The Business of Borderless Education: UK perspectives

Summary Report

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Preface

The new world of global higher education is fast moving and complex. Barely a day passes without an announcement that a major company in the media or entertainment business has tied up a new deal to market and sell educational products across the world.

I am delighted that CVCP took the lead nearly a year ago in commissioning, jointly with the HEFCE, a report that would map these changes and suggest how they might impact on UK universities. The aim of the study was to alert CVCP members to the potential risks and rewards of the new 'borderless' environment that they all face. The report, which is the most substantial work of its kind, provides valuable practical guidance about how higher education institutions might respond to these challenges and opportunities. There are also clear indications about how the CVCP itself might continue to support its members in this area. A major example is the need for a continuing source of market intelligence that will help to inform universities' planning decisions. Such a service would be best organised on an international basis and CVCP will be initiating early discussions with its Australian partners in this project about the possibilities of future collaboration in monitoring developments in the global marketplace.

Borderless education has potentially much deeper long-term implications for the future shape and structure of British higher education. For example, more intense competition raises issues about the number and size of UK universities and the extent to which greater collaboration could help us face the global challenge. The CVCP will be taking the lead in debating these wider issues over the next few months.

Professor Howard Newby
President
CVCP

This report on 'The business of borderless education' has come at just the right time. It gives a comprehensive account of the virtual and corporate developments in learning which - along with the Internet - are sweeping the world.

The report alerts UK universities and colleges to the challenge in borderless learning posed by their overseas counterparts, particularly in North America. But that challenge is also a major opportunity for us, which we must seize. The UK has a strong track record of world-leading initiatives in the use of new technologies in higher education. The report puts us right on track to capitalise on these.

Conclusions from this report have fed into the thinking on our new 'e-University' project. The report highlights that many individual higher education institutions are seeking to develop web-based applications on their own or in groups. We launched the 'e-University' project in the strong belief that, by working together in a partnership, we can pool the resources and expertise needed to exploit the huge possibilities offered by new technologies, and the Internet in particular, to establish a world-class provider with global reach.

Nevertheless, the report also highlights the multitude of issues that need to be addressed to develop high quality borderless education, notably in the area of quality assurance.

Along with the CVCP, we are very pleased to have sponsored a work of this scale and importance.

Sir Brian Fender
Chief Executive
HEFCE

About this report

This report is the result of a study commissioned by the CVCP and the Higher Education Funding Council for England (HEFCE). It was undertaken by a team of consultants and researchers from five organisations working in partnership. A steering group and an advisory group supported the study.

The project built on an earlier study by a team of Australian researchers (*New Media and Borderless Education: A Review of the Convergence Between Global Media Networks and Higher Education Provision*, 1997). The UK study has benefited from sharing information from the Australian team's second study: a detailed analysis of a sample of corporate universities and educational businesses in the USA (Cunningham et al, 2000).

In addition to this summary, the report is arranged in two volumes. One, referred to in this text as the 'main report', contains the analysis and recommendations. The other volume provides the findings from country case studies. The summary highlights the key points from each of the chapters of the main report, which itself draws on information in the detailed case studies. Recommendations are not repeated separately as they need to be considered in the context of specific analyses within the relevant chapters of the main report.

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1   Introduction

1.1   This report, undertaken in parallel with a similar exercise in Australia, looks at the impact on UK institutions of what is now called 'borderless higher education'. For some institutions we think the strategic implications could be very serious indeed; for others they may be minimal. The challenges arising from the entry of new private for-profit, virtual, and corporate, providers into the domestic and international markets of UK institutions will soon become evident to all. We also suggest that the internal managerial implications of borderless higher education will be material, particularly as regards policies on staffing and quality assurance.

1.2   The term 'borderless higher education' (borrowed from the Australian study) is used extensively to indicate developments which cross (or have the potential to cross) the traditional borders of higher education, whether geographical or conceptual. The phrase therefore encompasses both activities which are likely to be adopted in the UK higher education market (largely, but not solely, because of technological developments), and also new export opportunities for universities. The expansion of corporate education falls into this category for two main reasons: first, many of its imperatives rest on the lifelong learning needs of staff in multi-national organisations; and second, in some (but not all) cases corporate universities may act as a special kind of private for-profit provider. Inevitably such borderless provision spans a range of activities in post-16 education, although the border between higher and further education is not one on which this report concentrates directly.

1.3   At one stage in our work, undertaken in the period March to December 1999, we were tempted to present this report in the form of a 'wake-up call' to the higher education sector. It had seemed to us that there was too little awareness of the potential threats and opportunities and that as a result UK institutions would be poorly positioned in competitive terms. However, numerous articles have recently been published, particularly about so-called 'virtual' provision and about the possibilities provided by new forms of communication and information technologies for different forms of teaching and learning. Thus, awareness of the challenge is no longer the issue. Instead, we have focused on answering the two questions that institutions will now ask:

• "how significant and real are the challenges for us?" and

• "what should we do about them?"

1.4   The first question illustrates the tensions between the enthusiasts for change and those who are either more cautious or who fear the consequences of borderless provision. Many of the enthusiasts are critical of UK universities' use of technology in teaching, suggesting a conservatism that risks a failure to grasp the emerging market opportunities. For the cautious majority, however, the question of whether the

"The challenge to established universities will come from the international giants of communications, information technology and multimedia industries... Quality in the resulting 'global virtual universities' will be high, standardisation will create cost structures that are mightily competitive." Alan Gilbert, Vice-Chancellor, University of Melbourne, THES, 22.8.99

predicted changes will occur is reasonable, particularly in a context in which for most staff the major changes in the nature of teaching, promised by the advocates of all previous technological breakthroughs, have failed to materialise. The question - "is it all just another example of over-enthusiastic hype?" - is central to the report.

1.5   The second question - "what should we do about it?" - is addressed for a range of audiences in the report, with recommendations made not only for institutions, but also for action by government, the CVCP, the funding bodies, and other national and international agencies.

Objectives

1.6   The objectives for our study were to:

• Build on and update the Australian findings, and report on borderless developments relevant to the UK.

• Examine the policy implications of these developments for UK higher education, focusing on: legal and regulatory matters; quality and accreditation; governance and institutional management; costs; infrastructural issues; teaching and learning; and staffing issues.

• Advise institutions and the CVCP on actions they might take in the light of 'borderless developments'.

1.7   In practice, the main focus of the study was on the organisational, policy and management implications of the likely growth of borderless markets in higher education. Other technological developments will also have significant effects within universities, for example, the huge growth in the use of standard software applications by students, and the increasing sophistication of information technology systems for use in university management (for example, integrated student administration systems). It is also likely that advances in knowledge management software may lead to major changes in the way that research (particularly in the humanities and social sciences) is undertaken, and therefore the nature of postgraduate study. Indeed it may not be long before the virtual PhD becomes a reality. However, while acknowledging the importance of such developments, our focus is on the specific issue of borderless provision.

