HE in FE more than they now by the present plethora of bureaucracies with their tangle of competing, overlapping and hard-to-evaluate initiatives. The Foster and Leitch recommendations should be implemented without further delay; but their recommendations should be implemented as part of a co-ordinated programme, and not separately. To do otherwise is to unleash another cloud of initiatives, complicating still further an education and training system that is already myopic and Byzantine, and wastes vast amounts of public money.

5. Appendix: Recent Research

Engineering UK 2006: A Statistical Guide to Labour Supply and Demand in Science, Engineering and Technology. Engineering Training Board Research Report, December 2006.

NFEC comment:

i. It is widely agreed that the UK is competing in a highly-competitive global market place for STEM, Science Technology Enguineering and Mathematics, skills in products and services.

ii. It is further agreed that this market demands of players high levels of technical innovation. Nobody disputes that crucial to the UK's success is the ability to produce engineers and scientists of sufficient quality and in sufficient quantity to supply the needs of the nation's industry.

iii. It is to the production of such engineers in such numbers that the HE system, including FE in HE, must now commit. One essential is a "joined-up" HE strategy that must range from undergraduate degree to doctorate, and be of benefit to "UK plc" as an economy as well as a society. The two are indivisible.

iv. Judged against developments elsewhere in that competitive world, HE—and therefore the UK—is living on borrowed time. Over the past decade or so, the UK has increased the number of STEM degrees by slightly over a half (53%).

Impressive? It depends where you are standing. During that same decade, China more than doubled STEM degrees (124%): translated into raw figures, China now produces 350,000 STEM graduates a year to the UK's 75,000. But even that evidence is rapidly becoming historical.

The latest figures are from 2002. Anecdotal evidence suggests that China's rate of growth in STEM is not slowing. The same seems to be true of India.

v. The UK compares favourably with other countries in the proportion of STEM degrees awarded, America and Japan, for example. However, the available figures suggest that STEM students that would once come to the UK are now beginning to look elsewhere. This alarming development should inform discussions on the relative importance of home and the overseas students to the future of HE in the UK.

vi. The statistics that ought to worry HE most are those for post-graduate uptake in engineering, especially at doctorate level. The number of non-UK students on doctoral programmes is set as high as 50% in engineering and technology. Yet how many of these students leave the UK immediately after their studies? What is the value of these departing students and their degrees to the UK economy, apart from beefing university treasuries and the HE head-count?

vii. We should not carried away by heady debates on global HE markets. There is enough to do here and now without such distractions. Reliance upon overseas students, always a quick fix to avoid the hard work of creating a healthier home market, is yesterday's default position. In engineering and technology, for example, the proportion of non-EU nationals studying in the UK fell from just under 13% to 5% between 2001 and 2002.

viii. The UK's salvation in engineering and technology lies not overseas, but in the UK itself, for in many respects UK plc is shockingly backward, the production of bureaucrats excepted. We should concentrate upon developing UK plc.

ix. This does not mean cutting back on overseas students, many of whom in any case no longer automatically aspire to a UK qualification. But developing UK plc does mean that we must redress the shameful position whereby one in two doctoral studentships in the UK is taken up by non-UK residents who, their doctorates achieved, add little or no value to the UK economy. To say thus is not xenophobia. Let as many more non-UK nationals pursue doctorates here as wish to, at whatever price UK HE establishments can exact. But let us also, in seeking to increase the total number of doctoral students in technology and engineering, tilt the proportion so that significantly more UK then non-UK nationals are enrolled.

x. The present HE structure fails UK students and the UK itself. HE fails students, especially females and ethnic minorities, because HE fails to persuade enough of them to choose engineering and technology. HE then fails to persuade too few engineering and technology students to persevere into the higher reaches of this indispensable learning. In this respect, if no other, the structure of HE requires review. It neither gives students, of UK origin or otherwise, what they or the UK want.

xi. HE in the UK has got to open up, and learn from elsewhere, in practical terms from FE. HE's future lies in resolving to develop and being made capable of developing the knowledge and skills of UK permanent residents. It should do so irrespective of race, wealth and social origin. HE should also balance personal growth with economic prosperity.

xii. That future is already here, in undergraduate provision, not in HE, but in HE in FE. The future sustainability of the HE sector, its purpose, funding and structures, will not be clearly envisioned without reference to HE in FE, and certainly will not be achieved without much closer co-operation between HE and FE.

December 2006

Memorandum submitted by the National Institute of Adult Continuing Education (NIACE)

SUMMARY

The future of higher education (HE) will to a large measure depend on an equitable, accessible and flexible culture of lifelong learning. For it to be sustainable, fit for purpose and meet social, economic and individual needs HE must address these priorities.

Adult

We welcome Leitch's proposal to modify the HE target. The current policy focus on young participation obscures the vital needs of adults in higher education. Demographic trends mean new entrants to the labour market can only provide one third of future high-skill jobs; career patterns demand regular upskilling and retraining; family, communities, health and personal fulfilment all benefit from lifelong higher education.

PART TIME

Over 40% of UK higher education students are part time, but if study is less than 50% of full time (even though the average level of study is about 35% of full time) they are ineligible for financial support, and more likely to suffer from age discrimination. Only a minority are funded by employers.

A SINGLE POST-COMPULSORY SECTOR?

HE participation targets will only be achieved by better F/HE articulation. A new single post-compulsory sector could be the most effective step to achieve the economic and social goals of higher education for the 21st century.

HE IN FE

FE colleges deliver 11% of HE. This is critical to widening participation, employer engagement and workbased routes. The familiar local college is a powerful agent for social inclusion for non-traditional learners. Development of HE in FE is vital, including Colleges awarding Foundation Degrees.

COMMUNITY

Knowledge transfer and business reach-out are an essential aspect of the HE mission, but tend to ignore engagement of the local community as partners in development and renewal through learning and research. This builds capacity for active citizenship, regeneration and community development.

EQUITY

Higher Education will continue to develop as a market driven sector. This has advantages for individuals and for society as a whole. Policy interventions will be necessary to ensure equity for learners who cannot afford market prices, socially desirable provision, and disciplines necessary to the national interest.

INTRODUCTION

The National Institute of Adult Continuing Education (NIACE) is an independent non-governmental organisation and charity. Its corporate and individual members come from a range of places where adults learn: in further education colleges and local community settings; in universities, workplaces and prisons as well as in their homes through the media and information technology. NIACE's work is supported by a wide range of bodies including the DfES (with which it has a formal voluntary sector compact) and other departments of state, by the Local Government Association and by the Learning and Skills Council. The ends to which NIACE activities are directed can be summarised as being to secure more, different and better opportunities for adult learners, especially those who benefited least from their initial education.

NIACE welcomes the opportunity to present views to the Select Committee on the future sustainability of the higher education sector. We share the Select Committee's interest in the future development of higher education.

Our submission reflects NIACE's particular concern and expertise in adults in a lifelong learning context and in those learners who continue to be hard to reach and who remain under represented/and/or excluded from learning. Our presiding concern is the learner and therefore we argue for a genuinely learner-centred higher education, which is not only equitable for a lifelong and diverse constituency of learners but draws on the strengths such diversity can bring to the sector. We also base our submission on the fact that a large proportion of higher education students are over the age of 21, and over 40% are part time.

THE PRINCIPLES OF HIGHER EDUCATION

NIACE believes that the aims of higher education as set out by Dearing [*Higher Education in the Learning Society*, (1997) 1.4] still apply as guiding principles. According to Dearing higher education must:

- Encourage and enable all students—whether they demonstrate the highest intellectual potential or whether they have struggled to reach the threshold of higher education—to achieve beyond their expectations;
- Safeguard the rigour of its awards, ensuring that UK qualifications meet the needs of UK students and have standing throughout the world;
- Be at the leading edge of world practice in effective teaching and learning; undertake research that
 matches the best in the world and make its benefits available to the nation;
- Ensure that its support for regional and local communities is at least comparable to that provided by higher education in competitor nations;
- Sustain a culture which demands disciplined thinking, encourages curiosity, challenges existing ideas and generates new ones;
- Be part of the conscience of a democratic society, founded on respect for the rights of the individual and the responsibilities of the individual to society as a whole; and
- Be explicit and clear about how it goes about its business, be accountable to students and to society and seek continuously to improve it own performance;

NIACE believes that these guiding principles hold good for the twenty-first century, though in a context of an increasing pace of change in the number and diversity of higher education providers, the range of programmes and activities, and the move to a mass system of over 40% participation in 2006.

These changes have been accompanied by large changes in the structure and funding of the HE sector, and by the renewed vigour of the lifelong learning culture. Funding changes include increasing "third stream" income from commercial spin-out and knowledge transfer, and from 2006 the introduction of variable tuition fees; both of these developments reduce the dependence of the sector on the public purse, and thus the leverage of the State on the sector.

Two related but somewhat conflicting trends are emerging in higher education. One is that as global influences increase, and as State funding proportionately reduces, the sector becomes progressively market driven. The other trend is towards government intervention to protect and support certain aspects of the sector:

- Widening participation and social inclusion to widen and "deepen" participation to include constituencies of learners previously under represented in HE;
- Certain discipline areas which for national reasons are deemed at risk and essential (for example physics, mathematics) subjects; and
- Certain HE activities which are deemed for the public good (for example community provision).

NIACE accepts that the market will play an increasing part in HE in the future; this is visible in worldwide trends, and in the increasing vocational character of HE. Within this future vision, however, we argue that policy interventions need to be maintained and strengthened in the interests of both producing an appropriately skilled workforce which reflects projections of both individual and economic need and the changing demographic profile, and of equity, social cohesion, equality of opportunity, citizenship, and lifelong learning for all.

Adults in Higher Education

A large proportion of learners in higher education are over the age of 21:

	Firstdegree			Other undergraduates		
	Total	Full-time	Part-time	Total	Full-time	Part-time
	(%)	(%)	(%)	(%)	(%)	(%)
18 and under	40.7	48.1	1.5	6.1	21.6	2.6
19 years	18.8	22.0	1.8	3.8	14.4	1.4
20 years	6.6	7.4	2.6	2.8	8.1	1.6
21—24	11.8	11.0	16.2	11.7	17.7	10.4
25—29	6.3	4.1	17.5	13.1	10.7	13.6
30 and over	15.8	7.4	60.4	62.5	27.5	70.3

Age distribution of first-year UK-domiciled undergraduates, by mode of study, United Kingdom, 2003-04

(McGivney V, Adult learning at a glance-the context, facts and figures, NIACE, 2006).

The commitment to 50% participation by the 18–30 age cohort by 2010, and the supporting policy initiatives such as Aimhigher, though excellent in themselves, have somewhat obscured the adult constituency—especially those over 30. A healthy sustainable higher education within a lifelong learning culture will make an equitable offer to learners of all ages, and needs to respect certain characteristics of adults, including older adults. The consequence will be to the benefit of the individual, the economy and to society as a whole. For these reasons we welcome Leitch's recommended re-shaping of the HE PSA target.

Adult entry to higher education will be for various reasons offer:

— A transformative experience:

first experience of HE as returners to education after a perhaps long break. A majority of such learners has traditionally been women with relatively low educational qualifications who now for various reasons (for example grown-up children) are ready to further their education and enter the workforce;

- Retraining: occasioned by a major life change, for example redundancy, change of personal career direction;
- Career development: mid-career adults now seeking upskilling and continuing professional development;

— Personal development:

for example newly-retired people seeking higher education again for a range of motives, from a personal passion for a subject to the desire to work for the community or a national body as a volunteer; and

An adult student experience:
 higher education too often defaults (albeit unintentionally) to an assumption of a young, A level entrant studying full time for a degree. This is disadvantageous to the interests of both the State and the individual.

For the national interest:

Higher education needs to be not only fully accessible, but positively to attract adults into degree-level study. The evidence from demographic trends is overwhelming—not only the significant and progressive decrease in the 18-year-old cohort from 2011, but the fact that young entrants to the national workforce can only provide one third of the net increase in jobs by 2010 (Alan Tuckett, *Demography and Older Learners,* NIACE 2005). To this should be added the wider benefits to society of an educated adult population in terms of:

- Family—young people are more likely to aspire to higher education if their parents are graduates;
- Community—graduates are more likely to work or volunteer;
- Health—learning reduces demands on health services; and
- Personal fulfilment—study helps to build happier lives.

FOR ADULT LEARNERS:

Higher education needs to be:

- Local —adult students are likely to be home-based for personal reasons. There needs to be a fair curriculum offer accessible to all within reasonable travel distances (remote delivery by e-learning will help but not be sufficient);
- Flexible—learning patterns will be very varied and often governed by other factors such as work (including shift work), and periodic re-entry to HE throughout a career;
- Supported—by adult-friendly services (such as child care, out of hours resources, information advice and guidance, and specific support for learners who have perhaps been out of the education system for a number of years;
- Financially equitable—with no disadvantage in fees and financial support owing to age or mode of study (eg part time);
- Capable of recognising the direct value of previous qualifications and experience through robust and transferable credit schemes including Accreditation of Prior Experiential Learning (APEL);
- Inclusive—able to help potential entrants and on-course students to minimise the barriers to learning and successful completion (such as cost, lack of self esteem, support, inflexibility, lack of disability support); and
- Capable of valuing the professional and personal life experience of adult students as contributions to the collective student experience and to the academic culture, as well as to their communities, families and their own personal enrichment and development. We stress this as most important—we are not advocating a "deficit model" in which adults are "allowed for" but a true lifelong learning culture in higher education.

NIACE recommends that the higher education system should give equal and equitable priority to learners at all stages in their lifecourse.

PART TIME HIGHER EDUCATION.

Over 40% of UK higher education students are part time; indeed it could be argued that all students are now part time, as most full time students work for substantial parts of the time to support their studies.

"Part time" as a category embraces a very much wider range of learning and learners than "full time". Part time can range:

- From a few credits per year to almost full time; as the recent UUK report says:
 - "Students can study at their own pace, which means that some study at very low intensity over a long period of time whilst others study at nearly full-time levels." (*Part-time students in higher education—supporting higher-level skills and lifelong learning, UUK, 2006);*
- From very low-cost (for example programmes for community or social inclusion) to high cost professional development; and
- From on campus to off campus and remote delivery, including distance and electronic learning.

Furthermore, part time study is a vital plank in widening participation and social inclusion, since for many adults in non-traditional social groups this is the only option. Such students are likely to have serious need for effective support.

The extreme variety of part time study makes it very difficult to generalise or to recommend a regulatory framework which is fair to all. Nevertheless the system is currently disadvantageous to many part time students for the following reasons:

— Intensity of study

Although financial support has improved substantially, part time learners are ineligible for support if study is below 50%, even though the average level of study is about 35%;

- Part-time learners are not eligible for loans, even though the financial burden of fees is now substantial and can be prohibitive;
- Age discrimination proportionately hits part time learners as many more are likely to be in the over-54 age category; and
- Some part time students are fully or part funded by employers; this is however a minority (at most 35%).

NIACE believes that in the medium to long term the distinction between part and full time modes of study should be abandoned in favour of a structure which fairly reflects the reality of study, and allows for the already wide range of intensity of study within these distinctions. This should not, however, take the form of "bringing part time into line with full time" but a new categorisation purpose-built for all. Again as the UUK report says:

"Part-time undergraduate study cannot be seen as an adjunct to full-time study or as an alternative. For many part-time students the alternative would not be full-time study but not studying at all."

NIACE RECOMMENDS

1. That in the short term (up to five years) the higher education system should be "proofed" against discrimination or disadvantage to part time learners in all areas including fees, funding, and financial and other support;

2. In the medium to long term "full time" and "part time" modes be replaced by a new structure (perhaps based on credit) capable of reflecting a wide range of intensity of study.

A NEW "TERTIARY" SINGLE POST COMPULSORY SECTOR?

Higher education in England is bedevilled by two unhelpful "divides":

- "Academic"/"vocational"
- "Further"/"higher"

If participation in higher education is to be genuinely widened and more socially inclusive then these divides have to be overcome. Only 40% progress to higher education from vocational routes as opposed to 90% by the A level "academic" pathway.

Howard Newby, in the 2003 Colin Bell Memorial Lecture ("Doing Widening Participation: Social inequality and access to higher education.") spoke of the need for "vocational" and "academic" to be seen not as a divide but a continuum; in Scotland and in many other countries a single post-school "tertiary" system has been adopted for seamless post-16 provision especially F/HE.

Many existing features of the HE system already veer towards such a system. The Government higher education participation targets will only be achieved by better F/HE articulation. The additional funded numbers to support the targets are mostly for Foundation degrees, located in FE colleges, yet funded by HEFCE.

A new "tertiary" system could enable greatly improved progression for vocational and non-traditional learners of all ages, and especially enhance the success of:

- Foundation Degrees
- Work based learning
- Employer engagement

The new Lifelong Learning Networks (HEFCE/LSC) initiative would especially benefit from a tertiary system, having comprehensive and "seamless" post-16 vocational progression at its heart.

NIACE recommends that serious consideration be given to a wholly new concept of a single postcompulsory sector, with appropriate statutory and funding measures, as the single most effective step to achieve the economic and social goals of higher education for the 21st century.

HIGHER EDUCATION IN FURTHER EDUCATION

11% of higher education is delivered in further education colleges (FECs). 50% of Foundation Degree (FD) students are studying at FECs; 80% of FDs are delivered by FECs (Foundation Degree Forward, 2006). FDs engage employers and employees and offer a genuine work-based route for non-traditional learners, while many other HE programmes also operate in FE colleges.

For vocational and non-traditional learners the local FE college provides a familiar and non-intimidating environment, and thus a powerful agent for achieving widening participation and social inclusion. As indicated in the FE White Paper (*Raising Skills, Improving Life Chances*, 2006):

"FE is particularly effective in providing HE for learners from more disadvantaged groups, backgrounds and communities. Many FE colleges offer flexible, local opportunities which make HE accessible to people who might otherwise face significant barriers to participation." (2.42)

The HE in FE learner profile is both distinct and diverse, with a high proportion of part time and older learners:

"More than 50% of learners are part-time, compared with around 35% of higher education students as a whole. The student group tends to be older."

(Bill Rammell, speech to AOC/HEFCE conference on HE delivery in FE Colleges, 2006).

For all these reasons NIACE strongly supports the development of HE in FE, welcomes the proposal in the Queen's Speech for FE Colleges to have powers to award their own degrees and recommends that funding and structural models should enable growth and that this important aspect of higher education be fully recognised within, for example, the evolving context of Lifelong Learning networks.

COMMUNITY

Community engagement by higher education institutions has suffered in recent years from a low priority. Funding initiatives aimed at "community" have tended to interpret "community" as "business community" and focus on knowledge transfer and business reach-out in the pursuit of "third stream" income, or to fund, for example, student volunteering schemes (for example the Active Community Fund). There is also a strong tradition of interpreting "community contribution" as public lectures, concerts, and the economic impact of large numbers of students on the retail and housing local economy.

Important though these aspects are, they ignore an essential aspect of genuine university engagement in the local community as active partner in development, renewal, community learning and community-based research.

Excellent examples of this engagement are to be found elsewhere, for example in the United States. The benefits for community and consequently for higher education are substantial.

There is therefore an urgent need for establishing partnerships between HEIs (including research universities) and their local and regional communities. This will also involve working with regional organisations such as Regional Development Agencies and include the provision of a range of learning activities to enable informal, non-formal and formal learning and capacity-building programmes for active citizenship and effective involvement in regeneration and community development. It is important for lifelong learning to be seen as central to the public engagement strategies of higher education in the UK.

NIACE recommends that there should be specific policy interventions to enhance community engagement by all higher education providers.

AN EQUITABLE HIGHER EDUCATION: POLICY INTERVENTION AND FUNDING

NIACE acknowledges that higher education will continue to move progressively to a market driven sector. There are advantages as well as inevitability in this process, for individuals and for society as a whole. But within this market future, policy interventions will be necessary to ensure equity for a range of cohorts of learners and disciplines:

- Individuals and social groups who cannot afford market prices for higher education;
- Socially desirable provision such as community engagement; and
- Subject disciplines (as in the current case of Physics) essential for the public, economic or other interest.

Memorandum submitted by the National Postgraduate Committee (NPC)

EXECUTIVE SUMMARY

Higher Education offers a valuable opportunity to develop individuals, society and the economy. Postgraduates are best placed to ensure Higher Education provides these opportunities and it is crucial that the funding arrangements and future of institutions is secure to retain and develop the UK's excellence in research and development and that the holistic support for postgraduates facilitates such excellence.

THE NATIONAL POSTGRADUATE COMMITTEE OF THE UNITED KINGDOM

The National Postgraduate Committee (NPC) represents over 500,000 postgraduate students. It is the principal representative body of postgraduate students in the UK. As a registered charity (no. SC033368), our aim is to promote, in the public interest, postgraduate education in the UK. We share best practice through publications and meetings, respond to consultations, address conferences and take on casework. In the furtherance of our aims, we co-operate with other like-minded democratic student bodies, professional associations and trades unions.

The role of universities over the next 5-10 years

The National Postgraduate Committee has welcomed the Government's recognition of research as a part of higher education to support the knowledge based economy: (http://www.npc.org.uk/media/postgraduatepolicyresponses/consultations2003/ npc0304bdepartmentforeducationandskillsresponsetothehighereducationstrategywhitepaper).

Furthermore the NPC recognise the world class reputation of our Higher Education and welcome its benefits to civil society, culture, personal fulfillment and economic development and wealth creation. The Government must continue to develop Higher Education to enable these benefits but ensure that significant spending comes from the public sector in recognition of the linked role all stages of education play in the development of society and the economy.

Postgraduate students make a significant contribution to the research undertaken in UK universities and the UK. The skills and knowledge developed by postgraduate students benefits the economy and society when researchers use their skills in future employment. The success of the Roberts Skills Agenda highlights the value of public investment in research which enhances the strategic capacity of those groups employing postgraduate researchers and their wider benefit to society. Furthermore as the ageing academic labour force retires, postgraduate researchers are able to contribute fully to academic regeneration. Ensuring benefit to society and the economy can be further achieved through Higher Education thematic priorities such as SET to ensure postgraduate programmes are fully supported and recognized as part of key education funding priorities. Using thematic priorities and assessing research proposals on social and cultural benefit as well as economic and environmental benefit would emphasise that research is valued and considered to be integral to a national research strategy.

It is evident that concentration of research towards higher rated research units, and possibly research intensive institutions will enable not only the ability to recruit and retain researchers as well as research students but also to overcome the backlog of infrastructure and lack of resources that have accumulated over the years. However, the concentration of research funding does concern us in that better research funding of such research units will happen at the expense of losing research units with significant potential in other areas.

NPC strongly feel that high research quality does not have a bearing upon the quality of the research environment in which research students can be appropriately trained and supported. It could be the case that some research students will not find large, highly rated research units supportive and suitably geared in a way that will successfully take them as a student through a research programme. Smaller research units, that may otherwise not have as high a rating in their research quality, may offer a more suitable environment to allow their students to achieve research potential. Removal of such units may significantly reduce the options open to prospective postgraduates, which could bear a significant limit on widening participation in postgraduate education. We are concerned at present as to how the current plans to widen access at undergraduate level will extend to postgraduate qualifications for those who wish to continue. Retaining the choice and variety of institutions in order to make this possible is vital, under current proposals large research units will not be suitably geared to meet these interests.

KNOWLEDGE TRANSFER

In our experience it is largely the case that taught master level degrees and of course research degrees will require access to academic research as a support to the teaching and the research that students will carry out. With the reduction and possibly removal of research in some institutions we are concerned that this will severely affect the availability of higher degrees and in turn the choice that prospective postgraduates will have. We envisage that there will be greater availability of higher degrees in large research intensive institutions rather than knowledge transfer institutions.

As mentioned in the previous section, we strongly feel there that research quality does not bear any relation to the quality of teaching, support and development of individual students. Such factors are vital in developing the interests of graduates who have progressed significantly during their undergraduate degree. It may be that an undergraduate who has achieved well in a knowledge transfer institution wishes to continue to research and undertake a postgraduate qualification although the institution may not be able to provide this. Therefore this could provide an uncertain and uncomfortable future when moving to a larger research intensive institution with a significantly different environment. This could also have serious implications in terms of extending the widening participation agenda to encourage able students to progress towards higher degrees.

In conclusion, we acknowledge the need to enhance education at foundation level especially although we are concerned about the implications this could have on the future of postgraduate education, both taught and research. We therefore urge the Government to ensure this will not be affected to enable all graduates to achieve as highly as possible

UNIVERSITY-INDUSTRY RESEARCH COLLABORATION

The National Postgraduate Committee welcomes opportunities for research collaboration between universities and industry. NPC believes that collaborative research between the private and higher education sectors can be mutually beneficial, but also recognises that unless institutional policy is developed to protect students from highly directed projects, this collaboration can be problematic.

NPC believes that institutions should ensure policy is established prior to the commencement of research that agrees issues such as intellectual property, timing and confidentiality of publications, responsibilities of supervisor/s, funding, academic freedom, and, reporting requirements to the private sector collaborator. NPC believes that regardless of whether postgraduate students undertake their research on a university campus, in a public research facility or in an industrial location, all students should have access to student support services and to their postgraduate student association.

UNIVERSITY FUNDING

Teaching and Research

The National Postgraduate Committee recognizes the dual importance and crucial link between Teaching and Research. Teaching should be recognized as having equal status, prestige and value as research.

The experience of all students, both research and taught is affected by the quality of university research, the quality of teaching informed by that research and the quality of the university research infrastructure. Research funding should continue through the research assessment exercise by using a single system that values peer review while using limited metrics within discipline specific modifications. A single overarching system would prevent unfair funding distribution and allow new cross-disciplinary research. Research funding however should not be used to prevent cutting edge research in less favourably rated departments from taking place. Research funding should not be directed solely at institutions that are research intensive with funding ringfenced to other institutions for developing or creating interdisciplinary or inter-institutional research. Research funding, particularly for less research intensive institutions, should not follow a one-size-fits-all approach and recognize the mission of the institution and its role in the research field while also protect areas where market failure is greatest.

The National Postgraduate Committee recognizes academic freedom and "blue skies thinking" which should be protected and developed. Metrics based models are biased against new researchers as departments seek to build experienced researchers for metric output. We further feel that research funding focus should encompass training and development of researchers to ensure quality research is taking place and provide opportunities for new researchers and new research. Moves to increase equal opportunities must be maintained and any move by metrics to increase the attractiveness of a "transfer market" must be prevented.

The National Postgraduate Committee believes that benchmarking is positive tool and should be reflected in research funding but that benchmarking should be a separate function to the allocation of all research funding. Benchmarking takes place in the public sector to assess and evaluate performance but is rarely used as a sole determinant of funding. The opportunity for benchmarking is for capacity building to encourage funding as a tool alongside other criteria.

Should the cap be raised and what would the consequences be?

The National Postgraduate Committee is opposed to the cap on fees being raised as it would challenge access and create a marketised Higher Education system where access is based on the ability to pay and not on individuals merit. NPC believes that education as a funded public service results in benefits for society, the economy, employers and the learner. We are opposed to increased costs being passed to the learner and the opportunity for self and societal development to be prevented by fear of cost.

The National Postgraduate believe students should not pay tuition fees as they prevent access to higher education and prevent progress onto postgraduate courses. We are opposed to any increase in undergraduate tuition fees as this will create larger debts for undergraduates and pressure the market to raise postgraduate and particularly Masters fees.

Debt, particularly for those students seeking to develop themselves and wider society is unfair and will prevent those who might benefit most from access. The demographics of postgraduate programmes needs encouragement to attract women, ethnic minorities and other vulnerable groups; increased undergraduate debt will deter non-traditional groups from accessing postgraduate opportunities.

NPC believes the consequences for raising the cap would be an increased burden on students through increasing levels of debt and the limiting of access and progression to postgraduate study.

Increasing Debt and its impact on postgraduate programmes

Current levels of graduate debt are disputed but banks and other financial service providers usually consider the graduate debt figure above official government figures. An example of the increasing cost is the Barclays Bank Graduate Debt Survey which showed in 1994, the average graduate debt was £2,212. By 2005, this had increased to £13,501.¹¹⁸ Former Education Secretary Charles Clarke estimated that students who attend universities that charge the full top-up fees will graduate with debts of £21,000.¹¹⁹ Current Hobsons research on 5662 current undergraduates in years 1–3 considering postgraduate study showed that 28% students had £10,001 to £15,000 of current debt.

These debts are particularly offputting for students who must take longer courses such as medical students with the BMA stating in research before top-up fees were introduced that a fifth of medical students owe more than £30,000 in their final year.¹²⁰ For engineering courses the EPSRC noted that the potential impact of debt on entry into postgraduate programmes would be high due to the impact of accumulating "undergraduate debt in engineering which it estimates to be 20% higher than the average and substantially higher than the arts" presumably reflecting the length of programmes (Ackers, 2006, p.31).

Although too early to see the impact of debt on postgraduate applications it is clear from interviews that carrying forward debt might deter students from pursuing further study (Ackers, 2006, p.31).

"Yes we do find it difficult to obtain applications from high quality UK PhD students and the reason for that's fairly obvious—if you're a bright young graduate with a first class degree and a big overdraft the last thing you want to do is be a student for 3 more years in a city with a high cost of living" [HoS, EPSRC cited in Ackers, 2006, p.31]

Debt affects the demographic

The impact of increased debt will further challenge the demographics of those able to participate in postgraduate education as debt does not affect all members of society equally. DfES' research shows that those students in the lowest groups predicted average debts of £9,842 in 2004–05, compared to £7,733 among the middle groups and £6,905 for those from the highest.¹²¹ In National Postgraduate Committee commissioned research from 2006 (http://www.npc.org.uk/postgraduatefactsandissues/postgraduatepublications/marketfailureofpostgraduateeducationsurveyreport2006.pdf) respondents from social class D were substantially more likely to report that financial concerns had a very strong influence on their choice of study mode. Furthermore the majority of those not intending to study (58%) reasoned that they were unable to afford it or it was too expensive. Almost three quarters said planned tuition fee and 62% debt from previous study was reason not to consider postgraduate study.

The commitment to widening participation and promoting equality of opportunity at undergraduate may present problems of recruitment to postgraduate programmes as high quality students are forced to exit after their undergraduate programmes to provide for themselves financially (Ackers, 2006, p.39). Students from lower socio-economic groups are also more likely to seek financial income from part-time work and this will affect those who consider postgraduate study.

While undergraduate fees are deferred, postgraduate fees are not and these together with student living and other costs must be met as they arise and the burden of meeting basic living costs will act as a deterrent for students from lower socio-economic backgrounds.

Students from lower socio-economic backgrounds will work longer hours than students who enjoy greater levels of family financial support. The poorest students are far more likely to have to work during term-time. In a UNITE/Mori survey, 51% of C2DE students compared to 35% of AB students reported they worked

¹²¹DfES, Student Income and Expenditure Survey 2004–05, RR725

¹¹⁸Barclays Graduate Debt Survey 2005.

¹¹⁹Breakfast with Frost, 20th Jan 2003.

¹²⁰BMA Survey of Medical Students' Finances, 2005

during term-time. They also worked longer, on average 14.3 hours per week, compared to just 12.2 hours for AB students, and for less money £5.94 per hour on average for C2DE students compared to £7.21 per hour for AB students.

Research in the UK shows that students from groups at a disadvantage tend to enrol in lower level, shorter or more vocational courses, and closer to home. (Callender, 2003 and 2002; M Farr "Home or Away"? 2001 quoted in Callender, 2003)

In Australia, which has a system similar to that in England, the introduction of fees and income-contingent loans has contributed to an increase in the proportion of young people living in the parental home after graduation. The median age of first homebuyers has also risen.¹²²

Research on student debt has also meant that Australians are delaying having their first child, and choosing to have fewer children. The median age of Australian mothers at the birth of their first child rose from 24 in 1975 to 29 in 2000. Furthermore the indebtedness of graduates will have an impact on their ability to make the next steps in their lives, such as buying property and has the potential to widen the gap between reich and poor.

Debt is a deterrent

Research conducted by UUK and the National Union of Students shows that reluctance to take on debt, particularly for those from poorer backgrounds is a factor affecting access to higher education and which will impact on the ability to continue onto postgraduate education. Universities UK (UUK) Student Debt Project shows that the groups the Government is trying to attract into HE are likely to be the most debt averse and the most concerned about the costs of HE (ie low-income groups, lone parents, students from certain minority ethnic groups),¹²³ finding which were repeated in the NUS' Funding the Future research.¹²⁴

Such limited access to Higher Education by groups the Government is trying to attract will limit the pool of prospective postgraduate students and will challenge the demographic of postgraduate students and the benefit research can bring to society and the economy.

Due to part time students, particularly at PhD level being less likely to complete their degrees than full time candidates and the large numbers of part-time students. There is a need for equity to support these students. Part time study is an option for a number of students due to caring responsibilities, disability, dependents employment and, with a majority of students being aged 30 or over, it is more likely that postgraduate students will need to accommodate these competing commitments than undergraduate students.

Internationalisation and the demographics of the Student Body

The current demographics of postgraduate students reflects great diversity that would be threatened by increased levels of personal debt and unaffordability of postgraduate education. Most entrants to all types of postgraduate course are older than 22 with more older than 30 than below the age of 25 (Sastry, 2004). Part time students tend to be older, most being over 30, with almost a quarter of UK doctorate registered on a part-time basis. However the current postgraduate demographic masks the decline in domicile students which combined with the effect of increasing debt and increasing international students threatens the future UK knowledge based economy.

Research student numbers have shown a slight fall with UK domiciled entrants to research degree programmes having fallen by 17% but being partially offset by an increase in non-EU overseas students, whose numbers increased from a low base of 28% between 1995–96 to 39% of doctorates awarded in 2002–03. Although the actual numbers of doctoral awards are increasing, the proportions that are being awarded to UK domiciled students are similar to a decade ago. In 1994–95, 58% of full-time doctorates and 68% of part-time doctorates were awarded to UK domiciled students, in 2002–03 59% full-time and 72% part-time doctorates were obtained by UK domiciled students (HESA Student Records, 2002–03).

The declining recruitment pool of "home grown" researchers is mitigated by this ability to recruit researchers from abroad. In many fields international researchers now constitute the majority of contract research staff and doctoral candidates (Sastry, 2004, p.6).

International students make a valuable contribution to the internationalisation of the postgraduate community with some 36% of postgraduate research students in the UK being international students (Universities UK, 2005). However increasing overseas recruitment is seen as a means of increasing income generation for institutions through fees and explains low levels of recruitment of postgraduates from the EU and accession countries.

Overseas students are also highly concentrated in full time taught masters courses—a segment which they increasingly dominate. Almost half (48%) of full-time taught masters students are from countries outside the EU, rising to 63% if full-time taught masters students from other EU countries are included. This reflects the

¹²²The social and economic impact of student debt, Council of Australian Postgraduate Associations, 2003.

¹²³Claire Callender et al., 2003, Student Debt Project UUK. In this research, 84% of sixth formers and college students believed student debt deterred entry into HE and 88% of those questioned from the lower income groups believed that more people would go to university if grants were available.

¹²⁴Watson and Church, 2003, Funding their Future: the attitudes of year 10 pupils to the HE, NUS.

extent to which overseas postgraduates are concentrated in full-time taught masters study: 68% of all overseas postgraduates are studying full time for taught masters qualifications (the figure for UK students is 18%).

To ensure that postgraduate programmes are attractive there needs to be selective enhancement with an awareness that pay as a dimension shapes the relative attractiveness of academic research careers and would encourage researchers to progress and remain within the UK academic sector.

CONCLUSION

The continued funding of Higher Education is necessary and for postgraduate education fundamental to the attainment of a knowledge economy and the wider benefits of social development and economic potential. The Government must fund education over other areas of policy due to the social, economic and individual transformation it enables.

Postgraduate research enables the UK to be competitive in the global research and knowledge economy and develops the economic potential of individuals and organisations employing postgraduates. The Government must ensure public sector funding continues for Higher Education and particularly at ensuring researchers and postgraduates can complete their programmes without financial obstacle or burden.

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December 2006

Memorandum submitted by Queen Mary, University of London

FUTURE SUSTAINABILITY OF HE

The Education and Skills Select Committee's inquiry in to the future sustainability of Higher Education will consider the following:

The role of universities over the next 5–10 years

The role of the university over the next five to ten years should still be the focus on the development of excellent teaching and research in the context of their impact on the wider society and economy. However, the UK HE sector cannot sustain the current level of activity on the present funding arrangements.

Higher Education is of vital importance to the UK's global competitiveness, and this needs to be recognised through the funding it receives. Universities will continue to play a vital part in developing a highly skilled workforce. At the present time the UK's higher education system is globally competitive, however if the current funding levels and arrangements are not changed UK HE will increasingly loose its global position to emerging HE systems (such as those in the Far East and the USA).

International-standard research and teaching involve large costs, which at present are not recognised in funding mechanisms. HEIs need to be able to quickly respond to international markets and trends. In order for this to happen, the current funding of HE in the UK needs to be urgently and seriously addressed.

UK higher education is not a homogenous system. Each HEI will have a different set of values and priorities. Again this heterogeneity needs to be recognised in a more flexible funding system, which recognises the differences between UK HEIs and provides adequate funding to support different institutional missions. At the same time, the autonomy of HEIs is vital and should be cherished. This is one of the key aspects that makes UK HE a flexible and responsive system.

THE BOLOGNA PROCESS

The mobility of students and staff and the usefulness of developing a framework that makes it easier to understand different national educational systems are two of the key benefits of the Bologna Process. The challenge is that Bologna impacts on many aspects of HE in the UK, and there may be some anxiety that the defining features of UK education could be lost through a perceived "standardisation" agenda.

It will be important to ensure that mobility programmes, such as the Integrated Action Programme for Lifelong Learning (IAP) or joint degree programmes with HEIs in other Bologna signatory countries, are fully funded and do not create financial disadvantage for HEIs.

December 2006

Memorandum submitted by the Research and Development Society

1. EXECUTIVE SUMMARY

1.1 The Research and Development Society has conducted two pieces of research that we summarise here for the benefit of the Committee.

1.2 Members of the UK Research and Development (R&D) community who responded to our survey in August 2006 on "Science Higher Education in 2015: Employers' current and future skill needs", want:

- science, technology and mathematics graduates to have experience of the practical application of R&D by applying their skills and academic knowledge through industrial placement or practical projects.
- graduates to have good communication skills and other transferable skills such as teamworking. Respondents identified that these are currently detrimental.
- If possible, a clear way of communicating their needs to the people that determine the contents of undergraduate courses—the majority have no clear way of doing so at present.

1.3 The Society has also been consulting widely with leading figures in the UK R&D community (from a variety of sectors and organisation size) on what they thought the future of UK R&D was likely to be and what role the R&D Society could or should have in that future. These are the results from our work to date that are of most relevance to this Inquiry:

- A key future challenge is skills supply—"producing the right scientists in the right numbers." "There must be a trained workforce with relevant skills at all levels (including technicians and teachers)". The UK R&D community needs "a properly integrated supply chain from school to degree, to PhD to laboratory".
- Our main opportunity is our ability to "release value from the knowledge base to increase productivity through greater innovation." Within that, the interface between academia and industry is key—"Identify national strengths with global relevance (bio, geno, nano, etc) then ensure a functional interface between academic and commercial activity in them." "Academe must learn that innovation is not merely technology transfer."
- The R&D community can assist by
- (a) communicating a "clear description of the benefits to society of R&D",
- (b) "instigating more partnerships", especially between business and academia, and
- (c) "taking a much broader view of innovation than the development of new products driven by science and technology."

2. THE RESEARCH AND DEVELOPMENT SOCIETY

2.1 The Research and Development Society is a UK-based organisation which aims to promote the better understanding of R&D in all its forms. It is unique in the UK in covering all types of business and industry with an interest in R&D, enabling common issues and solutions to be discovered, shared and solved. With a membership spread across the full range of UK R&D community, it holds regular meetings on a wide variety of topics relating to innovation and R&D management best practice. The R&D Society's administration is provided by the Royal Society, but the R&D Society is independent, being a company limited by guarantee run by its members through an Executive Committee (board of directors).

3. The Survey: Science Higher Education in 2015: Employers' current and future skill needs

3.1 The remainder of this document is based on the summary report of the survey into "Science Higher Education in 2015: Employers' current and future skill needs", published in October 2006. We have also published on our website an annex, containing the questionnaire and the full text of all responses received. Both the summary and the annex can be accessed at http://www.rdsoc.org/grads2015.html

3.2 The report summarises common themes from the submissions of the respondents of the survey, and aims to reflect their views. The questionnaire and report was produced by the Research and Development Society thanks to the core funding provided by its members.

4. The survey: Introduction

4.1 During August 2006, the Research and Development Society conducted a web-based survey of our members and contacts of the current and future needs of employers in science-based industries. The survey was conducted to enable organisations to submit evidence to the Royal Society's science policy study on Science Higher Education in 2015 and beyond, which is looking at whether higher education in science, technology and mathematics at UK universities and colleges will produce enough individuals with the skills to meet the needs of the economy in 2015 and beyond.

4.2 The R&D Society conducted a survey to assist with one important component of the study, namely, employers' current and future demand for science, technology and mathematics graduates. The R&D Society recognises that a key component of the successful transfer "from ideas to wealth" is the availability of high-quality staff, and so implemented this survey to enable the UK R&D community to contribute to this important study.

5. The survey: respondents

5.1 We received twenty-seven responses from twenty-six organisations. Respondents were from a broad spread of sectors across the UK R&D community, including aerospace and defence (3 responses), chemicals and materials manufacturing (4) (includes two responses from one organisation), business and support services (3), universities (3), utilities (3), pharmaceuticals and healthcare (2), telecommunications (2), Government research and research support establishments (5), the automotive industry (1), investment banking (1) and technology development (1).

5.2 Respondents were from a range of size of companies, with six falling in the Small and Medium Enterprise (SME) category of up to 500 employees, nine having between 501 and 2000 staff, four between 2001 and 5000 staff and 8 employing over 5000 staff. The number of scientists, technologists or mathematicians employed by respondents was generally proportional to the total number of employees, but there was a broad spread of those companies with a high proportion of scientists as staff, and those with lower levels, as the table shows.

Total number of scientists, technologists or mathematicians		Tota			
employed	1–250	251–500	501–2000	2001–5000	5000+
1–25	3				
26–50	1		1		
51–250	1	1	2	3	1
250–500			2		1
500+			5	1	6

Table of the number of respondents for each combination of total staff and total scientists, technologists or mathematicians employed.

5.3 Of the respondents themselves, eleven were company directors or senior managers, five managed a lab, research team or project group, four worked in research but had no direct line management, and five worked in human resources. More than half (15 out of 26) directly supervised more than six staff, and just over a quarter supervised more than fifteen. When questioned about their responsibility for recruiting science, technology and mathematics graduates, six described themselves as primarily responsible for recruiting all or some in their organisation, eight for recruiting all or some in their team only, and twelve said they had some influence in recruiting graduates in their organisation—this included some company directors and human resources' staff. All respondents had graduate qualifications in science, technology or mathematics—three quarters held a masters degree or postgraduate qualification.

5.4 The survey could be completed anonymously. All respondents agreed to their responses being published in an anonymous form. Seventeen respondents agreed to have their organisation credited in the report. They are (in alphabetical order): Cranfield University, De La Rue International Limited, Engineering and Physical Sciences Research Council, Huntleigh Healthcare, Kodak Ltd, LGC, London Knowledge Innovation Centre, Medical Research Council, Morgan Stanley, National Grid, O2, Patent Office, QinetiQ, Rentokil Initial, Rolls-Royce, Royal Botanic Gardens Kew, RWE npower.

6. The survey: questions

6.1 We asked six open questions, supplemented by a range of closed questions about the respondent's organisation, role, recruitment influence, and personal background.

- What do you want from the science, technology and mathematics graduates you appoint?
- Are the science, technology and mathematics graduates you appoint well prepared for their roles? Has this changed recently?
- What skills, knowledge and experience are lacking? Has this changed recently?
- What can they do that you hadn't expected/didn't require? Has this changed recently?
- From your perspective, what components are important as part of Higher education? Which experiences is it important to offer students?
- How (if at all) do you communicate your requirements to the people who determine the contents of undergraduate courses?

7. The survey: Respondents' current and future needs for graduates in science, technology and mathematics from UK universities

7.1 The following is a summary of the key messages from the responses received. The annex to this report lists the full text of the responses, in an anonymous form.

7.2 Respondents want transferable personal skills and applicable science knowledge

7.2.1 When asked "What do you want from the science, technology and mathematics graduates you appoint?", respondents overwhelmingly wrote about personal and communication skills and applicable science knowledge.

7.2.2 An understanding of basic science was mentioned by fifteen respondents, who wrote about wanting graduates with a "good grounding in science", a "broad level of scientific literacy," or "with a strong maths / physics / technology foundation". Three spoke of requiring strong academic specialist knowledge, with another calling for "highly developed technical and mathematical skills".

7.2.3 Written and verbal communication, were both cited by fourteen respondents as being key. Seven specifically cited numeracy.

7.2.4 Ten respondents talked of teamworking, a further two respondents required the ability to influence and persuade, or to build relationships and two others requested "interpersonal skills". Eight wanted a variety of planning skills—to be able to plan a work programme, prioritise, multitask, and have self-discipline.

7.2.5 Problem solving was mentioned by five respondents; innovative behaviour or "thinking outside the box" by six, and a further two cited creative thinking. Seven required a logical and analytical approach or "critical thinking", and five wanted cross-discipline thinking or versatility and adaptability.

7.2.6 Being able to understand the business environment (three respondents), to be able to relate one's expertise to business (two) or to have a challenging applied final year project were also required.

7.2.7 "Many students fail at the interview stage as they not aware, or do not place as much focus on the need to have strong communication and team working skills. This is often frustrating, as technically they are highly proficient but have failed to appreciate the equal importance of these soft skills in allowing them to successfully apply their technical knowledge in the work place."

7.3 Respondents call for significant improvements in communication and numeracy skills

7.3.1 A clear message, communicated throughout the responses was that graduates' written and verbal communication skills were in need of significant improvement. As noted above, fourteen respondents wanted graduates to have good communication skills, but many were concerned that they had experienced a drop in the standard of graduates' communication skills. Seven wrote of a lack of communication skills and four of a lack of numeracy or mathematics skills in the graduates they appointed recently, and several of these perceived a decline in these skills over recent years.

7.3.2 "Written English language skills on occasion are startlingly poor." "General levels of literacy and numeracy are lower, particularly spelling, grammar and vocabulary—many recruits are not able to write acceptable letters or reports."

7.3.3 On the positive side, one respondent wrote that graduates "are better at report writing and project work" than anticipated, and another, from a different industry sector, said that they were "all keen to do more training courses and often express enthusiasm for things involving young people (eg science festival, placement in schools)".

7.4 Respondents think higher education should offer experience of industrial research and develop interpersonal skills, in addition to developing academic knowledge and rigour

7.4.1 When asked what higher education should provide, as could be expected, most respondents expected "skills, knowledge and awareness in degree subject(s)", a "good basic understanding of [their] subject area" and "academic rigour". Though some respondents required particular specialisations, others noted that graduates should have "a broad basis before you specialise in depth" or should have a "sound basic knowledge of the principles" of their field.

7.4.2 One third wrote of the need for graduates to have "a really good idea of the work environment" through, for example, industrial placements, job shadowing, "business training", "practical, challenging projects" or "real research experience". One organisation, in discussing their links with academia stated that they "do not have the resources to address the scope of expectations from a majority of agencies, and would like to focus our resources and provide our support to students with a keen interest and aptitude in the science & technologies appropriate to our business." Four respondents cited "knowledge and understanding of where and how science and technology fit into the rest of the world", with "technology/social interaction and government/technology interaction", including "an awareness of intellectual property and patents".

7.4.3 One third also listed different elements of interpersonal work skills, summarised by one respondent as, "Interpersonal & communication skills that enable people to effectively communicate orally (small & large groups) (and in writing) ideas and concepts to experts and non-experts alike, work in teams, seek & share ideas, concepts & information."

7.4.4 Other requirements included practical lab skills, problem solving abilities, flexibility in their skills and confidence.

7.4.5 Two respondents wrote that they expected to train their graduates in certain skills—eg "if they have intellectual capability, basic maths and physics knowledge and understanding to degree level, we can do the rest."

7.4.6 One respondent noted that graduates "lack business awareness & business skills, as would be expected. This is addressed though the core graduate programme. We are finding that science & technology degrees increasingly include business awareness training, though this additional training often lacks context and makes it difficult for graduates to employ the business training in their initial roles.

7.5 Respondents found students are more ambitious and have better IT skills than anticipated

7.5.1 Five respondents noted that recent graduates are more computer literate than anticipated and than previously, though one noted that "their computer skills are higher than we need." One also talked about graduates having a "good understanding of digital convergence and opportunities this opens up".

7.5.2 Four respondents wrote of the expectations, confidence and ambition of graduates being higher than expected—though two warned that their confidence and eagerness to progress may be misplaced. "They usually are very enthusiastic, but sometimes frustrated by the pace of change—suggesting minimal prior exposure to a real world or an industrial setting. Their desire for growth and international exposure is sometimes greater than can be met within normal business expectations." One other organisation noted that graduates from overseas have higher confidence levels than UK graduates.

7.5.3 Experience in giving presentations was cited by three respondents, and two wrote of better-thanexpected technical knowledge, awareness of other disciplines, or principles of management or business studies—though this respondent noted that was not required for "a technical capacity in industry".

7.6 Respondents have no clear way of communicating their needs to the people that determine the contents of undergraduate courses

7.6.1 Respondents either did not communicate their needs to the people that set courses (ten responses) or cited informal contact with lecturers and university staff (fourteen)—though some gave the impression that they were not sure if this was effective. Twelve of the fourteen only wrote about influencing course content at one or a few universities or individual departments. Only one of the respondents wrote about higher-level funding policy: "There is no easy mechanism for industry to do this as there are many universities. I am a BOARD MEMBER on one University just trying to understand this." [Respondent's emphasis]

7.6.2 Four respondents stated that they had clear ways of communicating their requirements: one had "input via engineering institutions course accreditation processes" (and also had informal contact with university staff), one was a "member of educational advisory group", one stated that "as part of the sector we work with the developers of undergraduate courses" and one stated that "we have very strong links to many UK universities that will help provide universities with a clear view of what we do and what we require from our graduates", through joint research, joint assessment and graduate marketing. This was one of three respondents that cited the job market as a method of communicating requirements—though not all were implied to be effective—"I usually just moan to the recruitment agencies about the quality of people on offer."

7.6.3 Respondents gave the impression that they would be willing to communicate their needs, if they were asked or if there was an appropriate mechanism to do so. One suggested that this should be anonymous.

8. The survey: Other issues

8.1 Respondents cited specific subject knowledge where they are experiencing difficulties, which usually reflects their organisation's speciality: "Physicists more difficult to find than chemists", "Skills related to curation of collections and a restricted knowledge of whole organism (plant) biology", "Chemists—lack of knowledge of formulation chemistry", "Micro-biologists—lack of knowledge of disinfectants", "Finding good chemistry graduates is getting harder", "PhD/Post Docs with Mass Spectrometry and Separation Science backgrounds, which we have found very difficult to recruit", "infrastructure skills[...]engineering and networking", "engineering calculation skills", "Specific need for power engineers is difficult to fill."

8.2 Two respondents perceived inconsistencies in university degree structures. "There is huge variation in ability [of the graduates], almost regardless of the degree type of level shown on paper." "[The preparedness of graduates] depends very much on the university from which they have graduated. There is clearly a difference in academic level between different universities and so the university courses may need to be graded, as well as the student's degree."

8.3 Two, unprompted, comments were about levels of pay: "A big issue for us currently is pay and the cost of living in London. While this is not part of your survey, it can have a great influence on attracting people to research, retaining them in the institute and attracting them to a biological course or to University at all." "Mostly the graduates we hire tend to be from European universities because the salaries in non-profits are not attractive for UK graduates".