Classification

1.8   The report uses a simple four-fold classification of higher education providers: public; private not-for profit; private for-profit; and corporate. Except where specifically stated in the text, it excludes so-called 'virtual universities' and colleges as a separate category. Currently, the term 'virtual university' is used to describe a multitude of concepts, and few wholly virtual providers exist. In our view virtuality is more a descriptor of an approach to delivery than anything else, and although different elements of virtuality may be significant (for example, whether or not a physical headquarters site exists, and for legal purposes where it is located), a more

important classificatory question is whether there is a need to distinguish between distance learning and virtuality as delivery mechanisms. In the future, the general heading of learning is likely to include all appropriate approaches to meet specific learning outcomes, including both paper-based and virtual where appropriate. Accordingly, the four-fold classification makes the assumption that within all higher education systems there will be specialist distance learning providers using virtual technology, and in the vast majority of institutions significant virtual provision will exist alongside a range of other forms of teaching and learning. This is likely to be as true for existing distance learning-based universities (for example, the Open University in the UK) as for new private providers.

Recommendations

1.9   The conclusions of the report are inevitably somewhat speculative (existing data are often extremely weak on many of the topics reviewed and areas for further research are identified), but it nonetheless stresses the need for institutional action. While claims of the 'death of the residential university' have been a useful stimulus to reflection, our main concerns are more pragmatic, and we have generally taken a 10 year timeframe for our policy recommendations and analysis. We have also been concerned to avoid the dangers of generalising about the likely impact of borderless provision on the basis of what are currently only limited developments in very specific subject areas, primarily associated with business studies, information technology and continuing professional development.

Other Sources

1.10   There are two other relevant sources which readers may wish to consult. The first is the report of a recent study commissioned by all the funding bodies in both higher and further education on the use of communications and information technology materials in teaching and learning in the UK (HEFCE 99/60). Among other conclusions, the authors observe that, although a relatively small number of universities are investing heavily in web-based materials to support student learning, the institutional reality of communications and information technology in teaching in higher education has a long way to go before the claims made for it can be substantiated. A second report - a Foresight study commissioned by the Office of Science and Technology on 'Universities in the Future' - is a more speculative piece about the possible nature of universities by 2025.

"Higher education is now a no-value commodity unrelated to real costs and no basis whatsoever for an effective and efficient business. There is still time to replace the present arrangements but the will is not there. This is to be regretted for the future is always best left in the hands of discerning customers close to the marketplace."
Sir Graham Hills,
The University of the Future, in Thorne, M. (ed), Universities of the Future,
Office of Science and Technology, 1999

2   Current developments in borderless higher education

2.1   Documenting current activity in borderless higher education is not easy. In a world of 'spin' it is in the interests of new providers to emphasise potential and to massage reality, and obtaining data on actual student enrolments with the new providers is difficult. Nonetheless, it is certainly the case that there has been an explosion of activity in corporate education, for-profit higher education, online delivery and university partnerships in the past five years. The drivers behind borderless higher education are strong and can only strengthen They include: technological developments; enhanced interest in lifelong learning in work; widening participation and encouraging access to post-16 education; huge increases in the international demand for higher education; and the general introduction of market mechanisms into the public sector. In the next few pages we summarise developments under the headings associated with their source - the case studies' volume contains much more detail.

Corporate universities

2.2   Corporate universities exist predominantly in the USA. According to Corporate University Xchange there were some 1600 by the year 1998, supported by a wide range of businesses. Undoubtedly there is an element of fashion about such growth, and a test of the survival of many will occur at the next economic downturn. Numbers in the UK and Europe are currently small, although likely to grow, and are mainly linked to large organisations with a serious concern about enhancing performance and job satisfaction through lifelong learning. At one end of a spectrum corporate universities represent a re-branding of education and training which is often narrowly skill-based and with no evidence of higher education level activity, a major driver being the appeal of the term 'university' to adult learners in the USA. At the other end they encompass a combination of learning and knowledge-focused activities, from education and training to research, consultancy, best practice benchmarking and knowledge management, available primarily to staff, but also to customers, and occasionally - but not often in the UK - to the wider public.

2.3   From a higher education perspective the use of the term 'university' often appears misleading. The focus of activities in most - not all - corporate universities is not at a higher education level, subject coverage tends to be narrow, practitioners rather than academics act as tutors, and links to academic research are rarely a part of curriculum design and content. By contrast, in a commercial environment the concern of public institutions over the use of the word 'university' is that it may be conceived as elitist, protectionist, and may not reflect the potential opportunities

that the more substantial corporate universities can offer in both conceptualising learning differently and delivering it in new ways.

2.4   In general, corporate universities place increasing emphasis on the use of technology to deliver training (although typically not as the sole delivery model), and the Australian team noted moves towards integrated multiple-platform delivery (although video was still the most commonly used technology, particularly for remote students). They nonetheless conclude that, at present, virtual, corporate and for-profit institutions are not far in advance of traditional universities in exploiting the potential of technologies to change their educational model.

2.5   Corporate university programmes have emerged to provide tailor-made provision, to address skills shortages and the need for rapid and regular skills updating. To an extent they can be linked to reported dissatisfaction among some business leaders and adult students with traditional university programmes (in terms of flexibility, content, focus and levels of service). Across the world - even in the United States - there is very little evidence that corporate universities have any intention of operating independently in the undergraduate arena in a major way. Most corporate universities have chosen or wish to collaborate with existing universities and colleges, although they are highly selective in their choice of partners.

For-profit higher education

2.6   Education and training is becoming a significant business sector. For-profit education is not new. In the USA, De Vry Institutes began in 1931, the Keller Graduate School of Management in 1973 and the University of Phoenix in 1976 (first accredited in 1978). In the USA for-profit education providers share many features with corporate universities, including a focus on professional subjects and working adults ('earner-learners') as students. Some offer a wide range of programmes, from associate degree to doctoral level, and in many cases offer directly accredited provision. With flexibility, convenience and relevance as watchwords, supported both by technology-mediated learning and close attention to learner needs, these organisations potentially pose a direct threat to existing universities in specific markets.

2.7   Key elements in the ability of for-profit education providers to attract adult students typically include: their location (learning centres close to work); accessibility (online provision and learning support available up to 24 hours a day, seven days a week, 12 months of the year, with frequent enrolment times and teaching available during the evening and weekends); short and intensive study periods; the potential for 'banking' and transfer of educational credit; and a curriculum taught by practising professionals which is of direct and immediate applicability to the workplace.

2.8   Alongside reputable developments, less reputable 'diploma mills' and 'fly-by-night' operators give particular cause for concern to institutions and higher

education agencies in the USA, South Africa and Central and Eastern Europe. Agency responses include attention to accreditation and recognition criteria as well as moves to promote registration of private providers and to advertise legitimate and ethical providers.

2.9   In common with corporate universities, private providers often work in partnership with existing universities, either singly or in consortia. As early as 1996, it was reported that half of Australian universities had twinning arrangements with private colleges in Malaysia. The picture in Singapore was similar, with the UK also well represented in such partnerships as more recent studies show. A newer development is existing universities establishing private ventures to allow them to operate more flexibly and to extend their international reach. Melbourne University Private Ltd, Deakin Global, and NYU*Online* are examples.

2.10   It may be a prelude of things to come that for-profit companies are also taking over existing providers and expanding internationally. Nord Anglia, a UK for-profit education business, took over Christchurch Design and Art College in New Zealand in 1997, Sylvan Learning Systems purchased a fifty-four per cent holding in a private Spanish university in 1999, and in the same year De Vry took on new educational acquisitions in the USA, including Denver Technical College. The University of Phoenix has opened a campus in Rotterdam (in October 1999, with an initial registration of 60 students) with apparent plans for expansion in Germany, Spain and Ireland.

Media companies

2.11   Media companies, including publishers, are also active. Some, like Addison Wesley Longman in Australia (now part of Pearson) and FT Knowledge in the UK (also part of Pearson) are collaborating with existing universities in the marketing, design, delivery and accreditation of programmes. A London-based subsidiary of News International, 'World Wide Learning', was recently opened to support institutions in distributing content. Other companies, such as McGraw-Hill OnLine Learning, and Harcourt General Publishers, are seeking to go it alone as new programme providers, drawing on their existing catalogues and providing access to tutors as part of their service. For-profit education providers can also prove attractive partners for media companies: the USA arm of Macmillan Publishing teamed up with Sylvan Learning Systems in 1999 to provide information technology training. It remains to be seen what the recently announced merger between Time-Warner and America OnLine heralds for higher education.

2.12   Other media services - particularly films and television - have not as yet fulfilled the threat to higher education that was perceived as imminent by the Australian Department of Education Training and Youth Affairs in 1996/7 (see Cunningham et al, 1997). In the USA the Public Broadcasting Service has offered programmes from numerous institutions, while in the UK the BBC has had a long-standing relationship with the Open University. Working with Microsoft, the Public Broadcasting Service in

the USA is now aiming to develop learning opportunities through a fusion of television and the Internet. In the UK, the BBC has recently signalled that it will "put education at the heart of its business" and might open its own learning centres, while Channel 4 is providing support to Ufi's (learndirect's) national drive for improvements in basic literacy.

Professional bodies and associations

2.13   Professional associations also feature in borderless developments, although generally at an early stage. For example, originally the Association of Professional Engineers, Scientists and Managers, this Australian association now aims to become the University of Technology and Management. It currently attracts 7500 students a year, has operations in South Africa, India, New Zealand, the USA and the UK and is seeking accreditation for its MBA in the USA and the UK (through the Open University's Validation Service).

2.14   Specialist professional or vocational colleges, serving a particular industry sector are a further trend, for example, Michigan Virtual University. This organisation will run seven virtual colleges to provide courseware brokered through existing colleges, universities and private training providers. It is highly likely that more professional associations will form partnerships with virtual providers to provide continuing professional development online.

Educational services

2.15   Expansion of the education and training business sector has fuelled growth in educational services. Contractors increasingly handle student enrolment, manage training and development as well as physical facilities, and run student support systems. Several major companies are working with universities to develop tailored systems to support administrative, marketing and educational requirements. In other cases, outsourcing to private companies (as in the case of the University of Durham's outsourcing of its academic computing service to UNISYS) is the preferred option. Information technology companies are also large-scale providers of information technology training and education, offering both stand-alone courses and modules for delivery within higher education programmes. For example, the University of Central England currently takes the role of Cisco Academy Training Centre for Western Europe, and some 18 other higher education institutions in the UK provide Cisco training as part of their undergraduate degrees.

Educational brokers

2.16   Educational brokers offer another kind of service to individuals and organisations as part of an increasingly crowded education marketplace. Such brokers exist around the world, for example, the Australian Open Learning Agency, the Atlantic Canada Distance and Open Learning Agency and the UK's Open Learning Foundation. Prominent examples, such as Western Governors University,

"There are few earthly things more enduring than a university. Religions may split into sect or heresy, dynasties may perish or be supplanted, but for century after century the university will continue, and the stream of life will pass through it, and the thinker and the seeker will be bound together in the undying cause of bringing thought into the world."
John Masefield,
Poet Laureate, 1946

and California Virtual University in the USA, have encountered problems, some associated with technology, others with a lack of direct access and control of interactions with students. Our Australian colleagues conclude that the death of the broker may be at hand, but evidence in the UK does not yet suggest this demise.

2.17   In the UK developments include Ufi (learndirect) which has plans for 1000 development centres to be opened in 2001, a target of providing information and advice to 2.5 million people a year by 2002 and creating a demand for up to one million courses and learning packages a year by 2004 (although not all at the higher education level). On a smaller scale, Scottish Knowledge, formed in 1997, is a consortium including all 15 Scottish universities and 20 companies, including General Accident, Shell UK, BP, Ernst and Young and Bank of Scotland. It has had success in establishing educational centres overseas, in marketing undergraduate and postgraduate programmes internationally, and recently in gaining USA accreditation for the University of Dundee's nursing programme.

Borderless developments in existing universities and colleges

2.18   Although some new providers compete directly with established institutions, most seek to collaborate with existing universities and colleges, particularly in the UK. A more direct threat to individual universities is emerging from international consortia of universities or consortia of universities and commercial organisations. Developments in communications and information technology will further encourage the formation of consortia.

2.19   Such international collaboration includes Universitas 21, shortly to be incorporated with approximately 23 research-led universities in membership; the group is now completing its plans for a collaborative degree in accountancy. Enterprise LSE Ltd has negotiated a place within a consortium involving the Universities of Chicago, Stanford, Carnegie Mellon and Columbia as well as commercial partners. While LSE will supply the curriculum content, Heriot-Watt University in Scotland will provide assessment expertise. Forty-five European Universities have joined EUROPACE 2000, a network also involving companies, research institutes and regional and national agencies that aims to deliver lifelong learning through a virtual campus and distance education network. Deutsche Bank and Duke University have created a joint corporate university, and the Ford Motor Company promotes international collaboration across the engineering programmes it uses by sponsoring an annual Deans' Conference. Distance educators are also entering into protective and developmental alliances such as 'the Global Virtual Alliance' in order to develop common quality standards, benchmark good practice, extend their access to educational markets and maintain competitive advantage as new players emerge.