8.4 Respondents were receptive to being consulted on this issue—"it is good to have the opportunity to contribute to this debate." One respondent put it bluntly: "I believe the ability to attract and keep good engineers and scientists is the most serious threat to our company."

December 2006

Memorandum submitted by The Royal Academy of Engineering

1. The Academy (Note 1) considers that to thrive in today's intensively competitive global environment the UK needs highly talented people with a wide range of intellectual and technical skills together with organisations and processes that can deploy them effectively. Enhancing national capabilities, recognising excellence and inspiring the next generation are strategic priorities in which the universities have a major role to play.

2. The Academy is well informed of the role and requirements of the universities through its current study on *Educating Engineers for the 21st century* (Note 2). The initial phase, conducted with Henley Management College, established the industry view based on in depth interviews with twenty UK major international companies and replies of 444 companies to a detailed questionnaire, 53% of which came from small and medium sized enterprises (SMEs) with less than 250 employees. Further interviews were conducted with recent graduates from the Academy's schemes. A detailed questionnaire has been sent to all university departments of engineering to discover how they intend to meet the industry requirement.

The role of universities over the next 5-10 years

What do students want from universities?

3. All engineering students want to gain a world-class internationally recognised degrees which will enable them to qualify as professional engineers. While the majority are content with the courses provided they agree with the industry view that there should be more practical experience and "hands on" content but not at the expense of understanding the fundamentals of engineering science.

4. The perspective of the graduates in the study focus groups emphasised what motivates students to study engineering: a good all round degree course offering a wide range of career options. There was a strong sense of wanting to make a difference, contributing to society and being able to see the results of your creativity.

5. UK degrees have a good reputation and international students are attracted to our universities' courses: indeed several universities are setting up overseas campuses to cater for demand. In research there is a high proportion of international students and there is a need to attract more UK students into taking higher degrees (doctorates) in engineering, in line with the recommendations of the Roberts' Report (Note 3), if the UK is to achieve its economic growth target of increasing R&D spend to 2.5% of GDP by 2014.

6. Also there is concern that the numbers of UK entrants to engineering degree courses are static or even dropping. If we are to deliver the vision of the UK as a global leader in turning knowledge into new products and services we need a step change in the number of students entering engineering degree courses. Also the demographics are against us as there will be fewer children in the next ten years who will be available to go to university.

7. The issues need to be tackled on several fronts. Contributions will come from: increasing the numbers of students studying maths and physics at school; increasing the proportion of these students who opt to study engineering; retaining a higher proportion of engineering graduates in industry and allowing overseas students who have studied at UK universities to remain in the UK to work for a longer period than the current one-year.

8. Solutions will include better maths and physics teaching in schools, effective schemes, especially in schools, to encourage students to consider studying engineering and more inspiring degree courses with closer industrial engagement.

What do employers want from graduates?

9. Many companies report difficulties today in recruiting graduate engineers particularly in Civil Engineering, Electrical and Electronic Engineering and Systems Engineering. They comment that it is difficult to get "enough of the best" and identify graduates in Information and Communications Technology and Materials as being key to future growth.

10. Shortages of suitable engineering graduates and skill gaps are affecting the performance of UK businesses. Over one third of companies responding indicated that shortages and skill deficiencies impacted on new product development and business growth as well as recruitment costs. Specific gaps were identified in problem solving and application of theory to real problems, breadth and ability in maths.

11. The quality of the best UK engineering graduates is considered by industry as good as their peers in Europe despite our shorter degree courses and there is no desire to move to five year courses in line with other parts of Europe.

12. There is, however, no room for complacency. Employers seek to recruit graduates with some previous industrial experience preferably gained as part of their course. They consider that university courses need to provide more experience in applying theoretical understanding to real problems.

13. It is considered that UK engineering degree courses need development by recognising the changing requirements of industry and in order to attract and maintain the motivation of students. In terms of priorities for future graduate skills, companies responded consistently in placing practical application, theoretical understanding, creativity and innovation as top priorities. While broader technological understanding is considered important it should not come at the expense of understanding fundamentals. Multidisciplinary system integration skills are seen as becoming increasingly important in future technology development.

14. Key business skills are envisaged primarily as commercial awareness or sensitivity (an understanding of how businesses work and the importance of the customer) combined with a basic understanding of project management.

15. The strong focus on creativity and innovation supports the conclusions of Sir George Cox's Review (Note 4) about the importance of creative skills in improving the UK's competitiveness in the face of the challenge from emerging economies.

What should government, and society more broadly want from HE?

16. So far as engineering is concerned the above evidence clearly supports the view that the universities should continue to maintain their excellence in research while at the same time developing their taught courses in such a way as to deliver motivated world-class engineering graduates with the skills required by industry in order to fulfil their role in delivering the Government's Science and Innovation Framework objectives (Note 5).

17. The strategy for continuing to maintain research excellence has already been laid out in the Academy/ EPSRC review *The Wealth of the Nation: An Evaluation of Engineering Research in the United Kingdom* (Note 6). This recommends the continued close cooperation between industry and the universities and a closer integration of research in engineering and that in pure science. It draws particular attention to the needs of industry for personnel with postgraduate degrees.

18. There is, however, a current imbalance between teaching and research in the universities which needs to be addressed. While research and teaching are complementary activities many feel that the status of teaching has suffered as a result of the focus on the Research Assessment Exercise performance. Initiatives are required to redress the balance and recognise the importance of excellent teaching as a key contributor to the economy.

19. As discussed above engineering courses must become better aligned with the changing needs of business and industry. In particular more and better quality project work is needed based upon real-life problems, ideally delivered in collaboration with industry.

20. Work is also required to improve the approach to teaching to ensure students remain motivated and engaged and graduate keen to pursue engineering careers. There are already important developments in this area such as the pedagogic approach taken in the CDIO (Conceive/Design/Implement/Operate) initiative (Note 7) and team based hands-on engineering experience such as Formula Student (Note 8) and the Constructionarium (Note 9). The Higher Education Academy's Engineering Subject Centre (EngSC) (Note 10) and the UK Centre for Materials Education Materials (Note 11) have instituted a well thought of programme for sharing and implementing best practice between universities which needs to be encouraged by the Academy, the professional institutions and HEFCE. Developments of this sort will not only improve graduate performance in companies, but can also improve recruitment into engineering courses and student motivation. The increased cost of "hands on education" engineering training needs to be recognised (see below).

21. Industry itself needs to commit to greater involvement with undergraduate engineering education if the changes it requires are to be delivered. For example: through industrial project topics, compulsory assessed vacation placements, visiting professors' lecturing, leading industrial case studies, industrial advisory boards on course content and material. This is particularly important in areas where there is not yet a strong engineering academic research base such as systems engineering, design, sustainability, service and support engineering. These new subjects should be of great concern to society as whole as they underpin the ability to deliver a sustainable development strategy.

22. As detailed above there is tremendous potential, as well as economic necessity, for increasing the number of students reading Science, Engineering and Technology (SET) degrees. This means encouraging more school students to study maths and physics at A level, another key feature of the Government's Science and Innovation Strategy. There are opportunities for the universities to engage more closely with schools and to collaborate more closely with other providers such as the schemes in the Best Programme (Note 12).

23. To achieve the targets for graduates appropriate to a high-skill economy there is considerable scope to widening participation and contributing to social mobility through universities working closer with companies, schools and the FE sector in providing access through vocational courses. The Academy has set out to provide examples of best practice in the National Engineering Programme, a consortium effort to strengthen engineering higher education by working with universities to create inspiring, attractive engineering degree courses, and then working with local FE colleges and schools to provide candidates for those courses (Note 13). Industry has a strong role to play: on one hand they co-fund the programme along with government, on the other hand they are able to go into schools and assure students that there is good employment on offer after graduation. This model of cooperative working is proving effective in raising the profile of engineering (and the wider SET curriculum) in schools where it has not been a priority in the past. Particular attention is being paid to groups so far underrepresented in engineering higher education: women, minority ethnic students, students from families with no experience of higher education and adult learners.

UNIVERSITY FUNDING

24. Despite the grave reservations about the funding formulae for both HEFCE and EPSRC grants, university engineering departments can work within the current system. However, the funding problem does mean that the current system is not adequate for industries' aspirations (Note 2).

25. There are, however, strong criticisms of the Research Assessment Exercise (RAE) (see above paragraph 18) and its adverse effect on teaching quality in the universities. The Academy has made detailed recommendations for reform in this area in its response to the DfES in its *Reform of Higher Education Research Assessment and Funding* consultation (Note 14).

26. The Academy considers that the funding of HE should accord with the government's wider economic objectives (Note 5) and be planned and directed to provide industry with the skilled workforce required to achieve these.

27. The major issue in England is that currently the unit of resource allocated by HEFCE to deliver engineering courses is far below the cost of delivery so that there is no incentive for universities to increase numbers or, more seriously, fund the facilities required for curriculum development. The key factor is the

ratio/multiplier. Medical studies receive four times the basic unit of resource, but engineering, classified as a full lab-based subject, receives only 1.7 times. Engineering is a high cost subject to teach—for example small group design is vital to effective and engaging teaching, but by its nature requires modern equipment, a good teaching staff/student ratio, and of course technicians—both for teaching support and maintenance. Engineering was funded at a ratio of two times the standard unit, but this was lowered to 1.7 between 2003 and 2004. This has had a detrimental impact on engineering with universities applying downward pressure on engineering undergraduate numbers. The extra money allocated by HEFCE for Chemistry, Physics, Chemical Engineering and Materials is very welcome, however, given the problems engineering has to encounter one wonders why the extra resource is being denied to the other engineering disciplines.

28. Acknowledging that there is only a finite level of money to spend on HE, it is possible to envisage an interim, cost-neutral proposal—one we have raised with HEFCE. The Academy believes that quality of engineering education is crucially important and that it would be preferable, in the short-term, to increase the per-student funding to at least the two-times-multiplier at the expense of student numbers. Engineering departments would be given the same amount of funding, teaching fewer students. This is not the preferred solution given the need for a step change in the number of engineering students required if the UK is to meet the economic and SET targets set out by the Treasury. However, it is a pragmatic way forward in the short-term.

29. It is too early to a say what the overall effect of the top-up fees will be. Initial returns seem to indicate a slight overall decrease in the number of applications for engineering degrees. Industry is concerned at the rise in student debt which could affect the numbers taking the longer Masters courses and advise against any further increase in top-up fees.

THE STRUCTURE OF THE HE SECTOR

30. From our survey of university engineering departments the current structure of the HE sector is appropriate and sufficiently flexible to allow for the necessary developments. It is, however, only sustainable in the future if appropriate level of funding is provided by government as detailed above.

31. The current under funding of engineering degree courses is causing most departments to hold numbers static or slightly decrease them. There is an aspiration to increase numbers which is necessary, and proper, to support the Government's priorities in the Science & Innovation Framework 2004–2014. This provides clear goals for the Sector which the Government should adequately fund and steer particularly in the area of strategic subjects such as engineering.

Notes

1. The Royal Academy of Engineering [RAEng] brings together over 1200 distinguished engineers, drawn from all the engineering disciplines. Its aim is to promote excellence in engineering for the benefit of the people of the United Kingdom. (www.raeng.org.uk)

- 2. See (www.raeng.org.uk/henleyreport).
- 3. SET for Success HM Treasury April 2002
- 4. Cox Review of Creativity in Business: building on the UK's Strengths HMSO November 2005
- 5. Science and Innovation Investment Framework 2004-2014 HM Treasury July 2004

6. The Wealth of a Nation-An Evaluation of Engineering Research in the United Kingdom EPSRC/ RAEng February 2005

- 7. See http://www.cdio.org
- 8. See http://www.imeche.org.uk/formulastudent
- 9. See Constructionarium: Build to learn CEBE Transactions, Vol2.Issuel pp6-16 April 2005
- 10. See http://www.engsc.ac.uk
- 11. See http://www.materials.ac.uk

12. The Best Programme provides support to over 80000 students in science, engineering and technology for age 9 to 36 years. The Best Programme works in primary schools to build an enthusiasm for SET subjects, in secondary schools to promote engineering and related SET careers, in universities to support gifted engineering students and beyond university to develop engineers in their careers. Best is already making a significant impact with over 1300 Young Engineers Clubs established in schools. Through the Smallpeice Trust and the Engineering Education Scheme over 3000 (mostly Year 12) students gain direct experience of working with industry and studying in university engineering departments each year and a further 800 students attend one week induction courses in SET subjects in 26 universities through the Headstart Programme. A further 700 students take a gap year in industry through the Year in Industry scheme. The schemes are proving successful in attracting women into SET with attendances of 30–40%. Evidence from the Headstart and Engineering Education Schemes show that generally over 75% of attendees proceed to take SET degree courses. (www.raengbest.org.uk)

13. The NEP started with the London Engineering Project pilot in Southwark in late 2005. This will work with five universities and 50 schools over 4.5 years. The pattern will be repeated, modified and enhanced, as appropriate, in six regions in England over the ten years. The NEP supports schools with their raised profile for SET by providing students with access to hands-on SET activities in class, residential and other SET learning events out of school and a system for mentoring of students with a capacity for higher education and ability in SET. This attention paid on schools and groups so-far unengaged in engineering is seen as key to strengthening the engineering profession in the long-term. The NEP is led by the Royal Academy of Engineering with the generous support of the Higher Education Funding Council for England (HEFCE).

14. See http://www.raeng.org.uk

December 2006

Memorandum submitted by the Royal Astronomical Society (RAS)

EXECUTIVE SUMMARY

The Royal Astronomical Society (RAS) wishes to make a full contribution to the inquiry into the Future Sustainability of the Higher Education Sector which will incorporate recent RAS research into the education of UK geophysicists and astronomers.

Re the Bologna Process, the RAS is concerned that our education structure already may place UK doctoral graduates at a disadvantage compared with their counterparts in other EU nations by making them less attractive to higher education and research establishments across the continent.

INTRODUCTION

1. The RAS is the UK's leading professional body for astronomy and astrophysics, geophysics, solar and solar-terrestrial physics, and planetary sciences. It has more than 3,000 members, including scientific researchers in universities, observatories and laboratories.

2. Much of its membership has a direct interest in the future of higher education in the UK and in the on-going process of harmonisation with other European states that followed the signing of the Bologna declaration in 1999.

3. The RAS would have welcomed the opportunity to make more substantial contributions to both of the Select Committee's Inquiries. However, given the imminent deadline, this communication is necessarily truncated. We hope, though, that the Committee will want to receive our more detailed evidence as and when it becomes available.

Note: While it is appreciated that the remit of the Select Committee is restricted to England, what follows has general applicability to the UK.

FUTURE SUSTAINABILITY OF THE HIGHER EDUCATION SECTOR: FUNDING AND STRUCTURES

4. The RAS welcomes the decision of the Education and Skills Committee to undertake a far reaching inquiry into the role of universities, what the principles of their funding should be, and how they fit into the overall structure of the HE sector. While what follows focuses on the contribution of universities to the UK economy, as repositories of accumulated and generators of new knowledge, universities enrich society in many, and possibly more fundamental, ways.

5. Some 50 universities in the UK teach astronomy at an undergraduate level, usually as part of a department of physics and astronomy, and 40 of them have significant astronomy research groups. This reflects the popularity of this subject which, over the past two decades, has resulted in roughly one new astronomy department or teaching group being added every year (although this has now reached a plateau). There is evidence that the health of those physics departments which are managing to survive, and since 1992 over 30% of university physics departments have been closed or merged, increasingly is dependent on the attractiveness of the astronomical component of first degree courses as well as the world class research being conducted by UK based astronomers.

6. Only 7 university departments, down from a dozen, offer geophysics undergraduate degree programmes. The number of students reading for first degrees in geophysics is now about half of that 20 years ago, while 80% of master's programmes have been discontinued. This, paradoxically, has happened at a time when, besides the continuing manpower requirements of the hydro-carbon industry, we need to know more about hazards like earthquakes, volcanoes and tsunamis; the monitoring and implementation of nuclear arms control or nuclear waste disposal and CO₂ release and sequestration. However here, as in other branches of physics, except astronomy, students have "voted with their feet".

7. The decline in physics and geophysics teaching capacity, notwithstanding the continuing appeal of astronomy, raises important implications for the way in which the higher education system should be funded, if we are to maintain internationally-competitive research universities which equip graduates with the skills required by UK employers. The Government has accepted the conclusions of the Robert's 2002 report ("SET for Success") that, unless there is a reversal in the significant falls in the numbers of students opting for physics, mathematics, chemistry and engineering, its attempts to improve the UK's productivity and competitiveness could be undermined. The closing of physics departments, in particular, by cashstrapped Vice-Chancellors, regardless of arguments related to strategic need, raises important issues about the way public funding should be channelled. To rely on current student choices to determine the long-term supply of qualified scientists and engineers needed by the UK economy could be a costly strategy. Despite recent and welcome initiatives from HEFCE to promote interest in, and the viability of, strategically important subjects, including the physical sciences, the fact remains that universities, as semi-autonomous bodies, cannot escape immediate and pressing financial imperatives. Only the Government can afford to take a long term view and ensure the survival of departments or subjects until such times as other measures have reversed the decline in secondary school students opting for science "A" levels and related university degree courses thereafter. In this connection, astronomy and geophysics, anecdotally, is said to play a critical role in stimulating interest in schools science. The RAS is commissioning research to document the evidence which, we anticipate, will demonstrate this.

THE BOLOGNA PROCESS

8. Until now the UK has been slow to respond to the restructuring of European higher education. For example, the introduction across most of Europe of a standardised undergraduate Bachelor/Master structure with a duration of five years may disadvantage graduates in the UK system, where many Masters level degrees are completed after four years of study.

9. In 2005 the RAS, together with the Institute of Physics (IoP), the Particle Physics and Astronomy Research Council and the Engineering and Physical Sciences Research Council, commissioned a review on "International Perceptions of UK Research in Physics and Astronomy". The panel of leading, foreign, experts noted that the short duration of UK PhD training could be undermining the ability of UK PhD graduates in physics and astronomy to compete scientifically with their peers from other countries. The Panel recommended that the UK instigate an in-depth review of graduate level education, including comparisons with its leading scientific competitors. This is in train. Following a scoping study, due to complete in February 2007, to determine and test the methodology needed to conduct such a wide investigation, the IoP and RAS will engage with other bodies to seek support to undertake a full study in 2008. We anticipate that its results will be of considerable interest to the Committee and to the Government.

December 2006

Memorandum submitted by the Royal Society of Chemistry (RSC)

The Royal Society of Chemistry is the largest organisation in Europe for advancing the chemical sciences. Supported by a network of over 43,000 members worldwide and an internationally acclaimed publishing business, our activities span education and training, conferences and science policy, and the promotion of the chemical sciences to the public.

The main points the RSC wishes to make are:

1. The Higher Education Funding Council for England (HEFCE) has identified chemistry as a strategically important but vulnerable subject. Strategically important because chemistry is the central enabling science underpinning innovation in a knowledge based economy, and is the key science upon which advances in healthcare and sustainability is based. Vulnerable, because there have been a number of closures of chemistry programmes in HE resulting in restricted access to chemistry education, a reduction in the diversity of provision and reduced opportunities for business to interact with and gain from academic research and innovation.

2. Recently HEFCE has taken some steps to address the issues. It has provided funding to enable the RSC to help universities increase their outreach activities to stimulate demand from students and help HE to develop their curricula. It has provided much needed additional funding for teaching chemistry via its block grant to institutions, but a funding gap remains. So far measures are restricted to England. The funding authorities elsewhere in the UK have not shown the same recognition of the issues facing chemistry teaching provision and have not taken action.

3. It is apposite that this Inquiry follows on from the Committee's Inquiry into the impact on its Bologna Process. UK Government and UK HE have not participated fully in the Process and as a consequence the UK is not reaping the benefits of reform that are evident elsewhere in Europe. A comprehensive system of chemistry based education for the UK requires the following features.

- (i) two year programmes in the fundamentals of the chemical sciences and their application with emphases on developing competences for process operations or at the junior technical level, including for school laboratory technicians;
- (ii) a very wide range of three year bachelors (1st cycle) programmes in which the contribution from the chemical sciences ranges from a minor supporting role to being the major component. Such programmes make a major contribution to a well educated citizenry in addition to being the source of many eventual practitioners across the range of scientific, technological and healthcare occupations. Some programmes need to be theoretically rigorous and technically oriented equipping graduates to occupy leading technical roles;
- (iii) intensive programmes to masters level (2nd cycle) of up to two years duration, leading on from first cycle qualifications in which the chemical sciences are a major component and intended to lead to professional level practices. There should be a mix of programmes ranging from broadly based to those specialist interdisciplinary areas; and
- (iv) three to four year programmes leading to doctoral degrees (3rd cycle) educating researchers and research leaders in the chemical sciences and contributing to the research missions of institutions.

THE ROLE OF UNIVERSITIES

1. What do students want from universities?

Students should expect to gain from their HE experiences skills that fit them for employment, to participate in and hold leadership positions in a democratic society.

2. What do employers want from graduates?

The ability to transfer the knowledge and skills gained whilst in HE to employment.

3. What should the Government, and society more broadly, want from HE?

The Committee has identified societal needs in the points associated with this question.

UNIVERSITY FUNDING

4. Is the current funding system fit for purpose? Is the purpose clear?

The purpose is clear, but the current system is not fit for purpose. There is insufficient resource overall and the relative funding between subjects is inappropriate.

The current system is too geared to what universities wish to provide and what 18-year-olds wish to "purchase". The mechanisms for ensuring that national needs are met are either not appropriate or insufficiently used.

5. What are the principles on which university funding should be based?

The principles should be a balance of:

- autonomy for universities, ensuring freedom of thought;
- enabling students to study what they want at a convenient location;
- enabling government, on behalf of society, to procure the knowledge base and skills the country requires; and
- enabling the private sector to engage in partnerships with HE for mutual benefit.

6. Should the £3,000 cap on student fees be lifted after 2009 and what might be the consequences for universities and for students, including part-time students?

No comment.

7. What should the Government be funding in HE and by what means?

Government should part fund (with students) sub degree, bachelors and masters level programmes, fund research infrastructure and some specific research programmes.

8. Should central funding be used as a lever to achieve government policy aims?

Yes, government funding should be used as a lever to achieve its policy aims. No, the balance is not currently correct. Government needs to be more active in procuring what society requires.

9. Should research funding be based on selection of "quality"? How should quality be defined and assessed? How might this drive behaviour across the sector?

Yes, research funding should be based on quality measures which should be defined and assessed using a combination of metrics and peer review appropriate to the subject area. A mix of measures must be used to reduce the risk of unintended consequences.

10. How can leading research universities reach internationally competitive levels of funding? Should limited central-Government funding be directed elsewhere?

To reach internationally competitive levels of funding, more funding must be provided.

11. How well do universities manage their finances, and what improvements, if any, need to be made?

No comment.

12. Are some parts of the sector too reliant on income from overseas student?

In principle internationalisation of HE is good thing. However, any organisation that is overly dependent on a single source of income that cannot be guaranteed puts itself, and therefore its publicly funded activities, at risk.

THE STRUCTURE OF THE HE SECTOR

13. Is the current structure of the HE sector appropriate and sustainable for the future?

No, the current structure's not appropriate. The three cycle system, widely adopted elsewhere in Europe through the Bologna Process provides greater flexibility than the (essentially) two cycle system prevalent in the UK. Please see our separate submission on this issue.

The current degree classification (which now mainly operates only on a three point scale) has outlived its usefulness. A transcript based system of records of attainment needs to be more fully developed and promoted.

14. How well do structure and funding arrangements fit with "diversity of mission"?

The current structures and funding arrangements do not sufficiently fit with "diversity study". A three cycle system, with a vibrant range of sub degree offering, and including part-time, distance and technically rigorous training programmes is required.

15. Is the current structure and funding affecting growth of HE in FE and part-time study?

Science has essentially disappeared from FE and, outside the Open University, is almost entirely full-time. This lack of provision is largely caused by funding regimes.

16. How important are HE in FE and flexible learning to the future of HE? Would this part of the sector grow faster under different structure and funding arrangements?

FE needs more freedom to develop programmes appropriate to its own market. The key is for links between the sectors that allow for progression with credit into HE.

17. Can, and should, the Government be attempting to shape the structure of the sector?

Yes. The Government cannot be completely "hands off". It has to ensure that HE fulfils the roles identified in 1-3 above. It must guide and enable institutions to be forward looking in accomplishing their missions, intervening when there is a risk that national needs may not be fulfilled.

18. Is the Government's role one of planning, steering, or allowing the market to operate?

The current market is not a pure market and probably can never be. See 17 above.

19. Should there be areas of government planning within HE—eg for strategic subjects?

Yes. Currently there are issues concerning strategically important but vulnerable subjects. Please see the main points at the beginning of our evidence.

20. What levers are available to the government and how effective are they?

The only real lever is funding. Legislation should be avoided.

21. Is there a clear goal for the future shape of the sector? Should there be one?

No. The goal should be a vibrant, flexible system that has the human and financial capacity to adapt.

22. Is there a clear intention behind the balance of post-graduate and under-graduate international students being sought? Is this an area where the market should be managed? Can it be managed?

No. This is an area that should not be managed, save for ensuring opportunities for students and the issue of risk identified in 17 above.

December 2006

Memorandum submitted by The Russell Group

1. The Russell Group is pleased to provide this evidence to the Select Committee's Inquiry into the Future Sustainability of the Higher Education Sector. The Russell Group consists of the Universities of Birmingham, Bristol, Cambridge, Cardiff, Edinburgh, Glasgow, Imperial, King's College London, LSE, Leeds, Liverpool, Manchester, Newcastle, Nottingham, Oxford, Queen's University Belfast, Sheffield, Southampton, University College London and Warwick. This evidence concentrates upon the important contributions Russell Group Universities make to UK international competitiveness through our teaching and research and our provision for high level skills; the importance we place on fair access; and our valuable work with industry and commence.

2. As the UK's leading research-intensive Universities, the members of the Russell Group have the quality and strengths to compete successfully in the global market place for research, skills, expertise and training. To continue to do so, they need to be able to maintain and to develop teaching and research capabilities and facilities of considerable scale and complexity. Further national investment is needed to maintain these at a level capable of competing with increasingly aggressive international competition. The benefits to the UK are in return very considerable.