3   Teaching and learning in borderless provision

3.1   Teaching and learning in the borderless context is a hybrid of existing modes. In distance learning currently paper-based delivery is still more common than virtual approaches. The scene is one of increasing complexity with a convergence of face-to-face and distance learning approaches. A shift towards treating students as 'customers' or 'clients' is also becoming more pronounced, particularly in relation to the working adult market.

3.2   In most examples of borderless higher education, curriculum development generally reflects the needs of employment and 'earner-learners'. New providers are positioning their wares as 'just-in-time' learning that can be immediately applied in the workplace as opposed to the 'just-in-case' acquisition of knowledge traditionally supplied by universities. The craft tradition that saw individual academics responsible for the development and delivery of a course is under pressure from a more industrial model where discrete elements (such as subject knowledge, pedagogical expertise, multimedia skills, assessment techniques) are drawn together within course teams of individuals with specific roles. For advocates of the new forms of provision the decline of the cottage industry approach adopted by universities to teaching and learning may be a matter for celebration, however, for many academic staff fundamental questions emerge about key educational processes and values.

Motivations

3.3   There is a number of quite different - and often conflicting - motivations amongst those involved in encouraging new forms of borderless, and particularly virtual, teaching and learning. These include:

- Attempting to enhance student learning within current course structures (for example, a small number of UK universities have started to produce web-based materials at an additional cost to supplement, but not replace, existing forms of teaching).

- Seeking to reduce costs through globally delivered and standardised programmes.

- Encouraging a greater awareness of the needs of the 'customers' for learning as a way of explicitly privatising the funding and operation of the UK university system.

- Addressing concerns which some companies express about the quality of graduates from current universities.

- Providing a more effective structure for operating company based lifelong learning.

"One might treat [students] as customers in the library, the dormitory, the cafeteria... but not in the classroom. They are at university to form their moral preferences more fully, to master bodies of substantive knowledge more fully, or to direct their instrumental strategies more clearly. Hence universities must stick to their discipline-groundedness, canonical rootedness or faculty-centredness in order to give students the formative strategic mastery they need to become educated."
T. Luke (1996)
The Politics of Cyberschooling at the Virtual University,
www.edfac.unimelb.edu.au/virtu/luke.htm

- Enabling mass 16+ education to be achieved.

- Bringing back a 'golden age' of university learning where, freed from the 'tyranny' of having to attend lectures, students will be able to acquire limitless information from the Internet supplemented by tutorials and small group learning.

3.4   We were asked many times during the course of this study about the evidence for the effectiveness of borderless approaches to teaching and learning: in crude terms "do they work?" Unfortunately, there are few answers at this stage, although a number of studies are being conducted. Some American research suggests that there is no significant difference between various types of borderless and conventional approaches. However, other studies appear to be affected significantly by the 'Hawthorne' effect (in which, a new programme - whether borderless or not - that has been the subject of heavy investment might, for this very reason, be expected to demonstrate positive outcomes during its initial years of operation). It follows that claims for the effectiveness of borderless approaches can only be substantiated over a longer period of time. This raises obvious difficulties for UK universities considering a heavy investment in virtual provision.

4   Important elements in borderless higher education

4.1   What can UK higher education learn from borderless developments? The main report and the country case studies highlight many lessons which institutions should consider.

4.2   Eight are of particular importance:

- In a fee paying market the need for consistent delivery through a customer-focused approach to education and training.

- An increased use of virtual delivery in providing services to learners although usually combined with other approaches.

- The dissolution of the boundaries between public and private, education and training, university and college which raises questions of identity and regulation.

- New systems of operation which disaggregate function, increase specialisation and where outsourcing is a strong feature. It follows that universities need to give priority to identifying their core business, niche opportunities and specialist functions.

- A widening of educational values to include company certification, learning outcomes relevant to the workplace, personal development and flexibility.

- Specialisation and a narrow subject spread as new providers concentrate in specific areas, thus potentially leaving university portfolios unbalanced or precarious.

- The need for collaboration to compete successfully in borderless higher education.

- The increased use of branding in order to exploit reputational assets.

4.3   As higher education moves towards becoming a market - or rather a series of different and sometimes conflicting markets - UK universities cannot ignore these trends, whether in relation to domestic student provision or international activities.

"In 50 years, people will probably look back on all this with amazement. Why, students will ask, did our grandparents put up with cramped and dingy halls of residence and depleted libraries when they could have stayed at home and achieved nearly all their academic objectives by electronic communication."
N. Ferguson,
Ivory Towers Go Online,
Financial Times,
5 January 1998

"At present we seem to be rather like the British motor industry in the 1960s - on the brink of participating in a global market, but poorly organised to take advantage of the opportunities available."
Professor Howard Newby,
Higher Education in the Twenty-First Century - Some Possible Futures,
Perspectives *Vol 3,*
No 4, 1999

5   Current institutional thinking

5.1   As part of this study, a survey was undertaken of the current state of thinking in UK universities on the implications of borderless higher education. The response rate to the letter of enquiry was rather disappointing: fifty-one per cent. The reasons for this are not clear - there are two contradictory hypotheses: the possibility that a significant proportion of institutions had not considered the issue and therefore had nothing to report; or that institutions had their own strategic assumptions, but regarded them as confidential, and so had no wish to share them.

5.2   Of those responding, forty-one per cent indicated that the issues raised were seen as critical for future development, and were accorded a high level of priority in the development of institutional strategy. A further thirty-eight per cent reported that, while the institution did not have strategies currently in place, the topic was "high on the agenda" for consideration. A minority of twenty-one per cent felt that, for a variety of reasons, the implications of borderless higher education were not an immediate priority in the institution's strategic development. The high level of non-response may disguise a larger proportion of institutions perhaps adopting this view.

5.3   In general, responses did not indicate a sense of imminent threat from potential new providers, and it was felt that the demand for traditional provision for the 18-24 age group would remain stable in the immediate future - we concur with this, assuming that current Government funding policies for students continue. Typically, respondents indicated that they would not be rushed into investing in substantial borderless activities without clearer evidence of demand, and a frequent view was the need to keep a 'watching brief' on activities before determining future action. Whether this is prudent caution in the face of extensive investment requirements, or an example of the alleged risk averse behaviour which is said to typify UK universities, is a key question.

5.4   The majority of respondents recognised that it would be difficult to enter what is perceived as a highly competitive market (particularly in relation to virtual programmes operated internationally) without creating collaborative partnerships. Although some examples of such collaboration are already in evidence, there was a general recognition that more private-public partnerships would be required. However, many higher education institutions have found collaboration (particularly with non-university partners) problematic, and private sector organisations frequently report that collaboration with universities is difficult because of differing cultures, expectations, timescales and so on. Clearly if the benefits of partnerships to promote borderless higher education are to be realised, then a high level of professionalism will be required within universities.

5.5   The survey also identified a number of widely shared concerns about the importation of borderless programmes into UK higher education from overseas. These include: the need for robust quality assurance arrangements as a way of maintaining standards (forty-four per cent of respondents); the problems of funding development and infrastructural costs (forty-three per cent); and a range of staffing issues centring on the ability, skills and willingness of academic staff to utilise the available opportunities to enhance or change teaching.

6 The effect on current and future markets

6.1 The different markets served by UK higher education are likely to be affected in very different ways by borderless developments. Domestically, separate markets exist for undergraduates, postgraduates, lifelong learning and a wide range of continuing professional development activities. Within these categories there are numerous specific markets that may be affected in different ways by borderless provision (for example, the needs of part-time undergraduate adult learners are likely to be very different from those of 'traditional' full-time 18-24 year old students).

6.2 Internationally, there are two broad forms of market: overseas students entering UK higher education; and provision in other countries by UK providers.

Domestic markets

"Converging technologies and the potential for global reach have led some to assume the existence of one 'global market'. Conversely, this investigation would support the notion of the fragmentation of world markets and the development of numerous niche markets on an international and regional, rather than global, scale."
From the parallel Australian study report: 'New Media and Borderless Education', 2000

6.3 So far as the domestic market is concerned, chapter 5 of the report identifies a range of relevant data. In summary, current UK student numbers are expected to increase by an average of 42,000 domestic students in each annual cohort over the next five years. The Government aims to increase participation in higher education in England and Wales from current levels to fifty percent of the under 30 age group during the next decade. This will equalise participation rates across the UK. After an increase in the early 1990s of the number of mature students entering full-time higher education, the numbers have recently declined. Postgraduate enrolment is increasing, but at a lower rate than in the early 1990s. With the exception of the University of Buckingham, there is currently little direct competition from wholly private or overseas providers in the UK undergraduate market, and, although some foreign institutions based in London offer both undergraduate and postgraduate programmes, most of their students are from outside the UK.

6.4 The picture is rather different for postgraduate provision in areas that provide an interface with continuing professional development, for example, MBAs, information technology, and parts of the paramedical market. Although the growth projections for such subjects vary, a number of borderless initiatives are already taking place, and the fee paying element will inevitably mean increasing competition in all forms and a substantial threat to existing UK providers.

6.5 Within the UK the non-postgraduate continuing professional development market is large and growing, although there are no precise figures other than a 1993 estimate of £10 billion spent on training. More recently, it has been estimated that annual expenditure in information technology training alone will be £1.1 billion. Up

to now universities have taken only a small share of the continuing professional development market and the Higher Education Statistics Agency records sums of £60-80 million as annual university income from continuing education and training, although this is generally felt to understate the actual amount. Such data confirm other evidence that many universities do not give high priority to meeting the continuing professional development needs of the economy. In terms of client numbers small and medium-sized enterprises are the main market, since they comprise over ninety per cent of companies and represent sixty per cent of their turnover. The nature of the continuing professional development market means that virtual provision may become dominant: it has the potential to deliver learning in a part-time format convenient for the learner, and where the social aspects of learning are perhaps less significant than in undergraduate education.

International

6.6   International student numbers are expected to grow very significantly throughout the world from 1.75 million now to 2.7 million in 2010. However, some governments will act to try to limit the outward flows of currency which the potential exodus causes. The UK is one of the market leaders, second only to the USA, with 114,412 international (non-European Union) students in the UK in 1998-99. The Prime Minister's initiative in June 1999 aimed to increase the UK market share. However, competition is growing as other countries, such as Malaysia, India, and South Africa, enter the English-speaking market.

6.7   The second main international market is in locally-based students studying UK degrees with overseas partners. No statistics are collected on these, although a recent estimate suggested that there are about 120,000, including those studying at a distance. Britain is the market leader in this area, although Australia is increasing its numbers fast. Surprisingly, there is very little research on overseas student preferences and their willingness to study virtually rather than through traditional methods, and we recommend to CVCP (in association with the British Council) that research is commissioned on this.

6.8   The report concludes that although the UK is in a good position in international markets - with the English language being a major asset - there are several threats and no room for complacency about the potential impact of virtual provision. The principal threats are: that regional providers in Singapore, South Africa, and Malaysia - and at some stage China and India – will, due to the stage of their economic development, take market share from the traditional providers; that governments will encourage the growth of their national universities in order to reduce the loss to the country of fees paid to overseas institutions; and that global web-based products from leading-brand providers will in time take a large share of the overseas market in business, management, information technology and other professional disciplines. However, overseas-based residency is always likely to be the preferred choice for some, albeit a minority, of students and their funders. The unanswered question is: "how solid and how large is this market?"

*"The internet is certainly not mature, because so many things are missing. It's adolescent, because it thinks it's the bee's knees and can do so much. Whereas, in fact, it has just started."
Tim Berners-Lee, inventor of the world wide web,
Sunday Times, 2.1.00*

7   Legal and regulatory issues

7.1   If many of the existing UK providers are to be able to compete in the new marketplace, the regulatory frameworks, both external and internal, will have to adapt. Although use of the Internet is generally unregulated internationally, it is recognised by international bodies (such as the World Trade Organisation and the Council of Europe) as having a significant role to play in higher education.

7.2   World Trade Organisation members have been invited (1998) by the USA to allow provision of educational services by electronic means to 'flourish' as part of a general liberalisation of trade while reaching a common understanding on regulatory issues, including recognition of qualifications and accreditation. The UK's contribution to the World Trade Organisation discussions on this subject is as part of the European Union. Co-ordination between the various government departments involved (and indeed between the UK Government and the devolved administrations) is essential.

7.3   The Council of Europe, in its most recent (1997) statement on the subject, also recognises the impact of 'globalisation', and has recommended that all member states take steps to protect the reputation of their higher education institutions and qualifications by adopting specific criteria for the recognition of private providers operating either on a European campus or through distance learning.

7.4   In the UK, there is no specific legislation dealing with the recognition of private providers or corporate universities other than a prohibition on UK-based providers using the title 'university' without authority or falsely asserting that their degrees are granted by a recognised body. It may be appropriate for the UK Government to introduce some further controls, possibly through the medium of new framework laws on higher education.