3. ECONOMIC INNOVATION AND COMPETITIVENESS.

Government has recognised in its Science and Innovation Investment Framework for 2004–14 that for the UK economy to prosper, the country must be able to withstand increasing global competition and must do so on the basis of high technology and intellectual strength, attracting the highest-skilled people and the companies which have the potential to innovate and to turn innovation into commercial opportunity. This in turn requires leading-edge research and training.

The acquisition of skills is essential throughout all levels of the workforce in a 21st century economy. However, in order to sustain an internationally-competitive economy, it is high-level and leading-edge skills which come to the fore, perhaps more especially in science, engineering and technology. Russell Group Universities train this country's brightest undergraduates and postgraduates from both home and abroad. Economic innovation also needs cutting-edge R & D, and Russell Group Universities provide over 60% by value of university R & D funded by both the public and private sectors. They are at the forefront of business spin off and IPR licensing. They also house most of the country's best Schools of Business and Management, responsible for the training of the entrepreneurial talent of the future.

4. The Health of the Nation

Russell Group Universities lie at the heart of medical education and training. Three-quarters of the nation's doctors and dentists are trained in Russell Group institutions. Basic medical research conducted in Russell Group Universities is at the forefront of advances in medicine, and through close collaboration with the NHS and the pharmaceutical industry they can provide the means to apply these to the clinical setting through rigorous clinical trials undertaken to the highest international standards.

5. BENEFITING SOCIETY

Russell Group Universities are major international institutions which nevertheless have a strong national and regional role and influence. They are to be found in all the major cities of the United Kingdom. Through their work on widening participation and continuing education they play a major role in raising aspirations and awareness and in transmitting the values of a common culture across all segments of society. Through their libraries, museums and galleries they provide vital elements in the cultural life of our nation and its regions. Similarly, through their research and teaching in the humanities and the social sciences, Russell Group Universities help to raise the quality of life and to solve major economic social and cultural problems. They play an essential role in training professionals to serve society—such as architects, health professionals, civil servants, lawyers, town planners, teachers and social workers—and are very often one of the larger employers of staff in their cities and regions, employment which is diverse but still heavily concentrated on professional and high value roles.

6. FAIR ACCESS

Russell Group Universities are committed to attracting the best students with the best potential, whatever their background or circumstances. To this end, Russell Group Universities are engaged in a wide-range of out-reach activities, which seek to raise aspiration and to encourage application for admission from across the social spectrum. Some of this work directly benefits Russell Group institutions; some of it serves to encourage individuals to apply to universities of their choice outwith the Russell Group.

As part of this commitment to access, Russell Group Universities have introduced very generous bursary schemes, considerably enhancing their existing provisions, to help to ensure fair access within the new fees regime. The Russell Group regards the maintenance of fair access as a pre-requisite of any further adjustments to that regime.

7. INTERNATIONAL RELATIONS

The strategic importance of meaningful ties across international boundaries is increasing. As major nongovernmental institutions, Russell Group Universities are at the forefront of important international HE alliances, have a rich diversity of contacts with overseas governments and institutions, and train the most able of the international students coming to the United Kingdom. The long-term benefits of such relations are highly valued both diplomatically and economically. Russell Group Universities are also of sufficient scale to be able to support those minority subjects which are of such strategic importance to the nation. For example, approximately 90% of provision in language related subjects identified under the HEFCE Minority Subjects initiative is to be found in Russell Group institutions.

December 2006

Memorandum submitted by Don Starr, Head, Department of East Asian Studies, University of Durham, and President, British Association for Chinese Studies

The opinions below are my personal views and should not be taken as representing the views of Durham University or the British Association for Chinese Studies.

Two trends in Higher Education over recent years have been the downgrading of teaching relative to research and the general abandonment of national planning in subject teaching provision. Applicants are regarded as consumers free to choose whatever they want from the market-place and universities are encouraged to respond to the consumer market by withdrawing less popular lines and replacing them with more popular products. More prestigious universities do not need to cut less popular courses: they can fill all their places on all their courses, provided they are willing to see a marginal lowering of grades for less popular subjects. However, they are often reluctant to do this. Other stake-holders, such as employers and the state, have been squeezed out of skills provision planning, except in medicine.

The system has adopted contrasting attitudes towards research and teaching. Market forces do not intrude on publicly-funded research decisions, which are based purely on an academic assessment of the quality of the project as provided by other researchers. Yet, teaching is all about market forces, defined almost exclusively by applicant demand and played out in a market whose terms are fixed by HEFCE. National employment needs scarcely figure in this, in spite of the fact that the state funds much of the provision for "home" students. Both research and teaching are essential features of the HE sector, but there

is an issue of balance between them. Prestigious research-led universities now regard their primary function as research rather than teaching, even in arts and humanities subjects. Hence, for example, lecturers are being told to spend 60% of their time on research, and 40% on teaching and administration. The needs of the employment market are not seen by individual universities as relevant in planning teaching provision.

The aims of universities have become much more explicit in recent years. In the past they were defined in generalities, reflecting national goals. Now they are defined by specific key performance indicators, often revolving around a certain league table position, an obsession of vice-chancellors. As elsewhere the difficulty with such targets is the way they skew priorities towards measurable goals and away from unmeasurable, or unmeasured, ones.

Changes taking place in the HE sector over the past twenty years have impacted on the ability, or willingness, of universities to support courses that require intensive teaching. This has advantaged methodology-based subjects where teaching loads can be very light, and disadvantaged knowledge / skills-based subjects where greater contact hours are required to ensure that students graduate with a level of competence acceptable to employers and sufficient to meet professional recognition criteria. Twenty years ago students in sciences typically had up to 30 contact hours per week, including laboratory sessions, and language students up to 20 hours per week. Much of this teaching took place in relatively small groups; for example in "hard" language teaching, such as Chinese and Japanese, interactive language classes require small numbers, ideally 8–10 maximum, to be successful. "Library-based" subjects, such as history, English, philosophy or politics, typically have much lower teaching loads of around eight contact hours per week, sometimes down to one or two hours per week for final year students. Much of this contact consists of lectures in large groups of up to 200 students. The economics of these two types of course are totally different, but this is not reflected in HEFCE's funding regime.

HEFCE has never paid universities according to the actual costs of teaching the subjects concerned, but has taken a "broad brush" approach of roughly banding subjects into four basic fee bands. Until the late 1990s HEFCE protected subjects by linking the fees to specific subjects in a quota system. Universities could close subjects down, but they would then lose the student quota. In the late 1990s, as a result of pressure from vice-chancellors for greater flexibility in responding to changing student demand for subjects, HEFCE agreed to de-link fees from specific subjects: as long as universities maintained broadly the same mix of courses they would continue to receive the same level of payment. This removed any protection for individual subjects. The background to this was rapidly declining per capita student fee income: in the decade from 1989 to 1998 public funding per student fell from a starting index of 100 to 63. Universities were told to make efficiency gains; these consisted of falling staffing ratios (it is not unusual for the staff : student ratio in library-based subjects to be 1: 30–40, double secondary school levels), reduced library and IT provision and building maintenance, and, of course, falling staff salaries. When it was impossible to go further with these "efficiency" gains, HEFCE was forced to agree to universities switching out of higher cost subjects.

At the same time universities were being encouraged to devolve finances to departmental level to bring in the discipline of the market. Departments were credited with what HEFCE paid for the students they taught. This made transparent previously opaque levels of cross-subsidisation. It became very clear that teaching history or English was much more profitable than teaching Chinese or Japanese. Under HEFCE's funding regime it was easy to achieve "contribution rates" (profits) of 50% for the former, but 30% was good for the latter. The fact that graduates in Chinese and Japanese were almost twice as employable as graduates in history and English (according *THES* figures) was irrelevant to the universities and to HEFCE, but not to the country and the national economy.

At the same time changes in corporate governance encouraged by HEFCE increased the power of the executive in universities, and the power of patronage of vice-chancellors. The mantra of responding to the market has given university executives wide scope for reforming their institutions in their own images.

What has happened to my own department illustrates these processes at work. It was originally set up in the late 1940s as a result of the Scarborough Report into the provision of strategically important languages, following intelligence deficiencies during the 1939–45 war. This resulted in a government decision to fund such languages at a small number of centres. Military intelligence was the original priority, but later reports, the Hayter Report of 1961 and the Parker Report of the 1986, emphasised diplomatic and business needs. HEFCE in 1998 provided further support for Chinese studies in a five year initiative under its strategic and vulnerable subject funding, and in 2006 a further five year initiative began. Durham's capacity in East Asian and Middle Eastern languages was supported under a succession of vice-chancellors from the late 1940s until 2003 when a committee chaired by the vice-chancellor, Sir Kenneth Calman, recommended closing the department of East Asian studies in autumn 2007. This was in spite of student applications rising at 10% a year and the department meeting the University's research and teaching performance criteria. It was also in spite of it fulfilling its original planned role of providing skilled specialist graduates. The Vice-Chancellor was reportedly told by GCHQ that they had recruited over two dozen skilled linguists from the department. Graduates also occupy important positions in the wider East Asian world: the British consul-general in Shanghai until December 2006, the current Beijing correspondent of *The Times* and the chief interpreter to the EU ambassador in Beijing are some of the many graduates of Durham's Department of East Asian Studies using their specialist skills to work in East Asia. We would argue this is to the benefit of Britain.

As a result of past planning Durham now has 50,000 volumes on East Asia in its library collection, 400 runs of periodicals, a further 30,000 volumes on Japan provided by a Japanese university, a large collection of teaching materials in the department, and a specialist oriental museum. The library collections will now atrophy as funding dries up (it is tied to student numbers), the departmental library and teaching materials will be disposed of and the staff will be made redundant. Student demand for East Asian studies is meantime dramatically increasing. So why did Durham's Vice-Chancellor decide to recommend this closure? A primary reason given for this was that it was: "not core to the University and not part of Durham's 'brand'", in spite of its 50 year history. However, behind this decision lurks the national policy issues discussed above. In my view this was an erroneous decision from a national perspective, and even from a local one; the higher value of graduates in strategic subjects needs to receive greater recognition. HEFCE offers short-term initiatives but does not provide adequate long-term core funding. It takes the view that provision will develop elsewhere if there is sufficient demand, and there is some truth in this, but this is dependent on sympathetic vice-chancellors. Abandoning fifty years of investment in one place to build up the subject elsewhere is an extremely wasteful and inefficient process, and one which could be avoided by just a small element of planning.

Since there are many difficult issues and vested interests here one can see why successive governments, and other parties involved, have preferred to use the mantra of market forces rather than take planned action. Presently only overseas students constitute a real market; the home student "market" depends on HEFCE's payment system. This has recently been changed to the advantage of "library-based" subjects, arguably moving in the wrong direction. Producing graduates with the right skills is important for the national economy, and an element of planning is necessary to do this. This is recognised in the case of medicine, but not for other subjects. Although HEFCE's primary role is the funding of teaching (on a ratio of 3:1) it is the research tail that wags the teaching dog, especially at RAE time. There may be an argument for separating these two functions to produce a funding body fully committed to teaching.

March 2007

Memorandum submitted by The UK Inter-Professional Group (UKIPG)

EXECUTIVE SUMMARY

The UKIPG is a group of 30 professional and representative bodies and statutory regulatory bodies from a wide range of professions. The UK professions work in partnership with the HE community. Whilst generally interested in HE, their key role is to ensure that practitioners have the necessary knowledge, competence and values to practice safely in the UK.

All HE students must be properly educated, not just narrowly in the science of their discipline. HE is expected to provide intellectual challenge, capacity for reflective learning, and a scholarly and ethical foundation for future work. In addition, professionally-related courses must be properly resourced, with up-to-date equipment and professional role-model staff, to achieve "day one competences" in new graduates. Some of this work will be post-graduate and not all will be for school leavers. Workforce development is equally important.

The sub-heading "University Funding" is seen as a symptom of a subconscious problem; HE is much wider than universities. Much is provided in the FE and work-based context at sub graduate, undergraduate and post graduate levels. There must be some rational comparability in approach (if the various sets of funding are to remain separate) between that taken in England by HEFCE and LSC, and that taken by those two English bodies and the approaches taken by their counterparts in other parts of the UK. More care is needed to balance the effect of research and teaching funding to ensure that the teaching of undergraduates does not become a "distraction" for academics from the financially and personally more rewarding RAE work.

Current HE funding models are excessively focussed on full-time undergraduate programmes for young people. Without further absolute increases in funding, some reallocation is required to promote entry to vocational higher education later in life, perhaps through phased progression via "technician" and "associate professional" work, and without discrimination against part-time and distance students. Finally on funding, UK HE must look to its attractiveness to potential UK "home grown" academics of the future.

The "HE structure" needs to reflect issues raised under "funding" relating to staged progression through HE, rather than excessive focus on young first-time entrants. Also the HE structure must be reviewed in the context of the overall and complex education and training structure. A key role for the Inquiry is to question the overlaps and tensions between the tradition HE structures and those implicit in the roles of National Skills Academies, Sector Skills Councils, those responsible for National Occupational Standards, those applicable to different professional areas (eg from the CMO/Foster reports on medical and healthcare professions), Directive 2005/36EC, and now Leitch.

"Bologna" offers opportunities for UKHE to show the comparative value of UK HE qualifications. It needs to be progressed with more enthusiasm.

INTRODUCTION TO THE UKIPG

1. The United Kingdom Inter-Professional Group (UKIPG) has been in existence since 1977 and currently has a membership of about 30 professional organisations, representative and regulatory bodies from a wide range of professions. Its objectives are:

- To promote recognition of the importance and raise the profile of the liberal professions in society to government, the media and consumer organisations;
- To consider proposals for legislation or administrative action likely to affect the professions, to identify matters of common concern and, where appropriate, make joint representations and take actions;
- To act as a forum for exchange of information on any topic likely to be of interest to a substantial proportion of members; and
- To provide opportunities for members of the Group to present the views of the professions at meetings with individuals with influence and standing in a particular area of activity of interest to the professions.

2. About 6 years ago, UKIPG published a position statement on the educational role of professional bodies, which set out some of the key principles behind professional regulators' involvement in education and training. In all cases, the UKIPG members, whether statutory regulators, professional bodies operating under Royal Charters, or simply incorporated professional associations, work within common codes of ethics and values, and generally with "objects" which require them primarily to work for the public benefit. They are concerned with the objective benefit of individual citizens and the "UK PLC", and not primarily with the benefit of their professional members or registrants, although that may well also be a consequential outcome.

3. In this context, the UKIPG member bodies have a role in:

- Providing careers information and guidance for those considering professional careers.
- Formal accreditation of undergraduate (and some post-graduate) programmes which are either the prescribed qualifications for a statutory qualification to practice or the recognised educational base for progression to a full professional qualification.
- Specifying, accrediting, and sometimes delivering, post-graduate level programmes for continuing
 professional development or for specialist or advanced practice.
- Working with QAA and the HE community on the academic infrastructure, such as programme specifications and subject benchmark statements.

4. The Group comprises representatives from each of the Professional and Statutory Bodies in membership, drawn from both the elected / appointed members of governing bodies, and from employed specialist staffs. The wider group is advised by a standing committee of education specialists.

5. The Professional, representational and regulatory bodies in UKIPG membership work in partnership with the education sector. Because of this relationship, there is a wide range of data, mostly held by individual member bodies and relevant to their related academic disciplines and modes of professional education and qualification. Many of the data are sourced from UCAS and HESA, but much evidence is collected directly by formal visits to HEIs and other providers. As the range is both wide and discipline specific, it is best taken from evidence provided by individual professional and statutory bodies. This response from UKIPG will address wider policy issues affecting most UK professions.

THE INQUIRIES' AGENDA AND QUESTIONS

6. The Inquiries address *the future sustainability of the higher education sector: purpose, funding and structures*, and the *Bologna Process* in the context of the European Higher Education Area. In the primary area of interest of the professional bodies, the European dimension needs also to be seen in the context of Directive 2005/36EC on the Recognition of Professional Qualifications, particularly as the final (and inevitably compromise) version contained some nuances of "level" which do not sit comfortably with UK HE generally.

7. The Professional, representational and regulatory bodies in UKIPG membership work in partnership with the education sector. Higher education provides essential educational routes towards professional qualifications, while the professional bodies represent their professional areas and set the standards on which the educational programmes are based. FE provides valuable opportunities which enable more diverse range of candidates to progress towards professional qualifications. It is therefore essential that an Inquiry of this nature should take a holistic view of post-compulsory education sector in the UK.

8. Within the UK context, HE cannot be considered in isolation from the FE and work-based learning sector, and HE cannot be considered only from the perspective of the HEFCE-funded "English" perspective. The environment is becoming increasing convoluted, on the one hand with the "chinese wall" between HE and LSC funded provision in England (eg in the context of apprentice frameworks requiring significant elements of HE as their "Technical Certificates"), and the almost parallel infrastructure of the Sector Skills Development Agency, Sector Skills Councils and now National Skills Academies, which

themselves sometimes cause overlap and tensions with the education, training and competence activity required to be undertaken by professional and statutory bodies. There is an equal need for clarity between the emerging work by QCA on the Qualifications and Credit Framework and the proposed European Qualifications Framework on the one hand, and the Framework for Higher Education Qualifications and European Credit Transfer System in HE.

9. The educational map of the UK has become increasingly complex since devolution, with varied awards, qualifications and credit frameworks, and funding policies. It is not clear from the terms of reference whether this Inquiry is addressing higher education only in England or more widely. The review would be of greatest value if it adopted the broadest possible perspective throughout the UK.

10. The UKIPG believes that it is important that both Inquiries take cognisance of these issues, which do not appear explicitly in the current terms of reference.

THE SPECIFIC TERMS OF REFERENCE

A. The Role of Universities over the next 5-10 years

11. This section asks what students want from universities, what employers want from graduates, and what should the Government, and society more generally want from HE. There is no single comprehensive answer from the professions, because the entry modes are so different. All categories expect the "HE experience" to be truly educational; to lead people out from where there are and open up new horizons though acquired knowledge, understanding, skill and attitudes. Thus, whether a HE course is strictly vocational from the beginning (eg medicine), one that has strong vocational roots but is taken by many as a general education (eg many of the science, engineering, technology and language courses), or one which is essentially study in depth of a subject of interest at the time, it must:

- a. Engage students in independent thought, research and argument;
- b. Develop a sound understanding of the essential knowledge base of the relevant disciplines;
- c. Motivate students to challenge, learn, and learn how to learn; and
- d. Develop a maturity of purpose, a scholarly approach, and an ethical foundation for future life and work.

12. It is UKIPG's view that this is what students, employers and the wider community really require of higher education. When all of the currently fashionable role or job-related abilities have become obsolescent, it is the graduates' true education that will enable them to adapt to new circumstances, environments and technologies. This must be the essential outcome of undergraduate HE.

13. In the context of sustainability of HE, the views of "students" must be further divided:

- Prospective students, whether still at school, in FE, at work, or later in life, want realistic and informed guidance on what to expect and what are the likely consequences of their choices. Some courses, which sound interesting and relevant and seem to keep options open, may be too general as a foundation for any one discipline. Some location choices may be financially preferable, but will limit the opportunities for professional developmental experience. Much better guidance needs to be available, especially that which is not founded on the experiences of a previous generation or influenced by the potential benefit to the guidance provider. The wrong choice of HE can be financially and motivationally devastating.
- Current students, whether on a vocationally-specific or more general course, do want value for money, not in a narrow consumerist sense but in true opportunities for learning in ways which match their learning styles and circumstances. Whilst a minority of very able and emotionally tough students could always cope with a "take it or leave it" approach, the wider cross-section attracted into HE by the current targets may need more help and differentiated provision. The worst case is to attract more students into less well provided programmes, and for them to achieve mediocre or poor outcomes. Wider access does not simply mean economies of scale; quite the opposite.
- Immediate past students need access to structured graduate training and development programmes, which assume that new graduates will be inexperienced. The current recruitment attitude, and not just financial imperatives, tends to drive students to gain experience of any kind of work for a CV, sometimes to the detriment of real and relevant study and placement. Even HE programmes allegedly designed specifically to meet employment needs, such as Foundation Degrees, are often found to be weak at providing realistic work-based learning for lack of sufficient employer engagement.

14. Some specific programmes must seek to achieve a range of competence wider than the general outcomes expected of all HE, particularly those programmes which lead to a qualification to practice. This will be over and above, and not instead of, the general educational outcomes set out in paragraph 11. Such programmes must be additionally resourced in terms of teaching and learning contact time (usually a longer

course eg a 4 or 5-year rather than 3-year degree), using industrial or professional standard equipment, and with staff who are themselves also competent practitioners and so able to be professional role models in terms of competence and ethical conduct.

15. The added cost, complexity and specificity of outcomes of professional courses may, in many cases, make it appropriate for them to be delivered as post-graduate enhancements to relevant first degrees. Access to this post-graduate education must be considered as important as initial access, and funded and supported appropriately.

16. As with everything else in the modern world, higher education is subject to global competition. Higher education is meant to be elite and challenging; otherwise it will not survive in a globally competitive environment. On the other hand it has to be flexible and adaptable, not assuming that one model will suit all purposes. Access, participation and engagement with society will be enhanced through innovative provision, which enables people to progress in stages through the various levels on the FHEQ at different stages of life, and not simply by opening the gates to more full-time 19-year-olds, irrespective of preparedness or motivation.

17. The true current HE target, across the range of HE levels from Higher National to Doctorates by the age of 30, is quite different from forcing ever more young students into pseudo-academic courses immediately on leaving school, thereby delaying the experience of life and work sought after by employers.

18. The time has now come for the HE target to be reviewed in the light of experience and taking into account the opportunities provided by further education. Updated targets could then be established, with appropriate funding, which provided more realistic learning opportunities for the young people of the UK after they have completed compulsory secondary education.

B. University Funding

19. The Inquiry is into "higher education" but this sub-heading is focussed, perhaps subconsciously, on universities; there are other "players" in HE, particularly among the FE Colleges, professional bodies, and some private providers. In his report about a decade ago, Dearing was conscious of a different way of funding HE from FE and other work-based routes. In terms of what government funds to what level, there needs to be some logical connection in the approach to LSC and HEFCE funding of teaching and learning, and of student support, (in England, and the equivalents elsewhere). There needs to be some consistency of approach to the appropriate shares of funding between the state (for the common good), the individuals (for their own lifelong personal and financial benefit), and employers for the direct subsidy provided by educated and skilled people entering their businesses. The Inquiry should challenge HE funding from this overall perspective.

20. The second area for comparative inquiry should be the balance between funding for teaching and for research. The current process causes tensions in both directions. On the one hand, the "gearing" to departmental and institution funding provided by top RAE rankings can make the quality of the undergraduate learning experience be a much lower priority for academics than the research activity needed to achieve high RAE ratings. Ordinary students almost become a "drain on the system". Top rated research universities, by virtue of their good name and excellent "market value", may well be best placed to gain non-public funding to "back the winners", but—if others will do this—it may be more useful in the long term for public funding to "back the outsiders", enabling the research base to increase and flourish in non-traditional areas, particularly those relating to applications and practice compared with pure science. Perhaps it is in this area of practice-related research that the professions could contribute most effectively to assessment for funding of research activity.

21. Currently central funding for teaching and student support is excessively focussed on the first undergraduate experience, whether or not this happens to be the most useful. As argued earlier, those seeking to enter specific professionally-relevant HE, either at post-graduate level or again at undergraduate level, now to take a professionally qualifying course, find it difficult to do so. There must be a balance to be achieved by an "equity" argument, which simply provides three years HE for all who wish to enter, and a more focussed approach which transfers some of that resource to fund those who, later in life, wish to qualify for a socially and economically useful profession.

22. Funding for part-time students should be part of the equation, enabling a more diverse population to progress towards degree level study, and subsequent professional development, without incurring the debts that appear to continue to discourage wider participation. Perhaps it would be worth considering whether repayments of student loans, of deferred payment of fees, could be offset by payments in kind, such as through employment in socially valuable but less economically rewarding work.

23. Finally in this section, the funding regime must, without being xenophobic or racist, enable and encourage "home grown" talent to progress through the highest levels of HE and post-doctoral work, to produce the next generation of world-class researchers and academics. A system which is so heavily reliant on non-UK residents, as is the case currently in many academic disciplines, is unbalanced.

C. The Structure of the HE Sector

24. Some of the questions raised under this heading have already been addressed in the previous section on "funding". It is probably doubtful that all aspects of the current HE sector will be sustainable in the future. The introduction of higher and repayable fees is a market force which will increasingly come into play, alongside the other "market force" of an increasing proportion of "graduate entrants" seeking work. There is already the paradox that employers frequently bemoan the dearth of quality UK graduates (and increasingly rely upon international recruitment) whilst new graduates bemoan the dearth of jobs, the limited range of graduate training schemes, and the difficulty of getting past the "cannot do anything for the first time" attitude of many recruiters seeking a wealth of experience from the inevitably inexperienced. It is probably too soon for statistically significant data to emerge from UCAS and HESA, but anecdotal evidence is beginning to emerge, both in UK and elsewhere, to show that "long and hard" courses are attracting fewer applicants.

25. With demographic trends of fewer 18-year-olds and towards the later assumption of family responsibilities, there could well be a trend towards a more stepped approach to higher level education and work. This approach could also more appropriately assist the "opportunity and diversity agenda", as proportionally more people might go into "technician" or "associate professional" level work initially, and wish to progress to full professional level through "bite-sized" steps. This could increase the importance of "HE in FE" and of flexible, part-time and distance learning, as well as of work-based and professional providers. All of higher education need not be structured within universities.

26. It seems strange that the Committee's Terms of Reference make no mention of the impact of other education and training strategies and structures, such as the role of Sector Skills Councils and their work on Sector Qualifications Strategies, National Skills Academies (whose recently launched prospectuses equally target HE), "Train to Gain", and the role of lower levels of HE (eg Higher Nationals and Foundation Degrees) as Technical Certificates in Apprenticeship Frameworks.