7.5   Successful entry of UK institutions into the fast-moving market now dominated by the USA may require some changes to the funding, internal governance and decision-making processes of institutions and perhaps the establishment of subsidiaries specifically to provide Internet-based services. Within the overall quality assurance framework, institutions need to establish a legally secure basis for their contractual arrangements with people taking delivery of their services: students, customers, clients or whoever.

7.6   Institutions need to recognise that, while the Internet is unspecifically regulated, there are steps that they can take now to protect themselves against predatory practices. Registration and trademarking of all relevant domain names is one such step. There are a number of other intellectual property issues which will need careful consideration, including the extent to which staff contracts clearly define the ownership of copyright in materials produced for use over the Internet.

Similar clarity is required about issues such as data protection, privacy and academic freedom, under legislation coming into force over the coming months. Legal advice may be needed in these areas.

7.7   Apart from protecting their own property, institutions must have in place adequate procedures for protecting themselves against action for infringement of the intellectual property rights of third parties and to control in an appropriate way the use of their own computing facilities by students and staff.

8   Institutional management

8.1   Four key issues on institutional management are highlighted in chapter 7 of the report:

• tensions within existing decision-making structures;

• the need for effective leadership by senior managers;

• the implications for governing bodies and governors;

• the need for more responsive and customer-oriented service delivery.

8.2   The extent to which major borderless activities can be undertaken within existing structures is open to doubt. Potential difficulties include: time-consuming decision processes; the problems of engaging in full cost resourcing within a traditional academic environment; conflicting pressures from mainstream activities; and a whole raft of staffing factors. In such circumstances some institutions have created separate structures to undertake borderless provision. For example, at least one UK university has developed a separate entity responsible for distance learning overseas which has its own academic board, quality assurance procedures, and management structure, and which reports directly to the governing body. There are major questions about the extent to which traditional collegially-based decision-making structures are appropriate to the running of the modern entrepreneurial university.

8.3   The operation of a private subsidiary company or joint venture raises a number of challenges for university management, for example, can there be a clear dividing line between the activities of the 'parent' institution and its subsidiary?; will the subsidiary compete with its founder, and if so under what brand label?; and to what extent should the institution attempt to retain control over how its name or brand is used? Such questions have already generated heated debate within a number of public universities in North America and Australia that have considered setting up such structures (see the country case studies), and they are likely to be equally contentious in the UK.

8.4   If any major borderless development is to succeed, the role of senior management will be crucial, and effective leadership alongside the identification of credible and respected 'product champions' will be needed.

8.5   Issues also arise about the role of the governing body in this area, for example:

• How can governing bodies become informed enough about developments in borderless education to make the necessary investment decisions?

• Do any different forms of liability fall upon governors in relation to borderless provision, and if so what?

- How can the post-Nolan responsibilities of the governing body be exercised effectively if partnership or joint venture arrangements are used?

8.6   Further work will be required to provide the necessary guidance to institutions on these issues.

8.7   The management challenge of competition with private borderless providers will not only apply at senior levels, but will need to be reflected in changes in the ways that universities provide their services. In particular we argue that institutions will have to become much more service-oriented with the explicit recognition of fee paying learners as customers.

9   Finance and infrastructure

9.1   Universities are concerned about the cost and infrastructural implications of virtual provision, but unfortunately, despite a number of studies carried out both in the UK and internationally, very little reliable data exist on the cost of web-based courses. Costing methodologies are still being developed in the face of numerous technical difficulties. The barriers to, and practical difficulties of effective costing have led some to question whether it is worth doing; however, guidelines are being developed in the UK which will help in making costings more reliable.

9.2   The costs involved are of three main kinds: developmental, operational and infrastructural. Studies from the USA and our own interviews indicate that the total development cost of producing a full degree course on the Web is £1-2 million (the principal component of which is staff time), although much depends on the nature and breadth of the programme. Data on operational costs are also weak, although a number of universities experimenting with virtual provision report the need for a high level of staff tutorial time, with a larger volume of electronic requests for assistance by students than might have been expected under a personal tutor system.

9.3   The cost of the infrastructure required for an institution to undertake virtual courses is also very hard to quantify, since it usually cannot be identified separately from the base cost of the campus network and computing services. Even if a marginal cost approach is taken, the very rapid changes needed in the basic infrastructure, the absence of consistent use statistics, and the growth in number and type of users, seriously complicates any costing exercise. A survey by the Universities and Colleges Information Systems Association (UCISA) in 1997/8 and one by Bacsich (1999) appeared to show that only three institutions spent more than £5 million per annum on their information technology systems, although these are widely accepted as considerable underestimates. One university approached as part of this study plans to make a full estimate of its expenditure and has already calculated that it spends ten per cent of its recurrent budget on information technology related activities, a figure not inconsistent with proposals in the Dearing report. Recent surveys of college expenditure on information technology in the USA (Green, 1999) have produced ranges from five to ten per cent of their total budget.

9.4   Our assumption is that the capital cost to an institution's information technology infrastructure of embarking on the delivery of web-based tuition is marginal, involving only the possible need to commit a server of an appropriate size and robustness to the traffic. This assumes that an infrastructure is already in place to an acceptable professional standard: where this is not the case then very significant increased costs will be incurred. However, the cost implications for students of the physical infrastructure could be significant if the tuition is to be delivered remotely as well as on campus.

Raising finance

9.5   If a university has decided to grow or exploit its position by developing virtual programmes for international use, then major questions exist concerning how this can be achieved, and few institutions will have the ability to raise the required finance on their own. For example, only one UK university has yet achieved a Standard and Poor's credit rating allowing it to access world capital markets, and even then all institutional borrowings are subject to a ceiling set by the Financial Memorandum with their Funding Council.

9.6   Accordingly, most institutions will seek other ways of raising funds or reducing their share of the investment cost in offering distance education courses globally. The report submitted to Industry Canada recently (Knowledge@Work, 1999) faced the same issue and recommended that universities seek partnerships of various kinds. We believe the options (which are not mutually exclusive) are as follows:

- Raising venture capital from commercial sources, an option that has been widely followed in the USA where the education 'industry' has a loyal following among the venture capital community. In London there is one intermediary agent specialising in the education market and a few venture capital organisations willing to lend. Our view is that the expectations of the London market as regards profitability and payback are too demanding for the higher education sector to meet at present.

- Joining with private sector partners to provide either the technical infrastructure and information technology skills, the international marketing or related activities.

- Creating a UK-based consortium of universities to share the time and cost of materials development and broaden the home market base. This option could well also involve commercial partners to bring in the technical management skills.

- Seeking other higher education partners overseas. For example, if a university's model of distance education requires local tutorial support in each country, a series of overseas institutional partnerships is inevitable.