27. There is an urgent need for clarity in the respective roles of professional regulators (particularly those of statutory origin), of those working on National Occupations Standards under the auspices of SSDA, of National Skills Academies, and of those engaged in the Academic Infrastructure work of QAA (eg on Subject Benchmark Statements and Programme Specifications). In many professional areas, confusion reigns—this Inquiry offers the opportunity to challenge government about some real "joined-up thinking". In medicine and healthcare, the educational recommendations of the Chief Medical Officers' Report and the Department of Health's "Foster Report" need to be included in the "HE structure" debate.

28. Any review of the structure of HE must take into account the tension between the freedom of the universities to do what they do best, and the longer term needs of the UK. Market forces alone must not be the sole arbiter of the "safety" within the structure of what HEFCE has identified as Strategically Important and Vulnerable Subjects. Moreover, the inquiry must not limit itself to "within HE". There must be at least a review of whether the National Curriculum (as currently applied and sometimes "disapplied") is starving HE of potential students in the basic sciences and foreign languages.

29. Finally, the structure must be influenced by the outcome of the parallel inquiry into the implications of the Bologna Process for UK HE. However, that inquiry must also see UK and European Higher Educational Area education both in the broader context of the global HE market, and in the "regulated by Directive" environment of professional qualifications within the EU.

INQUIRY INTO THE IMPLICATION FOR UK HE OF THE BOLOGNA PROCESS

30. The UKIPG-represented professions are aware of the Bologna Process and are generally supportive of the ten "action lines". Historically, there has been difficulty in resolving practical and cultural differences arising from different traditions both of HE and of professional regulation across Europe. However, in professionally-related HE, many of these issues have been overcome, either through the voluntary work of pan-European professional associations, or by the detailed work leading to the adoption of Directive 2005/ 36EC and its predecessors.

31. The Bologna arrangement of originally two cycles (now three to include doctorate level) has generally served UK HE (and its users) well. However, all accept that there are exceptions. There are occasional misconceptions that it would be beneficial for "Bologna purposes" to divide artificially the long vocational HE for medicine, dentistry and veterinary medicine into two parts; they are more "fit for purpose" in their currently integrated mode. Some rationalisation of titles may aid comparability for those few wishing to use these very special courses other than for their vocational intention, but that is a trivial issue. Recognition for professional purposes is covered by the Directive.

32. There have been some other anomalies, with reference to the first cycle and second cycle "Bologna" model, of a number of UK professional HE courses. These include:

- The 4-year "undergraduate masters" courses, which are the extended and enhanced undergraduate course intended for professional practitioners in the disciplines (eg MChem, MEng, MPharm etc);
- The "one calendar year masters" (longer than one academic year but less than two), which are the means of converting from a generally relevant degree to a professional one in some disciplines;

- The five-year two-phase degree in architecture, with an intercalated period of professional learning in a practice;
- The 5-year "bachelor" degrees in veterinary medicine and dentistry, already mentioned;
- The recognition that some professionally useful UK HE, at Intermediate level in the FHEQ (such as HND, HE Dip and FD), does not easily fit into the Bologna "cycle system"; and
- The need to see that UK HEI administration can formally record the professional status of accredited or approved professional HE on Diplomas Supplements. It often defaults because if internal communication difficulties between Schools and Registries.

33. The Bologna Process does offer, for the first time, the opportunity of comparability of HE qualifications across all the participating countries, providing clarity of qualifications to candidates, professions, employers as well as government within a three cycle system. Combined with consistent creditrating processes, this should significantly strengthen the opportunities for EU citizens to work on an equal basis throughout the enlarged Europe.

34. It is, however, regrettable that relatively little progress appears to have been made in the UK towards the Bologna ideal since 1999. Indeed, it appears that in some cases, government policy has led in the opposite direction, making the attainment of the Bologna Process more difficult. The anomalies mentioned in section 22 above were initially addressed by the QAA but have not been resolved. The Inquiry should assess the action that need to be taken to ensure that the UK can become a full partner in the Bologna Process by the target date of 2009, and ensure that the UK can benefit from the reforms that this will entail. This can be done without prejudice to the special position of professional qualifying programmes regulated by Directive 2005/36EC.

December 2006

Memorandum submitted by UNISON

BACKGROUND

UNISON is the largest education union in the UK with over 300,000 members across the sector. Of these around 50,000 work in Higher Education Institutions (HEIs), representing all grades of staff from manual staff to senior managers. UNISON has a keen interest in realising the potential of the HE system and, within that, the potential of all its' workforce. We want a high performing workforce that will maximise learner attainment.

The breadth and nature of the sector is often mis-understood—for instance some of the questions suggested as part of this inquiry refer only to "Universities", yet the HE sector is wider than this and includes for instance academies of art and music. The cultural differences across the sector are also often too easily generalised. There are undoubtedly differences between the old and new universities—however with in these and within the other sub groups (the Russell Group, the 94 Group etc) institutions have differences that affect both the experiences of students and staff.

Fewer than half the staff in universities are academics (around 45%) yet this is not obvious from general public debate, nor indeed from national statistics. Until 2003 the Higher Education Statistics Agency (HESA) only kept workforce data relating to academics and even now define support staff in the negative as "non-academic staff". Similarly, one of the main official measurements used in the sector: student-staff ratios, measures only the numbers of academics when referring to staff. This leads to perverse decisions when institutions are forced to re-structure. When employers have to adjust staffing it is more often than not support staff that are adversely affected, as HEIs seek to protect their student-staff ratios, meaning that junior academics end up being asked to take on administrative work and bureaucracy, this impacts on the work they should be doing and could be better done by professional administrative staff.

Of course fundamentally students go to HEIs to get an education and the academic role is key. However to deny the existence of others who also make the student experience vital (see examples below) would be a serious error. The Government states (most of the time) that HE is not in the public sector, but clearly it does not sit in the private sector either. This ambivalence allows some institutions to trundle along, on one hand missing out on government forced (and sometimes negotiated) workforce reform, whilst on the other protected from market forces. It is interesting to compare these to the changes in the re-profiling of the workforce across the NHS or more relevantly re-structuring in schools. Those who would argue that all is fine and should be left alone seek to create an artificial debate, as between academics preserving the purity of universities as intellectual bastions that stand outside normal realities and "managers" who are portrayed as bureaucrats trying to drive HEIs into the arms of the market. We recognise from our experience across the public, private and voluntary sectors that sometimes it is necessary to introduce measures to adapt and survive. It is how such change is arrived at and how involved both the workforce and students are in the process that dictates as to how successful changes are. One question this inquiry does not really ask is about the leadership in the sector and whether it is up to the job. Our experience is that historical "Buggins turn" promotion based on academic reputation rather than management skills has sometimes caused problems within HEIs. In a 21st century competitive global economy those in charge need to be skilled and competent managers. The increased movement of international students, with access to the web and information on Institutions, means that HEIs have to pitch themselves accordingly. This calls for savvy and knowledgeable leaders. This obviously does not rule out academics as senior managers, but nor does it mean they automatically should be the leaders. What it does mean is that senior managers need good management skills, structured support and continued professional development and training to lead HEIs. The role of the Leadership Foundation is crucial in this. Good management is not just about the top, it is engendered throughout an organisation, it is inclusive and engages managers at all levels of an institution. The Leadership Foundation has made a good start but its focus currently is at the top and needs to be extended to engage lower level managers.

The role of universities over the next 5-10 years and what students want

What students want from HEIs will vary depending on their age, their life experience and their reason for choosing their particular institution. For example the views of those that are studying for a chosen vocation will differ from those studying to get a qualification in a subject that interests them, but have not yet decided on a career. However we can surmise that all want a high quality education and will want it in a "safe" and supportive environment without prejudice or discrimination. They may also have more vocational requirements and be seeking employability skills and career advice. Some international students may want English language support and those with disabilities will require support mechanisms to assist them. Not all of these are the remit of academics but are vital to students achieving their potential.

In particular support staff provide students with the necessary environmental context to feel able to concentrate on their learning. For example cleaners in Sheffield Hallam are being trained in counseling as often they can be the first port of call for new and lonely students as they need to go into student dwellings to clean them. In other institutions our security guards make sure that students are protected from outsiders who would seek to steal or abuse them and often are called to make sure they are safe after they have overdone things.

WHAT DO EMPLOYERS/SOCIETY WANT FROM GRADUATES?

With an increased supply of graduates employers need not just an educated workforce they want well rounded human beings as well. This is more than just producing automatons that pass exams. It involves the necessary maturing of our future workforce leaders appropriate for a high skills economy. We also believe that there is a need to widen participation, however there is a need to ensure that resources are in place to deliver this; the academics to lead the learning and research and support staff that will make it happen by supporting vital services such as IT and library. This needs significant investment to ensure that hardware, books and web based services are up to date to allow students to work at the forefront of technology. Of course we should aim for a stable, internationally competitive, HE sector, built on significant targeted government funding.

STUDENT FUNDING

It is ridiculous to suggest lifting the cap on fees at such an early stage when the full impact of the current system has not worked through nor been subject to a review. Currently student intake figures have been distorted by the comparatively recent introduction of the new policy. Our current view is that the present policy will dissuade students from pursuing HE, and those that do choose to go will be saddled with massive debts which will add to the debt culture in society in general.

Lifting of the cap will extend the divisions and differences between the wealthy and poorer institutions. In the current situation most universities are charging the maximum for most courses because to charge less than a competitor might be read to indicate that your degree is worth less than theirs. If the cap is lifted some institutions will raise their fees: no doubt Oxbridge, the Russell Group and others with reputations in particular areas. However other Institutions will have to weigh up the balance between increasing fees and causing a reduction in recruitment. This could cause a multi-tiered system in HE which if picked up by the employers could lead to the demise of some universities in the lower tier(s) as employers will prefer candidates from the more expensive institutions. Fewer university places will result in a problem for the government's stated aim of increasing participation in HE. In addition it would add to the already increasing debt burden in society and would almost certainly not increase student recruitment from the lower income families. Part-time students either paying their own way or being sponsored by employers would most probably have to think twice about embarking on a course and consider whether it was likely to be value for money in their lifetime which may well discourage older people from re-training. Changing demographics will also mean fewer school leavers; increasing dependence on mature and international students.

RESEARCH

At the time of submitting this paper we are working through the proposed changes to the Government's reforms on measuring and funding research. On the one hand we accept that this should make the process less bureaucratic, however the proposals on metrics with its focus on inputs raises some issues and we share the concerns of those who suggest this could increase the disparity between rich and poor departments.

We believe that an internationally-competitive research capacity is vital and full support increases in the EU budget to greatly improve the quantity and quality of research via the 7th EU framework for research and technological development.

We would also support moves to ensure greater cross border quality, although the current proposals do not seem to be refined enough and may lead to tenuous cross border projects that are based on academic/ institution links rather than strategic well planned partnerships . Unfortunately, as ever support staff have been forgotten. The 6th programme did not take into account the need for proper administration and technical support. Consequently researchers were busy doing administrative functions rather than concentrating on research—this wasted their time and resources and limited opportunities for support staff. The outline 7th programme followed this trend, however our sister union HK-STAT (Denmark) worked with Britta Thomsen MEP to submit amendments with a view to building in administrative needs. Unfortunately these amendments were not agreed even though we alerted UK MEPS on the relevant committee of the importance of this. We are building an EU network of support staff unions to ensure that future EU policy takes account of this and will be targeting the 8th programme.

HE IN THE FE SECTOR

Expanding the role of HE in the FE sector is welcome as foundation degrees provide opportunities for young people who might not otherwise have them. It should also provide them with gateways to honours degrees. However we have concerns around resources available to FE colleges. Particularly in libraries, where there are issues over stock and staffing and restricted opening hours. We have had reports that some FE colleges currently have access to their local HE institution library for students on courses that are validated by them and concerns have been expressed that if colleges validate their own degrees these might not be withdrawn. Our FE members also report concerns around staff training and added demands.

HE STRUCTURES

Of course the Government has a role in shaping the sector. It is a nonsense to pretend that this is a normal market. A purely free market that ran only courses that make a profit would see a range of science courses decline and die. The future of our long term technological base is a major factor in our long term international economic competitiveness. The Government should set out long term strategies for ensuring the economic future of the country. The Government has to have a role in planning steering and shaping the structure of the sector. A pure free market would be disaster.

December 2006

Memorandum submitted by Universities UK

INTRODUCTION

1. Universities UK is pleased to submit evidence to the House of Commons Education and Skills Committee Inquiry on the future sustainability of the higher education sector: purpose, funding and structures.

2. Paragraphs 4–35 outline Universities UK's view on the role the higher education sector plays in respect of students, employers and the Government, and offers views on how this might develop in the next 5–10 years. Paragraphs 36–51 address issues relating to university funding, and paragraphs 52–61 deal with the structure of the UK higher education sector.

3. Universities UK believes that the following principles should continue to underpin the development of higher education policy in the UK:

- Autonomy: The strength of the UK higher education sector is founded on its autonomy. Our success contrasts with that of centrally managed systems, such as those in many European countries.
- Shared responsibility for funding: We support the Dearing principle that all who benefit from higher education should contribute to its costs, including individuals, employers and the public purse.

- Support for diversity: We have a broad higher education sector in the UK in which institutions
 pursue, and excel in, a variety of different missions. This diversity is beneficial and should be
 recognised and supported.
- Sustainability: For too long the higher education sector in the UK has traded at a loss on teaching and research activities. As government asks more and more of our higher education institutions, both parties have a responsibility to ensure that current activities do not compromise the future health of the sector.
- Stewardship of the reputation of UK higher education: Our hard-won reputation for world-class teaching and research must not be taken for granted. Universities and government have a shared responsibility to protect the reputation of UK higher education both at home and abroad.
- Expansion and market responsiveness: The sector has expanded in all areas during the last 20 years, and has met all government targets. It will continue to grow in response to changing student demand, and also to respond to the needs of the diversity of markets in which it operates.

The role of universities in the next 5-10 years

4. As the Chancellor of the Exchequer made clear in his statement to parliament on the Pre-Budget Report 2006 the key to the UK's future economic competitiveness lies in our ability to "out-innovate and out perform our competitors by the excellence of our science and education".¹²⁵ The UK's universities play an increasing role in meeting the economic challenge the Chancellor described.

5. But in addition to this, our universities will be central to the UK's efforts to meet a much wider set of challenges to the UK. Alongside their core mission of delivering world-class teaching and research, UK universities have a key role to play in enhancing social mobility and improving the life-chances of individuals. By extension, universities can also contribute to social cohesion and this, in turn, may produce additional benefits, including reducing risk to national security by promoting better understanding, tolerance and integration between different sections of society.

6. Beyond these fundamental contributions, universities have a growing role in equipping an ageing workforce to be more productive for longer, understanding and reversing the effects of climate change, and contributing to efforts to address the threat of global terrorism.

7. At the same time, to remain successful universities must be able to respond to both student and employer demands. The UK's universities already make a massive contribution on each of these fronts.

Students

8. A major challenge for universities in the future will be delivering a high quality learning experience that both addresses and manages the demanding expectations of highly diverse, technology-literate students. There is a well-documented tendency for students to see themselves as customers, with accompanying demands for a personalised service and high quality outcomes. This tendency will inevitably increase following the introduction of higher fees, even if they are paid for after graduation.

9. The UNITE *Student Experience Report 2006* reported that students' main motivation for going to university was the desire to learn and to gain qualifications for a successful future career.¹²⁶ 70% of respondents said that their decision to go to university was motivated by the desire to gain qualifications, and 59% cited the desire to improve their chances of getting a job.

10. Evidence shows that demand from employers for graduates remains strong. A study undertaken by PricewaterhouseCoopers for Universities UK, suggests that a graduate will earn over 20% more during their working life than an individual with two or more A levels.¹²⁷ This premium has been maintained throughout the period of expansion in student numbers. The average starting salary for a graduate in 2006 was £21,000.

11. On top of the personal financial gain, studies have shown that graduates are likely to have better health, be more racially tolerant, are more likely to be involved in their children's education, and are more likely to vote.¹²⁸

12. High post-graduation employment rates, high completion rates compared to other OECD countries, and high reported satisfaction rates amongst both UK and International students¹²⁹ indicate that universities are generally successful in meeting student expectations.

¹²⁵See full transcript on the Treasury website http://www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr06/ prebud_pbr06_speech.cfm

¹²⁶UNITE Student Experience Report 2006: http://www.unite-group.co.uk/data/Research/default.aspx

¹²⁷Forthcoming policy briefing by PricewaterhouseCoopers to Universities UK.

¹²⁸HEFCE (2003) *Revisiting the benefits of higher education*, Higher Education Funding Council for England.

¹²⁹See UNITE Student Experience Report 2006 and UNITE International Student Experience Report 2006 both available at: http://www.unite-group.co.uk/data/Research/default.aspx

13. However, the student profile is increasingly diverse. The 'typical' 18–21-year-old studying away from home for an undergraduate three years honours course is no longer the norm. Universities have made substantial efforts to widen participation in social terms, and it is important to note that 40% of all students study part-time, and 68% are classed as "mature" (21 and over).

14. Demographic change means that the number of 18-year-olds will decrease after 2012. 70% of the workforce of 2020 have already completed their compulsory education. These two factors, taken together with the increasing need to ensure that the skills of the workforce are kept up-to-date to ensure that we can stay ahead of competitor economies, mean that universities will need to continue to widen their student base.

15. This means that the demands on universities to meet student needs are also changing. Universities UK's study *Part-Time Students in Higher Education: Supporting higher level skills and lifelong learning*¹³⁰ demonstrates the wide range of flexible academic provision that has been developed by higher education institutions in response to diverse student needs, offering what amounts to personalised higher education. This is a trend that is likely to continue.

16. As the student base expands and widens, universities will increase the range of courses they offer. Universities UK's publication *Higher Level Learning: Universities and employers working together* showcases some of the ways in which universities and employers are collaborating to offer courses which fit graduates for specific employment opportunities. These vocationally focused courses, frequently labelled "Mickey Mouse" by a sceptical media, form part of the higher education sector's response to both employer demand for specially trained students, and student demand for higher education which will lead to successful careers.

17. There are a number of ways in which the Government could provide further help to universities in responding to student needs. Of these, increasing financial support for part-time students would be a particularly worthwhile step. Although the Government has already brought forward measures to support part-time students, relatively few part-time students currently benefit. In particular, Universities UK has asked the Government to reconsider support available to part-time students who study less than 50% of the full-time equivalent, as they are currently excluded from state support.

Employers

18. The role of employers in contributing to the future of UK higher education is the element of the "Dearing Compact" on which the least progress has been made. Recent government thinking has increasingly focused on how employers can be more successfully engaged in higher education—and persuaded to make a greater contribution to the costs of education at this level. The recently published report by Lord Leitch, *Prosperity for all in the Global Economy*, represents a major contribution to this debate. Universities are demonstrating increasing enthusiasm for partnership with business and industry—both in terms of teaching and knowledge transfer. But there is no doubt, and recent history has demonstrated, that it is easier to identify the need to engage employers than it is to deliver real change. Major challenges include:

- Identifying genuine employer demand (particularly where there is a large number of bodies claiming to represent employer interests);
- The higher education sector's need for sustainability versus sometimes rapidly changing employer priorities; and
- Balancing the interests of employers with those of students—who may legitimately choose to study courses which they feel will equip them with generic, transferable skills rather than careerspecific ones.

19. Higher Level Learning: Universities and employers working together, mentioned above, demonstrates how universities are increasingly responsive to business needs. Indeed, according to HEFCE's most recent Higher Education Business and Community Interaction Survey, 88% of HEIs offer short bespoke courses for business on campus, and 80% offer similar bespoke education at companies' premises.¹³¹ 78% of HEIs report that employers are actively engaged in the development of content and regular reviewing of curriculum at Level 4 or 5 of a 5 point benchmark scale (ie the highest level).

20. There is a long history of successful collaboration through work placements as part of undergraduate and professional programmes. For example, "sandwich" students currently account for 7% of the undergraduate student population.

21. As Lord Leitch has recently recognised, there is no doubt that the sector will play an increasingly important role in engaging with employers to provide the higher level skills essential to meeting the economic challenges facing the UK. In a recent development, HEFCE is currently funding three Higher Level Skills Pathfinder projects, supporting direct links between HE providers and employers to develop flexible provision centred on the needs of employers and employees.

¹³⁰Universities UK (2006): Part-time students in higher education: Supporting higher level skills and lifelong learning, London. ¹³¹HEFCE (2006): Higher education-business and community interaction survey 2003–04. 22. However, there are some major issues, which universities, employers and government will need to address if we are to achieve substantial growth in provision developed in collaboration between the higher education sector and employers. For example, the higher education sector's recent experience of working with the NHS highlights the financial risk involved in developing provision for a big single employer. Cuts in training budgets have led to substantial reductions in the number of nursing places funded in 2006.

Government

23. The Committee has asked what government, and society more generally, should want from HE. The major contribution made by universities to a range of national strategic priorities is briefly described in paragraphs 4–7 above.

24. Universities UK would argue that it is in the national interest to have an internationally competitive higher education sector. The benefits accrue to government, individuals, employers and society as a whole.

25. Despite relatively lower levels of investment in UK higher education than in many of our competitor countries, the UK higher education system continues to perform well in global terms. According to the Shanghai Jiaotong index, the UK has two universities in the top 10, and 11 in the top 100.

26. In terms of teaching, our reputation as a world leader is confirmed by our strong performance in the recruitment of international students. The UK attracts 12% of all international students, second only to the US.

27. In research, with only 1% of the world's population, the UK produces 9% of the world's scientific papers and 13% of the most highly cited. It wins 10% of internationally recognised science prizes and has produced 44 Nobel Prize winners in the last 50 years. UK research productivity is superior to that of the US: in the UK academics produce 16 research papers for every £1million invested, compared to 10 in the US and 4 in Japan.

28. The contribution made by UK university research to society in a wide range of fields is documented in Universities UK's publication Eureka UK.¹³² It is worth noting that many of the innovations used on a daily basis documented in Eureka UK began as blue skies research in universities.

29. UK HE also makes a substantial contribution to the wealth of the nation. The rate of return on investment by the Exchequer in higher education students is 11%, and the UK higher education sector's total contribution to the economy amounts to £45 billion a year according to Universities UK's recent study *The Economic Impact of Higher Education Institutions*. UK higher education exports are also a valuable source of income to the nation, worth £3.6 billion to the UK economy.

30. Over the next decade, as both the Government and the Leitch Review have recognised, universities will play a critical role both in ensuring that the UK remains economically competitive, and in equipping an ageing population to be more productive for longer. Comparisons with our major competitors, and projected employer demand, indicate that further expansion of higher education will be necessary. Lord Leitch has recommended that the UK should aim for 40% of the adult population to have at least a Level 4 qualification by 2020, an aspiration that Universities UK has endorsed.

31. In order to increase participation in higher education, we will need to continue to widen participation. Much effort has been invested by universities in reaching out to students who might not otherwise consider higher education. Some of this work is documented in Universities UK's series of publications From Elitism to Inclusion, Social Class and Participation, and From the Margins to the Mainstream.¹³³

32. The key to reaching 50% participation and to widening participation in social class terms lies in increasing staying on-rates post-16 by improving school performance. Whilst 90% of students with 2 A Levels already go on to Higher Education, the UK has one of the worst staying on rates for education at post-16 in the developed world, with only seven other OECD countries reporting lower enrolment figures for 15–19-year-olds. Universities have been working hard to attract students through alternative routes (eg. by recruiting students in the workplace to Foundation Degrees).

33. Universities UK has welcomed the Leitch Review and its proposal that the Government's expansion targets should be broadened. The 40% attainment target for Level 4 qualifications and above is ambitious, but Universities UK considers it helpful to go beyond the Government's current focus on 18–30-year-olds, as this recognises that lifelong learning and older learners will play an important part in achieving the highly skilled workforce needed if we are to remain a competitive global economy. In this respect it is worth noting that universities have been very successful in providing education to mature students—nearly a quarter of the labour force achieve a higher education qualification when over the age of 25.

34. The provision of appropriate financial support for students is also key to encouraging greater participation in HE. Universities UK has welcomed the introduction of grants worth up to $\pounds 2,700$ per year available to full-time UK and EU undergraduate students, the repayment of fees post-graduation and the increase in the threshold for repayments in the student maintenance loans system. These measures, introduced alongside the Higher Education Act 2004, are a substantial improvement on the previous system

132Available on request from Universities UK or from our website at http://bookshop.universitiesuk.ac.uk/

¹³³All available from UUK's website at http://bookshop.universitiesuk.ac.uk/

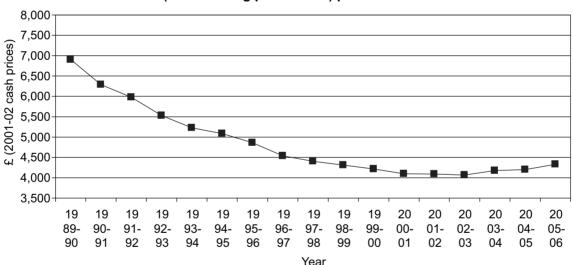
in which there were no grants and tuition fees were paid by students up-front, in each year of study. Together with substantial investment by universities in bursary arrangements, these changes should provide real benefits to students from low-income backgrounds and encourage not only participation in HE, but also retention.

35. However, as mentioned in paragraph 17 above, Universities UK believes that the Government should give consideration to improvements to the support available to part-time students. This will be increasingly important to our efforts both to widen participation, and to engage a broader demographic in higher education as the ageing population increases the national need for genuine opportunities for lifelong learning.

UNIVERSITY FUNDING

36. Investment in UK higher education is still relatively low by international standards. The UK spends 1.1% of GDP on higher education, compared to 2.9% in the US. Universities UK strongly agrees with comments attributed to Gordon Brown at the launch of the Centre for European Reform's publication *The Future of European Universities: Renaissance or decay*?¹³⁴ that this is "not a figure that can stay at that level". We also note that 43% of US investment in higher education comes from public sources, amounting to about 1.25% of GDP, compared to only 0.8% in the UK. We therefore believe that investment from both private and public sources needs to increase.

37. Between 1989 and 2002 the level of public funding per student in higher education fell by 37%. During the same period student numbers grew by 94%. Since 2002, funding per student has begun to increase in real terms, as the graph below shows. Measures in the Higher Education Act 2004, which allow universities in England to charge up to £3,000 in fees for full-time UK and EU students from 2006–07, will also make a substantial contribution to reversing the effects of a long period of under-funding of higher education.



Unit of public funding in real terms (£, 2001-02 prices) DfES (not including private fees) per FTE from 1989-2005

Methodological comments: Student FTEs have been recalibrated to reflect a whole year count, rather than 1 December snapshot. Funding does not reflect private fee contributions.

Unit funding without student fee contribution

38. The higher education sector has also benefited from substantial public investment in research and research infrastructure over the last ten years.

39. While the higher education sector's finances are improving, they remain delicately balanced. The current historical surplus of income over expenditure is only 2.1%—lower than the 3-5% recommended by the Funding Councils. The most recent institutional financial forecasts project a deterioration in this position. In the next Spending Review Period, Universities UK is asking for:

- The unit of public funding per student to be at least maintained in real terms;
- Funding for further expansion;
- Capital funding teaching infrastructure to help universities address an investment backlog and to maintain and renew buildings which are no longer fit for purpose; and
- Additional support for part-time students.

¹³⁴Reported on BBC website at: http://news.bbc.co.uk/1/hi/education/5042210.stm

40. In the US, 57% of higher education income comes from private sources, compared to about 30% in the UK.¹³⁵ The impact of variable fees in the UK will increase the share of income to higher education from private sources to about 43%, and the total level of investment as a proportion of GDP to 1.2%.

41. Private sources of income to UK universities include contract research for business and charities, post-graduate, part-time and international fees and Continuing Professional Development (CPD) activities. Universities continue to seek ways to diversify income sources. In particular, universities are increasing their efforts to attract private voluntary donations, including endowments and other forms of alumni giving.

Is the current funding system fit for purpose?

42. Universities UK believes that an appropriate balance of contributions from each of the major beneficiaries of higher education—employers, individuals, and the state—should be sought and maintained. In this context we have welcomed the Government's recent focus on increasing contributions from employers to the cost of training, alongside universities' own efforts to be responsive to business needs and grow their income from this source. However, we also note that much work also needs to be done to stimulate UK business investment in research and development.

43. In terms of government funding, the block grant system underpins the success of UK higher education, and Universities UK would want to see it remain as the major mechanism for the distribution of public funds to universities. The block grant principle recognises the importance of university autonomy and enables universities to respond flexibly to market demand. It has also helped to produce substantial differentiation of institutional mission. The strength of the block grant system mirrors that of the Quality Related element of the Dual Support system, in that it enables the system to respond not only to current priorities but also, through cross-subsidy, to maintain or develop capacity where a future need is predicted.

44. While "special initiative" funding for specific priorities may have a role in some cases, the Government should be wary of creating too many "jam pots" which encourage universities to invest time and effort (and therefore money) in bidding for small sums to chase small scale policy initiatives.

The Fee Cap

45. The Committee has asked whether the £3,000 fee cap should be lifted after 2009. Universities UK's view is that it is essential to develop a sound understanding of the impacts of all the provisions of the Higher Education Act 2004 before forming a view of future fee levels. Extensive research will need to be undertaken to develop a complete picture of the effect of the introduction of variable fees on, for instance, application rates, widening participation, the market share of different universities, and student retention. Universities UK is already engaged in contributing to this research by producing an annual report monitoring the impact of variable fees' with the first issue appearing early in 2007.

46. It will also be necessary to consider the full student support package introduced by the Higher Education Act 2004, not just fees in isolation: has the introduction of higher grants for the poorest students increased participation? What has been the impact of institutional bursaries? In particular we need to understand the effect of deferred payment of fees, available to all students, on university applications.

47. A major issue, when the fee cap is reviewed, will be the relationship between the level of the fee, the level of student support including fee loans, and the cost to the Treasury of supporting the package—and whether the current level of subsidy is sustainable with much higher fee levels or, indeed, with uncapped fees. Alongside this we would want to continue to stress that in our view it is imperative that public funding for teaching be at least maintained in real terms alongside higher private fee contributions. This is a key plank of our 2007 Spending Review submission.

Research Funding

48. Universities UK believes that the success of the UK's university research has been underpinned by the dual support system. This provides public funds for research to institutions in two streams, one as part of their block grant provided by the Funding Councils, distributed on the basis of an assessment of quality, and the other in the form of project based grants. A key strength of the dual support system is that the Funding Council grant is unhypothecated, allowing university leaders the freedom to take strategic decisions about the research activities of their own institutions. It also means that there are multiple sources of funding for research, with multiple decision points about what research should be supported and where research resources should be concentrated. This creates a healthy and dynamic research base in the UK. Universities UK strongly supports the dual support system and wants to see it maintained in the future.

49. Under current arrangements Funding Councils allocate their funds on the basis of quality judgements. A study by the Science Policy Research Unit in 2003 highlighted the advantages of this approach, (although it also concluded that the RAE has run its course) It has:

- Provided a firm basis for the selective funding of research, based on excellence;
- Created a strong incentive to improve individual as well as institutional performance;
- Encouraged the development of institutional management and strategic planning processes and increased efficiency; and
- Provided greater accountability for public funds invested in research.

50. The mechanism by which the "Quality Related" (QR) funds are distributed —currently the Research Assessment Exercise (RAE)—has been reviewed. The broad parameters of the new system were outlined in the Pre-Budget Report and will be taken forward by HEFCE. The main features of the new system are in line with the key principles outlined by Universities UK in its response to the consultation¹³⁶. We argued that funding allocations should be selective and based on a judgement of quality, with peer involvement. We agreed that fundamental reform of the RAE is needed but said that any new system should be consistent with the Government's commitment to the continuation of dual support and should support the distribution of unhypothecated funds. We also said that the transition to the new system should be managed and moderated to avoid any destabilising effects. Any new system should also provide a sufficiently stable financial framework that allows institutions to invest and plan on the basis of some reasonable assumptions about future levels of income.

51. The Committee has asked how leading research universities can reach internationally competitive levels of funding. In response to this we would want to make clear our view that the concentration of existing research funds in UK universities has gone far enough. It will be important to provide adequate funding not only for world-class research, but also for emerging and future areas of potential excellence.

STRUCTURES

Is the current structure of the UK sector appropriate and sustainable for the future?

- 52. Yes, it is. The higher education sector in the UK encompasses a wide variety of institutions including:
 - A very large supplier of innovative part-time distance learning—The Open University;
 - A number of large research-led universities with high international standing;
 - A thriving sector of small, specialist institutions;
 - Large, metropolitan, teaching-based universities, often with a significant local focus and a large amount of part-time delivery;
 - Broad-based mixed teaching-research universities with competitive research records; and
 - A large number of further education colleges delivering small amounts of higher education in collaboration with HEIs.

53. There is a genuine diversity of missions within the above typology. The net result of this, along with the wide geographical spread of institutions, is that the current structure of the UK higher education sector is able to operate flexibly in a number of different markets, to meet the needs of a diversity of clients, and to deliver on both national and regional agendas. The broad based nature of most universities means that they are able to spread financial risk, which has enabled them to stay solvent and maintain quality through a long period of under-funding.

Are current structures and funding affecting growth of HE in FE and part-time study?

54. Although the delivery of HE and FE and part-time study are linked, in that they are both means of delivering increasingly flexible and responsive higher education, there are quite distinct issues relating to their future growth.

55. As discussed in paragraph 13, part-time students now account for 40% of all students in higher education. Three important constraints on the growth of this proportion are:

- Financial support available to part-time students;
- The level of support from employers for part-time study; and
- The extent to which there is a disincentive for the delivery of part-time higher education because, following the introduction of higher fees for full-time students, supported by the graduate repayment scheme, full time study has become relatively better funded than part-time study (this issue is discussed in further detail in Universities UK's report *Part-time Students in Higher Education: Supporting higher-level skills and lifelong learning.*)

56. The issues relating to HE in FE are different. 14% of higher education is now delivered through Further Education Colleges (FECs). Collaborative links have been built up, based on universities' role in validating programmes offered by FECs, and initiatives such as Lifelong Learning Networks. These links have produced great benefits to widening participation and progression.

57. In 2005–06 there were 47,000 students taking Foundation Degrees, 79% of which are delivered in FE colleges. Foundation Degrees have provided a genuine catalyst for collaboration between the higher and further education sectors.

58. The benefits of this collaboration are clear. Links between further and higher education institutions have encouraged progression by students who might not otherwise have considered higher education, and have therefore become a key plank of universities' efforts to widen participation. According to Foundation Degree Forward, the body responsible for promoting the development of the Foundation Degree qualification, 59% of Foundation Degree graduates go on to further study, whether full time or in combination with work.

59. In this context, it is disappointing that the Government has recently brought forward measures, as part of the Further Education and Training Bill, which are likely to disrupt the links between further and higher education, fostered through partnerships developed to deliver Foundation Degrees. The Bill will give the Privy Council the power to grant degree-awarding powers to further education colleges in respect of Foundation Degrees, removing the need for FE colleges to enter into partnership with HEIs for the purposes of validation.

60. Universities UK opposes this measure, and believes that it is unfortunate that the proposal was not subject to consultation prior to the publication of the Bill. Although we understand that the Government hopes to increase both the provision and the take-up of Foundation Degrees by giving colleges the flexibility to develop and award these qualifications, we believe that amongst the serious, (and surely unintended) consequences of the move will be damage to the credibility of the Foundation Degree brand, and consequently its attractiveness to potential students and employers.

61. In addition, we think it likely that by introducing an element of competition into relationships between HE and FE institutions, universities will have little incentive to continue developing and supporting provision, which is currently offered through FECs, which might in the future become the universities' direct competitors. We fear this will lead to a reduction, rather than an increase, in the extent of Foundation Degree provision.

The Government's role in shaping the sector

62. The structure of the HE sector is the result of evolutionary change, as institutions have responded to the needs of clients (including Government) and markets, and prioritised within their diverse portfolios. The sector will continue to evolve rapidly in response to changes in its business environment.

63. Central planning of the higher education sector by Government would be counter-productive. It would run the risk of reducing responsiveness thus potentially cutting the sector off from future markets: it could, in other words, run counter to some government policies. A market-driven approach has led to substantial differentiation within the sector, which has proved to be in the national interest as demonstrated elsewhere.

64. In the global context, the tendency of our competitor countries has been to move away from a centrally-planned approach, in recognition of the benefits this brings in terms of enhancing institutional standing and efficiency. World Trade Organisation talks on the General Agreement on Trade in Services (GATS) provide a further rationale for freeing higher education institutions to respond to markets, since it will become increasingly difficult to protect national providers from global competition. However, there is a role for government in regulating the market and supporting sector-led quality assurance mechanisms. In addition, the Government shares a responsibility for protecting the "university" and "degree" brand (see paragraphs 56–61 above).

65. We would urge the Committee to consider ways in which the Government might support institutions in delivering higher education to a range of clients and markets. In particular, if institutions could rely on a stable core of funding that guaranteed basic financial sustainability then they could focus more on service delivery and take more risks in moving into emergent markets. We consider the block grant is the optimum way to deliver this.

CONCLUSIONS

66. The UK has a successful, world-class higher education sector. Its potential to make an increased contribution to a wide range of strategic national interests and policy objectives is also clear. The UK university sector's achievements are firmly rooted in their status as autonomous institutions and in funding structures that support universities' ability to respond flexibly and according to institutional priorities.

67. To meet the strategic needs of the UK, and to maintain and build on their current reputation for excellence universities need:

- An increased investment from both private and public sources as a proportion of GDP;
- Recognition of the role of university autonomy in delivering success;
- Stability: universities have gone though a period of rapid expansion and change and reforms, including the new fee regime, will need time to bed down;
- Continued commitment from government to funding through block grant and Dual Support for research;
- Support for diversity; and
 - Ongoing commitment by government to better regulation.

68. Universities and colleges have a long track record of successfully adapting to change and responding to challenges. The last 10 years alone have seen considerable turbulence, yet on a wide range of indicators UK HE remains very successful. This is in large part due to institutional autonomy that supports academic freedom and the collegiate nature of HE, which motivates and ensures the high performance of staff. It is in the national interest to have universities, which can genuinely claim to be independent of the particular interests of the Government of the day and home to free inquiry and expression.

January 2007

Memorandum submitted by the University and College Union (UCU)

EXECUTIVE SUMMARY

Purposes of higher education

1. While recognising the financial benefits of higher education to the UK economy, UCU believes that the purposes of higher education as laid down by the Robbins report and the subsequent re-expression of these values in the Dearing report (1997) remain valid today. Although the instrumental, economic value of higher education was stressed by Dearing, the report also highlighted the intrinsic value of knowledge and the wider social, cultural and democratic purposes of a learning society.

2. In our view, the instrumental purposes outlined in the Dearing report ("to serve the needs of an adaptable, sustainable, knowledge-based economy at local, regional and national levels" and ensuring that students are "well-equipped for work") are becoming the sole drivers of government policy.

Fees and funding

3. The Government would suggest that higher education is a means to improving social cohesion and equality of opportunity, as well as a means to improving the UK's economic performance.

4. It is important the Government recognises that continued investment in the sector is required if it is to operate as an engine of economic growth and as a contributor to social justice.

5. Continued investment is needed in widening participation activities in higher education—as well as initiatives in schools and FE colleges—and in supporting "non-traditional" students once they are at a university or college of HE.

6. There is a problem that potential "widening participation" students are the ones most likely to be discouraged from entering higher education because of its cost.

7. The Government wants greater selectivity in research funding in the hope that developing an elite group of world-class institutions will have good knock-on effects for the economy. The impact of that policy is to concentrate research funds in an increasingly small number of institutions and to jeopardise for many staff and students the opportunity to work and study in a research-active environment.

Quality of teaching and learning

8. There is a consensus that teaching in higher education is currently under-funded. While the Government has been prepared to make some additional investment in relation to research this has not been the case with respect to teaching.

9. We are extremely concerned about the growth of the student:staff ratio. The increasing age profile of academic staff means that a growing number of staff will be retiring over the next 10 years.

10. The expansion in student numbers, the growing pressures on staff to publish and bring in research income, burgeoning administrative demands, and the increasing casualisation of the workforce have all led to reduction in students' contact time with their lecturers.

11. The amount of academic staff time spent on bureaucratic monitoring and administration must be limited in order that proper attention can be given to teaching and related activities such as the developments in pedagogy, programme and approaches to learning and assessment.

Research and scholarship

12. There have been major increases in public spending on recurrent funding for research compared to teaching.

13. The result of withdrawal of research funding from departments not performing sufficiently highly in the Research Assessment Exercise, may increasingly lead to the closure of departments, particularly ones which are expensive to run.

14. UCU also believes that the current DfES proposals for a metrics based system for assessing research are flawed—for example, 81% of UCU members in a recent poll said they are opposed to the government's plans. We call on the DfES and the funding councils to pull back from their metrics proposals and examine the full range of options for a post-RAE world.

Balance between institutional autonomy and government intervention

15. The protection of higher education institutions from government interference is crucial to the protection of academic freedom. At the same time, as the provider of public funds to higher education, government has both a right and a responsibility to satisfy itself that those funds are used effectively.

16. We believe that the existing legislative framework is now due for review. We would argue for a strengthening of HEFCE's independence by giving it specific duties to represent the views of higher education institutions through published advice, and also by restricting the secretary of state's control over the appointment of the council's Board and its chairman.

17. In parallel to a review of HEFCE's statutory basis, we also believe that the legal protection of academic freedom should be examined as has been the case in Scotland.

18. We believe that academic freedom should be protected in law and that alleged contraventions should be investigated and adjudicated by a body similar to the OIA.

19. With regard to governance, UCU believes that there should be an independent, public review of the composition and appointment of university councils and governing bodies.

UCU

20. The University and College Union (UCU) represents nearly 120,000 further and higher education lecturers, managers, researchers and many academic-related staff such as librarians, administrators and computing professionals across the UK. We welcome the opportunity to respond to the select committee inquiry into the future sustainability of the higher education sector.

21. Given the broad-ranging nature of the inquiry it has not been possible to respond to all the questions. Instead, we have decided to focus on what our members perceive to be the key issues: fees and funding, the quality of teaching and research and the balance between institutional autonomy and government intervention. Before addressing these issues, we would like to make some brief comments on the purposes of higher education.

Purposes of higher education

22. The future of higher education white paper, 2003: "The skills, creativity, and research developed through higher education are a major factor in our success in creating jobs and in our prosperity. Universities and colleges play a vital role in expanding opportunity and promoting social justice. The benefits of higher education for individuals are far-reaching."¹³⁷

23. The HE sector is of huge economic importance to the UK: Higher education institutions are worth £45 billion to the UK economy according to a report published by the vice-chancellors' organisation, Universities UK.

24. The higher education sector is now a larger contributor to the UK economy than the UK pharmaceutical industry and aircraft industry and only slightly smaller than UK legal activities and auxiliary financial services.

25. While recognising the financial benefits of higher education to the UK economy, UCU believes that the purposes of higher education as laid down by the Robbins report and the subsequent re-expression of these values in the Dearing report (1997) remain valid today. Although the instrumental, economic value of higher education was stressed by Dearing, the report also highlighted the intrinsic value of knowledge and the wider social, cultural and democratic purposes of a learning society.

26. Dearing, therefore, recommended a number of wider purposes for higher education, such as the ability "to inspire and enable individuals to develop their capabilities to the highest potential levels throughout life" and enabling students to "grow intellectually" and "to contribute effectively to society and achieve personal fulfillment". The report also stressed the intrinsic value of learning and the major role played by higher education "in shaping a democratic, civilised, inclusive society".¹³⁸

27. In our view, the instrumental purposes outlined in the Dearing report ("to serve the needs of an adaptable, sustainable, knowledge-based economy at local, regional and national levels" and ensuring that students are "well-equipped for work") are becoming the sole drivers of government policy.¹³⁹ This is both unfortunate and regrettable.

28. This is intimately connected to the increasing marketisation of higher education represented by recent initiatives such as deferred fees, the commercialisation of research funding and the plethora of performance targets. Moreover, the government's agenda to develop and expand "provision which is fully or partly funded and led by employers" will further narrow the purposes of higher education.

29. We believe that there are hidden costs in embracing a narrowly instrumental employer-led approach to higher education. In particular, we are concerned about the detrimental effects on academic standards and academic freedom, including pressures to suppress "unwelcome" research results and to cut corners in relation to student assessment. UCU reaffirms its commitment to higher education as an essential public good.

Fees and funding

30. The Government would suggest that higher education is a means to improving social cohesion and equality of opportunity, as well as a means to improving the UK's economic performance.

31. We consider that it is good for higher education to have these roles, provided they are seen in the context of universities and colleges as places of teaching and research, scholarship and discovery of the widest kinds, and provided there is sufficient investment to make these goals successful and sustainable.

32. It is clear that higher education is a good investment. For every 100 jobs within higher education institutions, a further 99 FTE jobs are generated through knock-on effects. For every £1million of HEI output, a further £1.52 million of output is generated in other sectors of the economy.¹⁴⁰

33. It is important the Government recognises that continued investment in the sector is required if it is to operate as an engine of economic growth and as a site for the promotion and generation of social justice.

34. Continued investment is needed in widening participation activities in higher education—as well as initiatives in schools and FE colleges—and in supporting "non-traditional" students once they are at a university or college of HE. We welcome the links between further and higher education through, for example, Lifelong Learning Networks.

35. It is important to recognise that sometimes the Government's economic and social goals operate in tension.

36. The Government wants greater selectivity in research funding in the hope that developing an elite group of world-class institutions will have positive consequences for the economy. The impact of that policy is to concentrate research funds in an increasingly small number of institutions.

37. Between 1997–98 and 2005–06, the allocation of recurrent funding for research (mainly under the QR stream) generally became more concentrated in the hands of a small number of HEIs. In England, the research funding share for the highest 10% of research-earning HEIs rose from 56% to 59%; in Wales the highest research earner, Cardiff University, incrased its share of total funding from 39% to 57%; in Scotland, the funding share of the highest 10% of research-earning HEIs rose from 48% to 49%. Data for Northern Ireland's two research universities—Queen's University of Belfast and University of Ulster—in 2005–06 were unavailable at the time of writing. In all three counctries, the highest 50% of research earners accounted for almost 100% of allocated research funds.

¹³⁸National Committee of Inquiry into Higher Education (1997) *Higher education in the learning society*, http://www.leeds.ac.uk/educol/ncihe/

¹³⁹See the recent report by Jennifer Bone and Ian McNay (2006) *Higher education and the human good* and some of the observations in the report by the Council for Industry and Higher Education (2005) *Higher education: more than a degree*.

¹⁴⁰Universities UK (2006) The economic impact of UK higher education institutions, London: UUK, p. 7 (http:// bookshop.universitiesuk.ac.uk/downloads/economicimpact3.pdf)

38. Withdrawal of research funding leads to departmental closures and withdrawal of provision hits "non-traditional" students hardest, ie the students whose background is working class and includes certain black and minority ethnic groups. There has been a real lack of progress in increasing the proportion of young full-time undergraduates from socio-economic groups four to seven.

39. Recent research indicates that the student groups with the lowest incomes include those who live at home with their parents; come from a minority ethnic group; come from the lowest social classes; and come from a family where no one else has studied at university. Those most likely to live with their parents include minority ethnic students and students from the lowest social classes. In addition, students living at home were more likely to work during the academic year.¹⁴¹

40. Again, the Government wants a world-class university system. That requires investment. The means of investment chosen by the Government in the UK (with the exception of Scotland) is variable tuition fees payable in the first instance by means of subsidised loans and repayable by graduates once their income reaches a certain level. Under £3,000 variable fees, average graduate debt levels are likely to be in the region of £15,000.¹⁴²

41. Increased funding is also needed to support widening participation activities in schools, FE colleges and HEIs. There is a problem that potential "widening participation" students are the ones most likely to be discouraged from entering higher education because of its cost.¹⁴³ This may help explain why, in the UK, since 2002–03, the proportion of students from working-class backgrounds in the UK has fallen slightly, from 29.2% to 28.7%. About 15,000 fewer full-time undergraduates started university in the UK in 2006 compared with the previous year, it remains to be seen whether this fall disproportionately includes non-traditional students.¹⁴⁴

Recommendations

42. That the proportion of UK public expenditure on higher education is increased to the OECD average, of 1.1% of GDP.

43. That long-term investment in enabling knowledge transfer is needed; we consider that England's Higher Education Innovation Fund is an important step towards this aim. We recommend that the majority of such funding continues to be allocated on a formula basis.

44. That there is a review of the use of widening participation funding, to identify best practice in WP activities and to appraise priorities in the use of WP funding between widening access, improving retention and other activities

45. That tuition fees are abolished, with additional funding coming from the Government and employers.

The quality of teaching and learning

Funding

46. There is a consensus that teaching in higher education is currently under-funded. While the Government has been prepared to make some additional investment in relation to research this has not been the case with respect to teaching. This impacts particularly on institutions with large numbers of less academically prepared students, and students studying part-time, where teaching costs will be high.

47. Over the past three decades, the student:staff ratio in UK higher education has also increased from 9 students to 1 teacher, to 19 students to 1 teacher. This is a rise of more than 100%. Over the same period, the pupil:teacher ratio across all UK schools has fallen from 19 pupils to 1 teacher, to 18 pupils to 1 teacher. Since 2000–01 the higher education SSR has been higher than the schools PTR. Over a five-year period to 2003, OECD data show the student:teaching staff ratio in UK higher education fluctuating at around 18:1. This was consistently higher than the mean ratio for OECD countries, of 15:1, and was also considerably higher over that period than for the USA, Germany and Japan.

48. We are extremely concerned about the growth of the student:staff ratio. The increasing age profile of academic staff means that a growing number of staff will be retiring over the next 10 years. More staff will be needed to meet the Government's aim of 50% of young people participating in higher education by 2010, at a time when the young adult age cohort in the population is increasing. Ever-increasing dependence on casualised staff makes no sense in terms of quality for students, equality for staff or smooth management.

 ¹⁴¹Claire Callender and David Wilkinson (2003) 2002–03 Student Income and Expenditure Survey: Students' Income, Expenditure and Debt in 2002–03 and changes since 1998–99, London: DfES, research report no. 487, section 2.3.1, 2.6.1, 2.6.2
 ¹⁴²http://www.natwest.com/global options.asp?id=GLOBAL/MEDIA/131

¹⁴³CHERI and London South Bank University (2005) Survey of higher education students' attitudes to debt and term-time working and their impact on attainment, London: Universities UK, p. 7 (http://bookshop.universitiesuk.ac.uk/downloads/ termtime work.pdf)

¹⁴⁴http://www.ucas.ac.uk/new/press/news181006.html

49. The expansion in student numbers, the growing pressures on staff to publish and bring in research income, burgeoning administrative demands, and the increasing casualisation of the workforce have all led to reduction in students' contact time with their lecturers. For example, lecturers and teachers on average work longer hours or unpaid overtime than most other occupations and suffer higher levels of psychological distress than other occupational groups, including doctors, managers and professional staff.¹⁴⁵ All of these workload pressures have led to a reduction in students' contact time with their lecturers.

50. Pressure from performance indicators such as degree classifications and student retention rates may also be leading to compromises over academic standards. For example, a number of surveys point to unacceptable pressures on academic staff to award higher grades and to avoid failing students for primarily financial or PR reasons.¹⁴⁶ Similarly, during the 2006 pay dispute in higher education, a large number of universities were willing to by-pass the usual quality assurance provisions. Examples included allowing students to graduate without completing the full qualification, the abandonment of second-marking procedures and the use of non-specialists to set exam papers and mark scripts.¹⁴⁷ Quality assurance provisions have become more and more demanding in recent years and to be told that when it became inconvenient to the employer, the employer would simply abandon them, UCU members found insulting. Professional and statutory bodies such as the Law Society also expressed their concerns about the impact on UK degree standards.¹⁴⁸

51. Overall, we believe that financial pressures on staff and institutions are leading to a reduction in the quality of the student learning experience and assessment.