- Subcontracting the most expensive elements in course development to a cheaper supplier overseas.

- Purchasing course materials developed elsewhere by another institution or corporation, offering them under licence and concentrating on providing high quality tutorial support and assessment.

9.7   Whatever option is used, a detailed data-driven business plan will be required which takes the needs of local markets into account, including cultural and language preferences. UK-based courses are not always as transferable as is often assumed.

"Because high-quality online teaching is time and labour-intensive, it is not likely to be the income source envisioned by some administrators.... Teaching the same number of students online at the same level of quality as in the classroom requires more time and money." Teaching at an Internet Distance, *University of Illinois* http://www.vpaa.uillinois.edu/tid/report

10 Human resource management

10.1   In many universities the various human resource management issues associated with the development of new forms of provision remain the most difficult to address. They also raise fundamental questions about the extent to which significant parts of the academic workforce possess the skills and abilities to help universities meet the challenges identified in this report. Although extensive innovation is being undertaken by individual staff in the use of communications and information technology within universities, numerous studies have identified that, so far as the application to teaching and learning is concerned, this change seldom reaches beyond those who are 'enthusiasts' for using new media or have a strong commitment to innovations in student-centred teaching. The reasons for this are summarised in chapter 10.

10.2   On the limited evidence available, few universities appear to have yet developed the clear human resource management policies that will be needed if major innovations in borderless provision and virtual learning are to take place. Given the newness of activities in this area and the rapidly developing technological infrastructure, this is not surprising. But already tensions are becoming evident in a number of areas, including: recruitment; the responsibilities of academic staff in relation to both the design and use of virtual materials; associated promotion and reward systems; and the extent to which the staffing structures which support 'traditional' forms of individualistic teaching are suitable for more collaborative and materials-based programmes. In the face of such difficulties enhanced staff development and training is crucial, although by itself it will not resolve the human resource management issues facing institutions. Nonetheless progress is being made, and in some institutions a new group of professional staff have started to emerge in roles centred on providing information technology support for teaching and learning.

10.3   In our view it is clear that the combination of factors considered in this report is of such a magnitude that it will require imaginative action from both institutions and central agencies if any attempt at coherence in human resource management practices is to be achieved. These challenges include: responding to the more efficient way that the new private providers are likely to utilise staffing resources; managing the growing flexibility of employment of the academic workforce to ensure desirable and not destructive outcomes; resolving the implications of changing academic roles caused by virtual provision; accepting greater differentiation in institutional activities leading to less homogeneity in staffing arrangements across the higher education sector; and possibly moving closer to market-oriented salaries if high quality virtual provision is to be provided on a reliable and consistent basis.

10.4   All these human resource management developments represent an enormous challenge to higher education in the UK, a view echoed by the parallel study in Australia. To date the approach adopted by most institutions, as such pressures start to become evident, has been to 'muddle through' and look for central agencies to provide guidance. Our clear view is that such an approach will not be appropriate in the future. Institutions themselves will need to become much more professional and strategic about their human resource management responsibilities.

11 Quality issues

11.1   As noted above (section 5 on 'institutional thinking'), concerns about the quality and accreditation of borderless higher education feature strongly in the current thinking of UK universities. It is clear that borderless developments will add significant complexity - with associated cost - to the task of quality management.

11.2   New providers seeking accreditation or recognition pose challenges for existing criteria and definitions of 'universities' and 'degree-granting powers'. Some countries are moving to protect their institutions by reinforcing these criteria, and the Council of Europe has recently taken steps in this direction. Others wish to broaden their higher education base through changing funding, legislative or quality frameworks. Recent public accountability requirements have created quality assurance arrangements that do not necessarily favour borderless developments. The unit of accreditation or recognition is typically the institution as provider and awarding authority offering programmes linked to public awards. Developments in borderless education to some extent challenge the public accountability focus of quality assurance arrangements (particularly if the State becomes a minority funder) and the unit and focus of recognition (with moves towards lifelong learning and smaller elements of learning accumulated over time). However, the State has a broader interest in qualifications, for example, where questions of public safety are concerned as in health or civil engineering.

11.3   We suggest that the main elements of a quality framework for borderless education should include: currency and security of qualifications; audit of the system for the design and approval of curricula or appropriate learning contracts; an internationally-recognised system of educational credit; licensing of staff; security of assessment; an internationally-recognised approach to recording and certifying attainment; adequate and accurate public information about learning opportunities; approved guidance and complaints systems for learners; transparent quality management processes for each agent in the educational supply chain; access to learning resources assured by the provider; and publication of guidance relevant to different modes of provision.

11.4   The purposes and assumptions that underpin external arrangements for assuring the quality of higher education will need to change if borderless developments are to be encouraged. A stronger emphasis will need to be placed on internal quality management since external arrangements may become too costly and cumbersome to remain cost-effective and of benefit for consumers. The nature of external quality assurance needs to shift from a compliance-based approach towards comparative benchmarking as a means of enhancing provision and increasing the knowledge-base within existing institutions about the potential and

problems of borderless higher education. International quality standards are likely to be needed, with steps towards this made possible by mutual recognition arrangements, developmental networks across agencies and the shared use of international experts. Peer review systems may need to be supplemented by user and client surveys, contracts for the delivery of services, published performance indicators and other market mechanisms.

11.5   Internally, borderless developments challenge the ways in which most existing universities seek to deliver quality in education. The reasons for change include: time and cost, for example, new modules are needed quickly and will generally have a shorter life-span than currently; recent and forthcoming communications and information technology developments will transform approaches to learning; and a disaggregation of function in design-delivery-award processes requires different forms of quality assurance and security across agents. The accommodation of different forms of knowledge and competence and an internationalising of curricula broadens the nature of quality judgements. Different forms of scrutiny will be needed: international panels; international assessors; and online processes. New approaches to monitoring and accrediting learning will also require a range of new products and processes including learning logs and contracts, diagnostic tests, curriculum maps, assessment of prior experiential learning (APEL) criteria and authentication systems for content, assessment and awards.

11.6   Arguably, the biggest challenge to existing providers of higher education lies in the highly professional approach to learning and teaching that is evident among new providers. As our Australian colleagues report, this is produced by close attention to quality matters through mandated teacher training, rigorous evaluation of the teaching process, emphasis on supporting all teachers including part-timers, a focus on professional expertise and close attention to service levels for learners. There are valuable lessons here for traditional universities and colleges in an increasingly competitive market.