52. New provision at all levels—programme, course and module—should be predicated on appropriate attention to the significance of student:staff ratios. This should feature as an indicator of the quality of provision and the rigour of assessment in validation procedures. The amount of academic staff time being taken on bureaucratic monitoring with little evidence of its contribution to the quality of service, needs to be limited and reduced further to allow the more productive use of the time available for learning, teaching and assessment.

53. In addition, a growing number of undergraduates are being forced to take paid employment during term-time. Recent research shows that high levels of term-time working can have a negative impact on student involvement in classes and attainment. We are already experiencing the emergence of a "two-tier" student experience—with major implications for the government's social inclusion agenda.¹⁴⁹

54. UCU believes that students deserve a high quality learning environment irrespective of their background or their course of study.

Recommendations:

55. That income generated by student contribution is additional and is not used to replace public funds.

56. That the costs of offering financial support to poorer students are shared by the sector as a whole, via the introduction of a national bursary system.

57. That there is a restoration of proper maintenance grants to prevent a "two-tier" student experience.

58. That all part-time students should be given pro-rata access to the full range of grants and bursaries and the ability to defer paying fees.

59. That funding is made available to safeguard and enhance teaching capacity and quality on an equitable basis at institutions across the sector.

60. That the additional costs of widening participation in relation to student retention and student success are met through additional funding.

61. That validation and auditing procedures should pay specific attention to staff student ratios as an indicator of quality assurance.

62. That caps on academic staff time required to undertake administrative work should be applied by employing institutions.

63. UCU believes that additional resources must be directed towards improving the student experience, and supporting staff:

64. That additional staff are employed to bring about reduction of the SSR in the UK to the level of the OECD country mean over the coming decade.

¹⁴⁵TUC (2006) Work Your Proper Hours Day, 21 February 2006; Gail Kinman and Fiona Jones (2004) Working to the limit stress and work life balance in academic and academic-related employees in the UK, London: AUT.

¹⁴⁶Phil Baty (2004) "Poll reveals pressure to dumb down" *Times Higher Education Supplement*, 19 November 2004; Phil Baty (2006) "Academia has sold out, 72% believe", *Times Higher Education Supplement*, 27 November 2006.

¹⁴⁷Phil Bary (2006) "Liverpool slated as number of firsts soars", *Times Higher Education Supplement*, 22 September 2006. ¹⁴⁸Anushka Asthana (2006) "Universities plan easier degrees to beat strike", *The Observer*, 30 April 2006.

¹⁴⁹Claire Callender et al (2005) Survey of higher education students' attitudes to debt and term-time working and their impact on

attainment, a report to Universities UK and HEFCE by the Centre for Higher Education Research and Information (CHERI) and London South Bank University.

65. That hourly-paid teaching posts are converted into fractional contracts.

66. That there is an expansion of continuing professional development for all academic and academic-related staff.¹⁵⁰

Research and scholarship

67. Compared to teaching, there have been major increases in public spending on recurrent funding for research. Between 1997–8 and 2006–7, there was an increase of 91% in recurrent research funding for higher education institutions in England, 57% in Wales and 115% in Scotland. The great majority of recurrent funding for research in UK higher education is allocated on the basis of departments' results in the Research Assessment Exercise (RAE).

68. The result of withdrawal of research funding from departments not performing sufficiently highly in the Research Assessment Exercise, may increasingly lead to the closure of departments, particularly ones which are expensive to run (of course, change in student demand is also a contributory factor). This in turn reduces the number of places where particular subjects, such as chemistry and physics, are provided.

69. We welcome the introduction of funding streams additional to quality-related funding which are intended to stimulate research potential, but we believe that research funding is already too concentrated and any additional selectivity risks undermining the intellectual culture across the national university system as research becomes unduly concentrated in very few institutions. We do not accept that high numbers of students should study in universities that are not or barely research-active.

70. UCU also believes that the current DfES proposals for a metrics based system for assessing research are flawed—for example, 81% of UCU members in a recent poll said they are opposed to the Government's plans.

71. A number of different concerns were raised by members, of which the following were the most frequent:

72. Income-based metrics reflect a "big science" model of research, ignoring huge swathes of HE subjects and disciplines, including desk-based scientific research in areas like mathematics.

73. There are problems in linking all Quality-Related (QR) research funding to an ability to win grants from the big funders. Ultimately this system could have a negative impact on academic freedom, especially the ability to finance or publish research in unorthodox or controversial fields.

74. Income-based metrics could result in further "short-termism" in HE research, making it more difficult for universities to move to greater use of permanent contracts and/or to avoid redundancies in the future.¹⁵¹

75. UCU calls on the DfES and the funding councils to pull back from their metrics proposals and examine the full range of options for a post-RAE world.

76. Private and commercial sources of funding make up a growing proportion of the research income of UK HEIs. We are concerned about the ways in which the research agenda can be distorted by an excessive reliance on commercial funding. For example, a New Economics Foundation report has shown how oil and gas industry funding of university geology departments and research centres can help skew research priorities, ie the bulk of research funding (both public and private) continues to go on developing new ways of extracting fossil fuels rather than on renewables.¹⁵²

77. Moreover, UCU has major concerns about the detrimental impact of commercial funding on the freedom to publish. For example, a survey carried out by AUT and Prospect, published in March 2005 found that more than 10% of scientists have been asked by their commercial backer to tailor their research conclusions to meet the sponsor's requirements.¹⁵³ More needs to be done to strengthen the ethical and accountability structures attached to commercial (and government) funding.

Recommendations

78. That there is a restoration of recurrent research funding for departments rated 3a in the RAE.

79. That the Government widens the scope of its review and the composition of its working group on the RAE—to include practitioners as well as official representatives.

80. That with regard to the commercialisation of research, an ethical research framework should be developed which ensures research funders can not unduly influence or cover up uncomfortable research findings.

¹⁵⁰It is critical that such funding is explicitly earmarked for practitioners' professional development, as experience shows that when funding pressures are acute, budgets for CPD are not safeguarded at the faculty/departmental level, where they are most needed and can most effectively be deployed.

¹⁵¹UCU (2006) The future of research funding and assessment: the voice of the profession, http://www.ucu.org.uk/media/pdf/1/4/ researchfundingfuture_1.pdf

¹⁵²New Economics Foundation et al (2003) Degrees of Capture: Universities, the Oil Industry and Climate Change, http:// www.carbonweb.org/documents/degreesofcapture.pdf

¹⁵³http://news.bbc.co.uk/1/hi/education/4379457.stm

Balance between institutional autonomy and government intervention

81. UCU welcomes the Committee's decision to include in its inquiry an examination of the relationship between government and higher education institutions. The key to this issue is the role of the Higher Education Funding Council (HEFCE).

82. The protection of higher education institutions from government interference is crucial to the protection of academic freedom. At the same time, as the provider of public funds to higher education, government has both a right and a responsibility to satisfy itself that those funds are used effectively.

83. This is a difficult balance to strike. The traditional solution has been to place a public body between government and institutions to act as a "buffer" between the two. This was the concept behind the old Universities and Grants Committee (UGC), the historical forerunner of HEFCE.

84. However, the legislative framework for HEFCE (principally, the Further and Higher Education Act 1992) emphasised its role as a conduit of government policy, giving ministers a much greater control of funding allocation, although of course still indirectly. The functions of the funding body as an advisor to government and the public, as a promoter of the interests of institutions, and as a protector of their autonomy, were downplayed.

85. In our view, the balance has swung much too far in favour of HEFCE operating as an administrative arm of government. Our members would view its "independence" as largely illusory. If it does exercise independence from time to time and resist government pressure, it certainly does not do so publicly, or, as far as we can see, successfully.

86. We believe that the existing legislative framework is now due for review. We would argue for a strengthening of HEFCE's independence by giving it specific duties to represent the views of higher education institutions through published advice, and also by restricting the secretary of state's control over the appointment of the council's Board and its chairman.

87. It is important for the funding council to have the statutory strength to resist any attempts by government to use its control of funding to shape the structure of the sector. Planning and management of higher education should normally be left to the funding council and the institutions.

88. Policy-directed funding should be minimised except where there is an overriding national interest at stake. The need to widen access to higher education is a good example of the latter, as is the present urgent requirement to protect strategically important and vulnerable subjects such as physics and chemistry. The primary responsibility of government is to provide adequate funding. It is for the funding council in close cooperation with the institutions to allocate funds in a way which acknowledges the diverse purposes of higher education and which does not stifle the creative abilities of institutions to meet those purposes in different ways.

89. On the specific issue of departments in strategically important subjects threatened with closure, we believe that HEFCE should be funded to support such departments in defined circumstances. HEIs should be required to alert HEFCE at the earliest possible stage if strategically important and vulnerable subjects are at risk.

90. Recent research on STEM subjects by UCU shows a decline in the period 1998–2007 of 31% in the number of single honours chemistry courses offered in the UK, of 14% in single honours physics courses, and of nearly 10% in single honours maths courses. In some regions of the UK, in 2007 there is only one provider of core science and maths subjects—a situation which could undermine widening participation aims.

91. With regard to languages, UCU research shows that in the decade to 2007 there has been an overall decline of nearly 20% in the number of HEIs providing French, German or Italian undergraduate language courses. This is making provision more concentrated in fewer HE institutions. The government's decision in 2004 to make languages at GCSE non-compulsory could reduce still further the number of institutions providing courses in these languages. Already the number of pupils taking French and German at GCSE has dropped sharply. As with STEM provision, it seems the number of departments providing these subjects looks set to continue to drop.

92. A set of criteria for the allocation of special funding to vulnerable departments should be developed through widespread consultation with all interested parties in the sector.

93. The criteria should include an assessment of the impact of closure on undergraduate and postgraduate student access regionally, nationally and internationally, as well as on research output and on staff retention and recruitment.

94. If the concept of strategically important subjects is to mean anything in practice then we should be prepared to pay the cost of saving departments where institutions can demonstrate their potential for successful survival over a reasonable period of additional support.

95. In parallel to a review of HEFCE's statutory basis, we also believe that the legal protection of academic freedom should be examined.

96. The ability of institutions to conduct teaching and research free of political interference is essential to our democracy. Academic freedom operates both at the level of the individual academic and as a vital component of institutional independence.

97. In recent years, academic freedom has been undermined by the intense pressures on staff to attract students and research funding. More recently, government proposals on anti-terrorism and extremism on campus have clashed with the values of academic freedom. Whether or not one takes the view that those proposals have crossed the line and restricted academic freedom, they have highlighted the vulnerability of academic freedom and the absence of any effective legislative "safety net" to afford it ultimate protection.

98. At present, the only specific protection of academic freedom in English law is under section 202 of the Education Reform Act 1988.¹⁵⁴ This places a duty on chartered universities "to ensure that academic staff have freedom within the law to question and test received wisdom, and to put forward new ideas and controversial or unpopular opinions, without placing themselves in jeopardy of losing their jobs or privileges they may have at their institutions." The provision applies only to the pre-1992 universities. (The Scottish Parliament included a clause on protection of academic freedom in its 2005 Further and Higher Education Act). Some other references to academic freedom and freedom of expression on campus can be found in legislation, but there is no clear, overarching protection covering all institutions.

99. Furthermore, the Government recently removed the route to redress in relation to the limited protections of section 202. The incorporation of the terms of section 202 into the charters and statutes of the pre-1992 universities enabled academic staff who believed that their academic freedom had been infringed to complain to their institution's Visitor, an individual, often legally qualified, appointed to police the application of the statutes impartially.

100. In the Education Act 2004 the Government effectively abolished the Visitor's jurisdiction over staff complaints. In the case of student complaints the Visitor was replaced by the Office of the Independent Adjudicator for Higher Education (OIA).

101. There is now very real concern among UCU members about academic freedom. We believe that academic freedom should be protected in law and that alleged contraventions should be investigated and adjudicated by a body similar to the OIA.

102. Recent changes in the governance of higher education institutions represent a related area of concern to UCU members. The trend over the last 15 years or so has been towards smaller councils and governing bodies, with diminished staff and student representation.

103. It is not clear to us that these changes have either increased the public accountability of institutions or improved their management. On the contrary, in our experience lay representatives on councils and governing bodies often have little knowledge or understanding of the distinctive values and purposes of higher education. They rarely question the recommendations of the vice-chancellor and senior management, who themselves become unaccountable for the considerable executive power that they wield in today's universities. The readiness of many councils to delegate powers to vice-chancellors is a particularly worrying recent phenomenon.

104. It is these practices which explain why councils and governing bodies are generally viewed by staff as part of the top down "command and control" culture of managerialism that has undermined and in some cases virtually destroyed the sense of academic community and shared purpose in many institutions.

105. It is ironic that while best practice in business emphasises the cultivation of a feeling of ownership and participation in decision-making among employees, in higher education staff are increasingly excluded from any say in the running of their universities and colleges. This disenfranchisement contributes to the low morale of staff in the sector.

106. UCU does not deny the importance of external representation on councils and governing bodies and of the valuable contribution that lay members can make. However, we do believe strongly that a more balanced mix of staff and student representatives, senior management and external lay members is needed in order to ensure that decisions are better informed; that the core academic mission of the institution is given proper weight; and that an effective check on overbearing managerial power exists.

107. We also believe that the method of appointment of lay members should be reviewed in order to assess whether Nolan standards of public life, and also equalities principles, are being followed. The role and appropriateness of the membership of vice-chancellors and senior managers on councils and governing bodies should also be reviewed. While the guidance produced by the Committee of University Chairmen is welcome, it does not deal adequately with these important areas.

¹⁵⁴By contrast, the Further and Higher Education (Scotland) Act 2005 provides for the protection of academic freedom in all Scottish further and higher education institutions.

Recommendations

108. That the legislative framework for HEFCE should be reviewed with a view to strengthening its independence from government.

109. HEIs should be required to alert HEFCE at the earliest possible stage if strategically important and vulnerable subjects are at risk.

110. That the Government should provide additional funding for targeted support to departments in strategically important areas faced with closure; the fund should be allocated according to objective criteria developed by HEFCE following widespread consultation with interested bodies.

111. That academic freedom should be safeguarded in law and supported by an independent complaints procedure.

112. That an independent public review of the composition and appointment of university councils and governing bodies should be undertaken.

December 2006

Memorandum submitted by the University of Central Lancashire (UCLan)

A. EXECUTIVE SUMMARY:

The role of universities over the next 5-10 years

1. Students want different things from university depending on their background, mode of study etc. Certain factors appear to be common, however, including: efficient student services and administration; high quality teaching and interaction with staff; excellent IT support; high quality facilities; and employability support.

2. It is difficult to know what employers want from graduates over and above generic skills, given that attempts by universities such as UCLan to engage and undertake meaningful dialogue have proved difficult. In general, however, employer demands are centred on professional and vocational skills, communication skills and leadership.

3. The Government and society should be looking to universities to provide services which encompass all of those outlined by the Committee in its terms of reference, additionally acting as custodians of civil liberties and protectors of freedom of speech, committed to the development and protection knowledge etc.

University funding

4. Despite criticisms, the current funding system has helped deliver sustained growth, widened participation and seen increases in the research base.

5. Equity is the key principal on which university funding should be based. A student studying on an approved course should receive the same level of central government funding irrespective of where the course is delivered, assuming that the course meets the relevant quality criteria.

6. It is too early to assess whether the cap on student fees should be lifted after 2009. In assessing the effectiveness of student fees, the Government should look at the impact on participation levels, student choice of course/institution and the direct effect on students from lower, socio-economic backgrounds.

7. The current Research Assessment Exercise (RAE) undertaken by HEFCE is arguably too selective and as a result disadvantages those institutions, such as my university, which have a good research trajectory but which may not have obtained high thresholds of funding.

8. With universities being required to increasingly operate in a market situation and secure more money from non-governmental sources, it is of little surprise that universities engage in international student recruitment. This will increasingly be based outside the UK. It is entirely plausible that over the next 20 years, some universities may earn more from international rather than UK based activities.

The structure of the HE sector

9. The future structure of the HE sector depends on the action taken by Government faced with a choice of intervention or reliance on the role of market forces. The Government currently sends mixed messages about its preferred method.

B. INTRODUCTION TO UNIVERSITY OF CENTRAL LANCASHIRE:

10. The University of Central Lancashire (UCLan) is based at campuses in both Lancashire and Cumbria. We are one of the UK's larger universities with more than 30,000 students and with a strong international base comprising over 2,000 students. This is replicated abroad, where UCLan is one of the leading UK Universities in terms of students studying on its programmes in-country in China, Hong Kong and India.

11. UCLan is a major employer with over 2,500 employees, an annual turnover of over ± 120 million, and with an indirect contribution to the local economy of ± 300 million.

12. UCLan is recognised as a university which consistently performs above the benchmark in its recruitment of students who would not traditionally go to university—something which is reflected in our current bursary scheme in which $\pounds 1,000$ is awarded to full time undergraduates who come from homes where the principal earner's gross salary is less than $\pounds 60,000$ per year. This is well above the national average.

13. Research of national and international excellence is at the heart of academic life at UCLan and the University has an established research reputation in a wide range of academic disciplines including History, Law, Physics to name but a few. The University has also recently announced a £10 million selective investment into research excellence, which will create ten major international research areas.

C. FURTHER DETAIL:

The role of universities over the next 5-10 years

14. It has to be recognised that there is no one single group of students. Students are of mixed ages, experiences, motivation etc. and study a variety of disciplines in different modes (part-time, concurrently with working and vocational courses for example). This leads to students wanting different things from the university setting. Despite this, there appear to be certain common factors which all students want, including:

- Efficient student services and administration;
- High quality teaching and interaction with staff;
- Excellent IT and learning technology support;
- Employability and careers services support; and
- High quality facilities including students union, recreational facilities etc.

15. It can be surmised that international students want the same things as UK students however, additional support in relation to studying a foreign language, in this context English, is usually high on the agenda. Universities also need to take into account the different demands that international students may have in terms of career guidance, given that many return to their country of origin to seek employment.

16. It can be difficult to know what employers want from graduates, given that attempts by universities such as UCLan to engage and undertake meaningful dialogue have proved difficult. This is particularly the case when seeking employers' views on curriculum design and engagement on industry advisory boards. In general, however, employee demands are centred around the following:

- Specific professional/vocational skills where appropriate;
- Relevant competences;
- Communication skills;
- Ability to work with others;
- Leadership; and
- Entrepreneurialism.

At UCLan we try to engage employers where possible—our Department for Journalism for example, has recently joined forces with Johnson Press PLC to undertake innovative research into emerging digital technology. Meanwhile, the university has been granted £4.5 million to develop the The Centre for Employability Through the Humanities which aims to link employers, Culture and Creative Industry organisations and the local community to our teaching and students.

17. The Government, and society more generally, should be looking to universities to provide a wide range of services which encompass all of those outlined by the Committee in its terms of reference. UCLan is already responding to the expectations of the higher education sector by:

Internationally-competitive research:

UCLan has recently announced a £10 million investment into research excellence to create 10 international research areas in subject areas such as Advanced Digital Manufacturing Technology; Disaster and Emergency Planning; Philosophy; Diversity and Mental Health; Nuclear Science; Criminology and Criminal Justice; Deaf Studies; Human Remains Identification; Business; "UCLanSport". In 2005, we also acquired the Westlakes Research Institute to accelerate growth in areas such as nuclear decommissioning and environmental science.

Graduates appropriate for a high-skill economy:

UCLan has a reputation for producing graduates with the skills demanded by employers—this was highlighted in 2005 through the award of a £4.5 million grant from the Higher Education and Funding Council to improve the employment prospects of humanities students. Over 93% of UCLan graduates are in employment or further study within six months of graduating.

Widening participation, contribution to social mobility:

UCLan is widely recognised as a university which consistently performs above the benchmark in its recruitment of students who would not traditionally go to university. This is evidenced through our above national average "Ones to Watch Scholarship", worth £1,000 per year for students who come from homes where the principal earner's gross salary is less than £60,000 per year.

A greater level of engagement with schools:

2005 saw UCLan increase its school liaison activities with a focused strategy to identify the "top 100" schools within its major catchment area. We are currently working with 13–16 year olds, primarily in Cumbria and Lancashire, to nurture progression in schools with lower progression levels.

Engagement in society and democratic debate, and producing active citizens:

2005 saw UCLan celebrate the launch of a new facility for the Centre for Volunteering and Community Action. The Centre supports young people who want to make a difference in their communities. 2005 also saw UCLan reach the finals of the Times Higher Awards for it support of international students in volunteering projects. Meanwhile in 2006, UCLan beat four other institutions to win the Times Higher Award for "Outstanding support of overseas students".

18. The Government should also expect universities to act as custodians of civil liberties and civic values and protectors of freedom of speech and minority views; committed to the development, furtherance and protection of knowledge, supportive of democratic values and the rule of law; and sources for protecting and transmitting cultural values.

University funding

19. Despite criticisms, the current funding system has helped deliver sustained growth, widened participation and increases in the research base. It has also delivered a degree of stability and certainty alongside providing flexibility for institutional differentiation. A wise university should not rely on one form of income, however, and should instead spread its sources. It should be pointed out that where there are circumstances of institutions with financial difficulties, it is usually the case of mismanagement at a local level as opposed to problems with the funding system.

20. Equity is the key principle on which university funding should be based. A student studying on an approved course should receive the same level of central government funding irrespective of where the course is delivered. The funding system should also encourage certainty, transparency, stability, and responsiveness to market forces.

21. It is too early to assess whether the cap on student fees should be lifted after 2009. This is predominately based on the fact that there has not yet been enough time to collate an evidence base around the impact of student fees, introduced in 2006, on participation levels. If and when the Government decides to look at raising the cap, consideration must be given to a) whether deferred fees will be raised on the basis of inflation only or real rates of interest—and whether this would be sustainable on the public expenditure and, b) how the position of students, who currently qualify for maximum financial assistance towards fees, would be protected if fees were to rise—would the Treasury in this context be prepared to cover the additional cost to the present system?

The Government must also take into account:

- The affect on participation levels broken down by ethnicity, gender, region and age;
- The affect on student choice of course or institution;
- Protection for poorer students; and
- Level of government intervention versus a move towards a stronger market.

22. Given limited public resources, the Government's funding for higher education probably strikes the right balance with the vast majority of funds going to undergraduate higher education and more limited support to part-time and postgraduate studies. The approach to block grants through a semi-independent body such as HEFCE is also correct.

23. There is some inevitability that significant public funding will come with strings attached, as is the case in the higher education sector. Despite this, funding should not be subject to short-term shifts owing to fluctuating government policy, but instead should be based on a consensus between the major political parties.

24. Notwithstanding criticism, the Research Assessment Exercise (RAE) undertaken by HEFCE has the support of the higher education sector evidenced primarily by the fact that the sector cannot agree on an alternative! I would argue, though, that it is too selective in terms of allocating research funding. This tends to be at a detriment to institutions such as UCLan, which have a good research trajectory but which may not have obtained high thresholds of funding in the past.

25. It can be argued that it will always be difficult for UK universities to reach international levels of funding for research, particularly those seen at ivy-league institutions in the US, based on the fact that we do not have anywhere near the same level of endowments, nor are we supported by a tax regime as favourable. Given that government, charitable or business funding for research is unlikely to increase drastically in the near future, UK universities will have to rely on the growth of their own commercial income.

26. With universities being required to increasingly operate in a market situation, and secure more money from non-governmental sources, then it is of little surprise that universities engage in international student recruitment. It is entirely plausible that over the next 20 years, some universities may become even more geographically mobile than is currently the case, earning more from international rather that UK based activities. This will undoubtedly pose a series of challenges to public policy which have not yet been thought through and challenge the current perception that the higher education sector is funded by the UK Government, meets the needs of the UK market, and sits within a UK based panoply of financial and other regulatory rules and procedures.

The structure of the HE sector

27. The future structure of the higher education sector depends on the Government's preference to intervene, versus reliance on the role of market forces. The Government currently sends mixed messages about its preferred method, sometimes emphasising the role of the market, anticipating that market forces will lead to a restructuring of the sector, while on the other hand claiming it wants a planned system of higher education in which the Government intervenes ie to protect so called "shortage subjects" such as chemistry.

28. If the Government is committed to market forces, then the sector should anticipate further liberalisation of the fee regime, a move from state contribution to individuals and a greater strengthening of competition between institutions. The Government must be prepared, however, to also face the "political" consequences of the market, namely closures and mergers.

December 2006

Memorandum submitted by Professor Keith Mander, Deputy Vice-Chancellor (Planning and Resources), on behalf of the University of Kent

EXECUTIVE SUMMARY

Higher education is a key component of lifelong learning and one of the cornerstones of the knowledge society of the 21st century. A diverse HE sector can encourage a diverse population to participate in higher education. This is to be welcomed. It is vital that the UK HE sector is internationally competitive in the recruitment of international students, and in educating a workforce that can compete effectively in internationally competitive markets. There is a danger, however, that UK society is becoming polarised in its educational attainment and aspirations. With limited resources, there will always be a tension between improving the basic skills of the population as a whole and improving the educational attainment of those who can make the greatest contribution to a high-skill economy.

The current system of HE funding does not fund providers at the same rate for similar provision. It should be a principle of HE funding that there should be equal funding for similar provision. HEIs seek an objective and stable funding method. The Government should consider tax relief on study costs as a way to encourage people to undertake accredited courses and other courses that fulfil a national need. This would have a cost, but would generate higher tax revenue in the longer term if earnings increase and the economy grows. The UK needs a clear system of funding that follows students (either as a contribution to an institution's teaching costs or the student's maintenance costs) coupled with a broad range of higher education provision.

Policies that more explicitly define excellence in research and which seek to allocate public funds more deliberately to institutions that are regarded as the best will have negative rather than positive effects in the longer term. Public funding for research should be placed wherever research excellence is to be found. The sources of research money other than from government are growing and becoming more international. A properly funding research base is more likely to be able to access these sources.

Postgraduate qualifications are now replacing undergraduate qualifications as a preparation for leadership in society. A further expansion of the HE sector can be expected as people seek to improve their employment prospects through postgraduate education. As the use of information and communication technology spreads, students will be able (and probably be expected) to exercise more choice and to pace their own learning. The government should not attempt to shape the structure of the sector. It should rely on the sector itself to provide the creativity necessary to respond to market demands.

THE ROLE OF UNIVERSITIES OVER THE NEXT 5-10 YEARS

1. Higher education is a key component of lifelong learning and one of the cornerstones of the knowledge society of the 21st century

Educational attainment is a driving force behind social, economic and personal prosperity, as well as technological progress. But the market encouraged by variable fees and league tables, and the increasing number of higher education institutions in the UK, increase the institutional diversity of the HE sector to the point where few individual institutions will deliver the range of activities covered by the sector as a whole.

2. A diverse HE sector can encourage a diverse population to participate in higher education

This is to be welcomed. Better educated populations are more prosperous, healthier, longer living, and suffer less crime; they form the basis of a workforce better able to compete internationally.

3. It is vital that the UK HE sector is internationally competitive in at least two areas

First, in the recruitment of international students, providing much-needed income to the HE sector and contributing to the UK's influence overseas. Secondly, in educating a workforce that can compete effectively in internationally competitive markets, particularly in areas requiring a high level of knowledge and skill. But many of today's internationally competitive markets are facilitated by information technology, allowing education to be delivered, and companies to compete, on a truly global scale that does not depend on physical proximity. The economic advantage that the UK derived from being a provider of higher education through the medium of the English language is being eroded by other countries, including those in Europe and Asia, adopting English as the language of instruction. Many institutions are also embracing information technology to facilitate the local (to the student) delivery of education.

4. There is a danger, however, that UK society is becoming polarised in its educational attainment and aspirations

First, around 16% of the adult population is functionally illiterate and over 20% functionally innumerate. Secondly, variable fees will expose the worst aspects of the student market in that those in greatest need of the support of bursaries to participate in higher education will find the greatest difficulty in accessing that support because they lack the confidence to navigate the necessary bureaucracy. With limited resources, there will always be a tension between improving the basic skills of the population as a whole and improving the educational attainment of those who can make the greatest contribution to a high-skill economy. Both can be addressed with increased resources, and the HE sector has an interest in seeing increased resources allocated to it, but raising the necessary resource from individuals (who might be thought to make the greatest individual gain from the consequential improvements in HE) must be balanced against the disincentive that increased individual contributions provide to those who are traditionally debt-/risk-averse if access to education on the basis of ability and potential (rather than ability to pay) is to be encouraged.

5. Students have diverse needs and expectations of HE

An exciting programme of study; an education that creates and supports excellent career opportunities; a stimulating environment that supports personal development. Many students will combine work with study, either working to fund their studies (particularly undergraduates), or studying as continuing professional development (CPD). Postgraduates studying as part of their continuing professional development will be increasingly common if, by 2020, 40% of adults are to be qualified to Level 4 as envisaged by the Leitch Review. Further, if 70% of the 2020 working age population has already completed its compulsory education, a greater engagement with that working population rather than schools seems to be indicated.

UNIVERSITY FUNDING

6. The current system of HE funding does not fund providers at the same rate for similar provision

The current "contract range" system, based on historical principles, allows a variation of up to 10% in funding levels, which is perverse when institutions with different historical funding levels collaborate to deliver joint provision. Further, funding weightings based on the location of a principal office are now outmoded as institutions diversify their provision geographically and through the use of technology. It should be a principle of HE funding that there should be equal funding for similar provision.

7. Increasingly "strategic" funding is being drawn out of formula-driven funding

This adds an element of uncertainty to the funding process at a time when HEIs seek an objective and stable funding method. Funding for teaching should follow student demand, recognising that part-time attendance may increase in future.

8. A truly variable fees market will produce a truly variable offer across the sector, with the associated volatility until such arrangements stabilised

It would have a number of consequences:

- (i) an impact on management structures and staffing, with a more flexible approach to the market and higher variability of staff rewards and opportunities;
- (ii) a danger of social divisions as students from poor backgrounds are forced into low cost courses on grounds of price;
- (iii) the possibility that students will be encouraged to take courses perceived to offer individual economic advantage but which may not match the national need;
- (iv) the opportunity to incentivise students to take courses that fulfil a national need; and
- (v) more part-time take-up as students seek paid employment to offset the costs of their education.

9. The Government should consider tax relief on study costs as a way to encourage people to undertake accredited courses and other courses that fulfil a national need

This would have a cost, but would generate higher tax revenue in the longer term if earnings increase and the economy grows.

10. Funding to achieve transient political aims tends to be unstable as predicting future needs is difficult in a sector with long product development timescales

Similarly, industry cannot be expected to be a significant funder of higher education to satisfy its demands for a skilled workforce since it also operates on shorter timescales than any specific educational initiative. The UK needs a clear system of funding that follows students (either as a contribution to an institution's teaching costs or the student's maintenance costs) coupled with a broad range of higher education provision.

11. Universities generally manage their finances very well

There has been increasing professionalism in the management of university finances over recent years. The more pressing issue may be one of more general management in increasingly complex and devolved institutions.

12. There is a strong impulse, mainly derived from fears about global economic competition, to develop policies that more explicitly define excellence in research and which seek to allocate public funds more deliberately to institutions that are regarded as the best

This impulse should be treated with great caution because there is limited understanding of the processes that have made the UK a world leader in the creation of new and important knowledge. There is a considerable risk of disturbing arrangements and institutions in ways that have negative rather than positive effects in the longer term. The publications of the Office of Science and Technology and past inquiries by both Houses of Parliament have shown that the UK, despite its size, has throughout the post-war period maintained its place as second only to the US in many areas of research and development. The reasons for this are complex and only very partially understood. They do not indicate that greater regulation and direction are the answer.

13. Concentrating government research funding in fewer institutions is just as likely to lead to rigidity and conservatism as it is to comparative advantage and innovation

The sources of public research funding should remain varied and continue to be pluralist in the way they allocate their funds and responsive to the ideas that emerge from a wide range of institutions and individuals. The current systems for allocating public funding to research have worked well over the longer term. Recent moves to recognize the full costs of university research have been an important step forward in securing the research infrastructure. There is good reason to believe that spending more through the same mechanisms will produce more knowledge. The sources of research money other than from government are growing and becoming more international. A properly funded research base is more likely to be able to access these sources.

THE STRUCTURE OF THE HE SECTOR

14. Postgraduate qualifications are now replacing undergraduate qualifications as a preparation for leadership in society

A further expansion of the HE sector can be expected as people seek to improve their employment prospects through postgraduate education. But whereas the majority of undergraduate education is based on the three-year full-time degree programme, the majority of postgraduate education will be part-time, balancing paid work with work-related study, will be done in small units of credit, and may be completed online rather than face-to-face. The HE sector will be appropriate and sustainable for the future if it can adapt to this new type of student. If it does not adapt, it will face increased competition from overseas providers, online private providers and the FE sector.

15. As the use of information and communication technology spreads, students will have a wider repertoire of learning sources to draw on

These opportunities should foster a more creative and critical approach to learning. Students will be able (and probably be expected) to exercise more choice and to pace their own learning. On the other hand, a mechanical use of available technology as a mere teaching aid would stifle creativity.

16. The Government should not attempt to shape the structure of the sector

It should rely on the sector itself to provide the creativity necessary to respond to market demands. It should, however, support, through strategic development funding, requests from the sector to implement sector-derived initiatives that are in the national need.

December 2006

Memorandum submitted by the University of London Union (ULU)

INTRODUCTION

The University of London Union (ULU) is the federal students' union for more than 120,000 students at the 20 Colleges and 12 Institutes of the University of London. The trustees of the organisation comprise four elected full-time sabbatical officers who represent the views of students across the federation to the central University and act as the interface between students and local and national decision-makers to achieve improvements for students in the capital. ULU has a team of part-time elected officers each with their own portfolio in an attempt to ensure that ULU is responsible to the needs of all its diverse membership.

1. EXECUTIVE SUMMARY

Students want universities to provide them with the opportunity to realise their intellectual and personal potential and enable them to enjoy a rich student experience where their needs are known and met. The impact of the introduction of variable tuition fees has not yet been fully realised but students are now more conscious of their status as consumers with choices and rights. ULU believes that there is an urgent need to address shortfalls in provision in a number of key areas such as welfare, supervision and accessibility and in this submission focuses on a number of often under-represented groups and their needs.

2. WHAT DO STUDENTS WANT FROM UNIVERSITIES?

With the introduction of variable tuition fees, students more so than ever want access to quality assured teaching in a well resourced and responsive learning environment and value for money. Through its democratic structure and targeted research, ULU has identified a number of areas where students demand improvements.

3. Postgraduates

- The relationship between student and supervisors is tremendously important to the experience and outcome of postgraduate study. A number of improvements should be made in the supervision of postgraduate students, these include:
- Clear definition of the roles and responsibilities of all types of supervisors;
- All supervisors to undertake mandatory training and for regular quality checks and refresher courses for experienced supervisors;
- Each research student to be supported by a supervisory team, consisting of not less than one primary and one secondary supervisor, one of whom must have supervised successful PhD candidates;
- Main supervisors to take prime responsibility for no more than a maximum of six research students; and
- All research students to be guaranteed regular formal supervision sessions, lasting at least one hour per month. We support colleges/courses where there is more supervision already offered.

4. ACADEMIC REGULATIONS

ULU calls for institutions to ensure academic regulations for postgraduate research degree programmes are transparent and that the definitive version of the regulations are readily available to students and staff, in both hard and electronic copies, in line with the QAA code of practice for the assurance of academic quality and standards in higher education.

5. CODE OF PRACTICE FOR TAUGHT MASTERS

ULU calls for all institutions to adopt a code of practice for taught master's courses setting out the responsibilities of both the department and the student, to include for example:

- taught postgraduate students to have access to a named personal tutor;
- taught postgraduate students to be provided with a plan for regular and formal supervisory contact, including provision for the summer period when the dissertation is being written up.

6. Costs

ULU calls for all costs associated with a research student's study to be made clear and consistently applied.

7. VIVA EXAMINATIONS

ULU notes that selected colleges within the University of London are piloting the attendance of an independent observer of academic standing at viva examinations as a safeguard against possible intimidation, bias or procedural irregularity. This should include provision for audio recordings of the viva to help speed up any appeals process. We call for this pilot to be extended nationally. In addition, we demand that copies of the independent reports are made available to the student on completion of the viva.

8. Equality

We call for all selection process and admission decisions, supervisory arrangements, training and development opportunities, feedback mechanisms and appeals and complaints to be set out clearly and applied consistently to avoid discrimination.

9. PART-TIME AND MATURE STUDENTS

Part-time and mature students can suffer from a lack of representation compared to full-time students. ULU calls for all students' unions and higher education institutions (HEIs) to ensure that these students are given a voice.

10. FUNDING AND FEES

We call for:

- The Department for Education and Skills to allow Part-Time undergraduate students to pay their fees after they have graduated, as is the case for all Full-Time students;
- A cap to be put in place due to the fact that there is NO CAP on the fees that Part-Time students have to pay;
- The abolition of Top-Up Fees;
- Specific loan rates to be offered to Part-Time and Mature students; and
- Part-Time students to be offered specific rates for admin costs/ library fees/ and other charges because currently they are not welcoming for Part-Time students.

11. CHILDCARE AND CARER FACILITIES—THE "HIDDEN COSTS"

We call for institutions to recognise that many Part-Time and Mature students have either children to look after or in some cases, are carers for their parents. To gain access to childcare provision is difficult and expensive hence we demand that institutions provide créche facilities.

It is extremely hard for carers who are studying to arrange someone from the Local Authority to look after their dependent when they are studying. Again, this is expensive; therefore we call for the institutions to offer financial assistance to student carers to be able to afford adequate care provision.

12. TIMING OF LECTURES AND SEMINARS

We call for institutions to understand that many Part-Time and Mature students have jobs and families to take into account when they are studying. Therefore, we acknowledge the "Derby Solution", the Birkbeck College system and the "Weekend Solution" and believe that every student should have access to all facilities at the point of demand, so that Part-Time and Mature students can spend time with their families and have enough time to balance having a job.

13. Environment—Studying Environment

We call for a provision of study skills support aimed at those students returning to education after some time.

14. CLARITY

We call for all selection process and admission decisions, training and development opportunities, feedback mechanisms and appeals and complaints to be set out clearly and applied consistently to avoid discrimination. There should also be clarity about the qualifications that a course demands from Part-Time and Mature students as this will at times differ to the requirements for Full-Time students.

15. Social Environment

We call for interdisciplinary Part-Time and Mature student networks to be facilitated, eg providing webspace on university websites and physical space for meetings, to avoid problems of social isolation for Part-Time and Mature students. We also encourage all Students' Unions to widen participation and to acknowledge that the needs of Part-Time and Mature students are sometimes not that of a traditional student. Therefore we believe that the services and activities on offer should respect this difference.

16. Students with disabilities

Students with disabilities require confidential and ready access to targeted support from their HEI.

Some medical students are reluctant to seek mental health support due to concerns that this could have a detrimental impact on their future career and their fitness to practise as medical professionals. All students should have access to mental health support services free from the fear of discrimination.

Access to counselling services within HEIs is often limited and long waiting lists can mean that students who do not seek support before they have reached crisis point can be left in a vulnerable state without any support. ULU calls on HEIs to invest in this critical area of student support.

Students with dyslexia and dyspraxia should also be made aware of the support available to them while at university and HEIs need to do more to make this information available to all students.

The nature of many university buildings means that students' with physical disabilities can face a number of physical barriers in buildings which are yet to be made compliant with the reforms set out in the Disability Discrimination Act. HEIs should be encouraged to act swiftly to ensure that their premises are accessible to all so that restrictions are not placed on the choices of students with disabilities.

WHAT SHOULD THE STUDENT EXPERIENCE INVOLVE, INCLUDING FOR INTERNATIONAL STUDENTS?

17. The student experience begins prior to the student's arrival at their higher education institution. Universities and students' unions should therefore promote all aspects of the student experience during each of the key phases of a student's life cycle.

18. The student experience is varied and much wider than the pursuit of a course of academic study. While at University, students, often for the first time, take on paid work, manage their own finances, live independently and assume all the responsibilities which come with running a home. Students are responsible for their own diet, health, transportation, utilities and must do this in an unfamiliar environment without the support structure they may have had in the past. The student experience is also about developing life skills in addition to personal and intellectual development. This is why students' unions and welfare support services are critical aspects of university life. The many activities and opportunities provided by students' unions can make the difference between a student enjoying a rich and fulfilling university life and dropping out of higher education due to the lack of a support structure and friendship networks. Clearly wider issues such as financial hardship are also critical factors in a student's decision to drop-out of university but HEIs should be encouraged to value the role of students' unions and invest in what is a key resource for students.

19. Many students contribute to the wider community by taking part in volunteering activities and many become politically engaged for the first time while at University. ULU operates a wide range of student activities which include elite sports and officiating courses. ULU has however identified a lower participation rate by international students in many of its sports clubs and societies. This is the case even in those sports popular with international students in their home country and reflects a national trend. ULU has recently put together plans to provide a sports programme targeted at but not restricted to international students in an attempt to change this imbalance. In order to ensure that the needs and views of international students are given representation, ULU has also formulated a dedicated training programme for internationals students' officers which we would hope to roll out in 2007 to officers across London. ULU is also carrying out work on an international students' charter to give focus and profile to issues affecting students from overseas.

20. The University experience for international students is affected by the level of support provided by their HEI in a number of areas.

21. ORIENTATION:

The induction process for overseas students varies between institutions. This is the first impression given to international students by their new institution. For example, University of Kent include health care, safety and banking in their orientation day. There is an issue with postgraduate researchers attending induction events. This seems to be partially through choice but also through lack of information. There is a misconception that orientation is aimed at undergraduates. Encouraging postgraduate international students to attend would undoubtedly improve their student experience.

22. Accommodation:

UKCOSA found that 75% of all overseas students in the HE sector were offered university housing at the beginning of their stay. However, the standard of care given to research postgraduates seems to be considerably lower than undergraduates. 20% of those surveyed said they had not received any help. In comparison with undergraduates, only 61% of overseas postgraduates were offered university-managed accommodation.

While there are initiatives, such as the University of London Housing Services' landlord accreditation scheme, they are not communicated well to students. Ensuring that information is easily available prearrival in the UK is very important. Although the development of the Internet has made this information more accessible, there is a tendency to use this as an excuse not to provide it in other formats.

23. LANGUAGE BARRIER:

Studying any subject in your second language is demanding. A survey, conducted by UKCOSA, found that over 50% of students were concerned about language before they arrived in the UK. A third of Chinese students and 45% of Thai students were still concerned half way through the academic year.

This causes problems in both academic and social settings. If students are struggling with language competency, this has a negative impact on their academic performance. It can also make socialising difficult, which can make international students feel isolated.

The issue of language competency is especially prominent in those coming to the UK for postgraduate study. This has led to a growth in pre-masters courses. The best established of these is run by SOAS. The main purpose of the course is to improve students' IELTS grade from 5 to 6, the requirement for many postgraduate courses. London Universities offering such courses include Greenwich, SOAS and Queen Mary's.

Students who have studied for pre-masters seem to consider them to be a positive experience that allows them to acclimatise to life in Britain, as well improving their language skills through interacting in a social setting. However, the SOAS pre-masters cost £8000, the same as a masters. This may solve some of the problems caused by the language barrier but it adds to the financial strain on overseas students. Some Colleges such as Imperial do offer free language classes to students all year round.

24. INFORMATION

Many institutions fail to provide enough information to international students about the support services available to them while studying in the UK such as housing advisers, welfare and advice services. Insufficient information is also provided to students before they arrive in the UK regarding the cost of living. Housing advisers report that some students in receipt of sponsorship will receive funds to cover their course fees alone and are not made aware of the full extent of course related in addition to rent, travel *etc*.

Many international students take on part-time work and yet are unaware of their rights as workers in the UK. More information should be provided to international students by both their academic institution and by trade unions to ensure that international students are not exploited. This is also a legal matter since international students are restricted in the number of hours they are allowed to work. This can also lead international students' in need of additional income to be forced into taking "cash in hand" work which leaves them open to prosecution.

25. CONCLUSION

Now that fees have been introduced Universities in the United Kingdom need to recognise that students will expect better quality services and facilities than ever before and that the traditional deference given to university staff and management may be replaced by a more hard-nosed and less forgiving attitude. Long standing weaknesses in the sector will need to be addressed effectively soon or may be come an embarrassment to the sector and the Government and will weaken the case for continued self-regulation and strengthen calls for better regulation on behalf of the public and taxpayers interests. For example, the treatment of applicants is still very variable and is sometimes haphazard and demeaning in a way that would be unthinkable in any business organisation. The quality and promptness of feedback on assessed work is still often an issue in many colleges. Many lecturers still have no formal teaching qualifications and take on pastoral support roles without suitable training or quality assurance measures in place. Support for the growing number of students with mental health issues is inadequate in size and range of style of support available. ULU hopes that universities will see the introduction of fees as a springboard into an era where longstanding inconsistencies and shortcomings are finally addressed rather than it being an all too comfortable armchair to fall asleep in, in the expectation that students will keep paying to go to Britain's universities.

December 2006

Memorandum submitted by the Wellcome Trust

1. The Wellcome Trust is pleased to respond to the House of Commons Education and Skills Select Committee Inquiry into the future sustainability of the higher education sector.

2. The Wellcome Trust is the largest independent charity in the UK and the second largest medical research charity in the world. It funds innovative biomedical research, in the UK and internationally, spending around £500 million each year to support the brightest scientists with the best ideas. The Wellcome Trust supports public debate about biomedical research and its impact on health and wellbeing.

3. Much of the Trust's funding in the UK is provided through universities. While we strongly endorse the value of universities both for teaching and learning, and contributing to the economy and society, this response concentrates mainly on the research role of universities, which is of most relevance to the Trust. It focuses on the questions related to university funding.

Is the current funding system fit for purpose? Should central funding be used as a lever to achieve government policy aims? Is the balance between core or block-funding and policy-directed funding correct at present? How can leading research universities reach internationally competitive levels of funding?

The Dual Support System

4. We strongly support the role of the dual support system, and welcome the Government's firm commitment to the dual system, in *Science and Innovation Investment Framework 2004–2014: Next Steps* and most recently, in the Pre-Budget Report 2006.

5. The two streams of funding within dual support have distinct purposes: Research Council grants provide funding for specific projects, programmes and people, while unhypothecated QR funding from the Funding Councils, allocated on the basis of research excellence, allows institutions to take strategic decisions about their research portfolios. QR funding provides flexibility to undertake blue skies research and to respond to new opportunities, and allows Vice-Chancellors to plan for the longer-term, with secure funding to provide for the core costs of permanent academics and support staff. The dual support system allows a wide variety of other funders, including the Government, charities, European Union and industry, to invest in university research, which has significantly contributed to the strength of the UK science base.

Financial sustainability of universities

6. The importance of moving towards financial sustainability of UK universities cannot be underestimated. The introduction of full economic costing has enabled good progress to be made, but robust financial management and significant investment will continue to be required.

7. The strength of the biomedical research base in the UK is partly due to the plurality of funders. UK charities, for example, funded 15% of research and development performed in UK universities last year and UK charities have contributed over £3.25 billion to research in the UK over the past five years. However, without consistent investment from government in partnership with charities, there is the risk of a significant reduction in the volume of high-quality research in the UK, further threatening the sustainability of the sector.

8. Recognising the contribution of charities to the research base, the Government established the Charity Research Support Fund (CRSF), to contribute towards the full costs of charitable-funded research at universities in England. The *Science and Innovation Investment Framework 2004–14* included the pledge to invest further in the CRSF over 2008–2010, adding at least a further £90 million to take the CRSF to £270 million. The Government must now fulfil this commitment in the Comprehensive Spending Review 2007.

9. We argue there is a continued need for the Government, through the Higher Education Funding Council for England (HEFCE), to provide a dedicated capital infrastructure stream, similar to the Science Research Investment Fund (SRIF), to ensure that universities have incentives to invest adequately in infrastructure. We are pleased to see SRIF, and its predecessor the Joint Infrastructure Fund (JIF), beginning to make a significant impact on university infrastructure.

10. Different funders contribute to the sustainability of the research base in a range of ways. In addition to supporting the direct costs of research, charities have also contributed enormously to maintaining the infrastructure and equipment of UK universities. The Wellcome Trust provided over £420 million in partnership with the Government for JIF and SRIF awards, to help fund new research facilities in UK universities. The Trust has also made a major contribution to the development of key international research resources, including the Human Genome Project and the Diamond Synchrotron Project. The sustainability of the science base in the UK relies heavily on national and international research resources such as these.

Should research funding be based on selection of "quality"? How should quality be defined and assessed? How might this drive behaviour across the sector?

11. The Trust has previously argued that the allocation of funding must reward and encourage excellence in research. Funding from charities, for example, is awarded through open competition, using independent peer review; it takes into account the track record of researchers and, above all, rewards excellence. We therefore welcome the announcement in the Pre-Budget Report 2006 relating to reforms of the Research Assessment Exercise. We support the need to reduce the burden of bureaucracy and costs, while ensuring the exercise is rigorous, consistent and transparent. We look forward to seeing further details as they are developed by HEFCE.

12. For biomedical research in particular, we consider that total external research income provides an effective measure of research excellence. The intensity of peer review (often international) associated with funding decisions means that external research income is the best proxy indicator of research excellence. We therefore welcome the proposals to streamline the process for research assessment for science, engineering, technology and medicine.

13. We note that it is proposed that there should be, as an additional quality indicator, a "bibliometric statistic relating to research publications or citations" for these disciplines. We will be interested to see further development of this proposal. The Trust affirms the principle that it is the intrinsic merit of the work, and not the title of the journal in which an author's work is published, that should be the main focus for consideration. We would therefore be more inclined to support the use of bibliometric statistics aimed at the article level.

14. The HEFCE announcement stated that the funding allocation will be produced by taking the outcomes from the assessment process and adjusting for research volume. There must be greater transparency at this stage of the funding process. We call on HEFCE to consult on this as they develop the details of the new framework.

15. Any new process must be flexible and dynamic, responsive to emerging areas of research and able to support the development of researchers. It will also be important to ensure that the system takes into account and actively encourages cross-discipline research and recognises translational research.

16. We also suggest that it is important that any assessment process should include an additional review of the quality of the research environment within any institution. This would help to avoid perverse drivers seen with previous RAE, such as an emphasis on short-term research strategies or a focus on increasing research volume rather than investing in research infrastructure. A broader review of this nature might include:

- support for career development and mobility;
- support for early career researchers and postgraduates;
- commitment to diversity;
- flexibility to facilitate careers for women;
- strengths in teaching;
- dissemination and public engagement activities;
- support for interdisciplinary research;
- investment in infrastructure; and
- commitment to sustainability.

17. An additional review of this nature, with associated reward through QR funding, would help to encourage institutions that are fit both for world-class research and teaching.

December 2006

Supplementary memorandum submitted by the British Council

Below is a table summarising students in UK Higher Education from the Middle East and Near East and North Africa (NENA).

The average growth rate for the two regions is 5%, which is higher than the average growth for non-EU students in UK (2%). Also enclosed is a split between the EU and non-EU students, so one can see the difference in the growth rate (overall, the Middle East region is one of the regions with highest growth).

Country	2004–05	2005–06	Growth (%)
NENA			
Algeria	545	465	-14
Jordan	1,295	1,355	4
Lebanon	585	635	8
Libya	1,310	1,245	- 5
Morocco	195	215	11
Syria	500	480	-4
Tunisia	65	80	18
Egypt	1,010	975	-3
Middle East			
Yemen	240	165	- 31
Bahrain	965	990	2
Iraq	180	245	37
Kuwait	885	980	10
Oman	1,160	1,140	-1
Qatar	510	515	1
Saudi Arabia	2,445	2,765	13
United Arab	1,810	2,085	15
Emirates	-	-	
Total	13,700	14,335	5%

Source:

HESA Student Record

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The EU growth has been primarily driven by the new accession states (10 countries joined in 2005, hence their students would refer as EU students vs. non-EU, as they were previously referred to).

Domicile Marker	2004–05	2005–06	Growth (%)
EU	115,230	121,730	6
Other overseas	229,105	234,350	2
Total	344,335	356,080	3

Source:

HESA Student Record

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