12 Future policy issues and expected outcomes

12.1 In chapter 13 of the report we identify a number of key policy issues facing the sector in considering its response to borderless higher education, and also summarise the most likely outcomes on the basis of current policy. Prior to establishing future policy a number of strategic and policy dilemmas will need to be addressed if a coherent response to borderless higher education is to be achieved. In summary these are:

- The dilemma that, if widespread virtual provision is felt to be desirable in the existing undergraduate market, only the entry of private sector competitors, or exceptionally strong central decision-making, will give enough impetus to drive change within the existing sector. This could only happen if a body such as DfEE were to increase fees to a level which would attract new market entrants. An associated question is the extent to which it is the role of the higher education funding bodies to protect existing institutions or to obtain optimal value for money, perhaps by creating the conditions for private providers to enter the undergraduate marketplace.

- That present quality assurance regimes are based on the providers' views of what should be delivered rather than a more customer-focused approach. It follows that there is not enough incentive for institutions to change their approaches to teaching as quality is not judged on market criteria.

- It is inevitable that international virtual provision will be of mixed quality, and a dilemma for both government and the higher education sector is whether UK students should be protected from some potentially poor quality overseas virtual provision, or whether reliance should be placed on the market to solve the issue. Politically it is likely that this issue would have to be addressed within the European Union as a whole, where pressures for a protectionist stance may be strong from some countries.

- The rapid pace of technological change is a problem for those wishing to invest in virtual provision, and an incorrect choice of new technology can write off financial investments overnight. How can operational stability in technology be achieved when an educational qualification may take years to obtain?

- The risk averse culture within publicly-funded sectors in general, and in parts of the university sector in particular, is another barrier to investment. How can the public accountability requirements of universities be made compatible with the risk associated with large-scale investment in technological ventures?

- Student preferences are still largely unknown as regards their willingness to study online at a distance. Should universities defer investing until the potential market is more clearly known for students who are unable to travel and wish to study online?

- The opportunities for successful investment in borderless higher education are greater for the few UK institutions which have world-class brand names. However, in general these are the same institutions that have no need to expose themselves to potential risk and the dilution of their reputation. How can this paradox be addressed, and what are the implications for a major extension of higher education export activities to growing new markets?

- Involvement in borderless higher education will increase commercial and market-driven initiatives in higher education institutions. How can these be reconciled with the traditional public role of universities, both domestically and overseas, when conflicts of interest and investment emerge?

12.2   Any action taken by government or the funding bodies to address these dilemmas will inevitably create a new policy framework in which universities will need to operate. However, on the basis of existing policy assumptions, the analysis of the threats and opportunities for the various markets in which UK institutions are present can be summed up as follows. Overall, within the timetable with which we are concerned, we do not believe that borderless developments of themselves will bring about (for good or ill) the more radical predictions about the collapse of the university system. Rather, although existing institutions will engage in extensive innovation in relation to a range of new forms of delivery, most developments in the borderless domain are likely to be focused on the priorities of enhancing access, lifelong learning and so on. This view is largely consistent with that of the parallel Australian study, although our conclusions were arrived at independently.

12.3   Such a conclusion is bound to disturb those who seek major reform of the current higher education system. Important though the changes will be to specific institutions, the current funding arrangements of higher education mean that, for the majority of provision, no commercial market exists, or is likely to in the near future. There are, of course, many who will argue that the pressures on the current funding system are such that tensions caused by the needs of universities for additional income to support teaching on the one hand, and government policy on fees on the other, can only be resolved by a new approach to funding. Certainly any substantial increase in fees is likely to act as an important stimulus to the entry of new for-profit providers into the UK undergraduate market. However, it is not our role to second guess government policy after the next election.

Domestic students – market factors

12.4   Unless fees for students are increased significantly, there is little chance that other providers will enter the UK undergraduate market. However, the need to enhance communications and information technology activities to meet national policy on enhancing access to higher education - particularly through part-time and

"Most experts agree that the way higher education will look and operate in 2007 is distinctly different from the way it has existed for more than a hundred years. Increasingly, both the content and the delivery of education will be defined by external groups: consumers and employers. Providers will compete for perpetual learners, or lifelong learners, those who need to be educated, trained, and retrained throughout their working lives." Carol Twigg and Diana Oblinger, The Virtual University, *a report from a Joint Educom/IBM Roundtable. Washington DC, 1998*

non-traditional routes - is likely both to increase institutional costs considerably and also to lead to greater collaboration - perhaps regionally. In terms of postgraduates, in the majority of disciplines the small-scale of provision is likely to provide a similar outcome, although the rise of private virtual programmes will constitute a major threat to both current full- and part-time provision in strongly applied disciplines, such as business and information technology, and perhaps also health care. All but the most high profile MBA programmes are likely to be under threat. In addition, major challenges to postgraduate and research activity may come about through the development of sophisticated knowledge management software, which in the longer term may both change and shorten the nature of postgraduate study as it is known today (see chapter 9 of the report).

12.5   The biggest opportunity for institutions is in the growing continuing professional development, lifelong learning and widening participation markets where universities have not gained as large a share as might have been expected. Some will continue to resist doing so, but for others (particularly non-research intensive institutions) there is a significant opportunity to collaborate with others in a post-16 framework. In the longer term our view is that the majority of continuing professional development is likely to become virtual, and if existing providers do not respond, may develop as an almost entirely private sector activity.

International students – market factors

12.6   There are many developing threats to the UK's market position, including the actions of governments eager to stop their citizens travelling and the arrival of new regional competitors in Asia. Virtual delivery of courses by powerful branded providers could also be a major concern in all markets where the UK operates. However, research on student preferences is needed to confirm or disprove this.

12.7   Our general view on the international market is that any complacency by UK institutions would be extremely damaging, either for the current position or for future prospects. Although there are some question marks about the extent to which virtual provision will appeal to students, when provided by a university with a strong international brand name it will undoubtedly be preferred by some, and perhaps by many. This would inevitably take away potential students unless UK institutions themselves enter the virtual market. The various ways that these issues can be addressed are considered in the remainder of this summary report.

13 The implications for government and other agencies

13.1   This section summarises our thinking on the extent to which the government and other agencies should play a role in supporting, financing, regulating or controlling future borderless higher education providers, whether they be public or private providers. Although some commentators would argue that no government action is appropriate and that affairs should be left to a developing higher education market, almost all universities are still very reliant on public funding and are not in a position to borrow heavily, and so their ability to fund borderless provision is highly constrained.

13.2   In most of the countries we reviewed, government involvement has been related to the provision of networks and the encouragement of collaborative ventures, and the case studies in the report note significant activity, for example, in Australia, Canada, Finland, the Netherlands, Belgium and the United States. Although the report considers a range of possible central action, in some areas it concludes that none is necessary. The areas where action might be required fall under four headings as outlined below.

The regulation of overseas or private providers in the UK

13.3   Education delivered over the Internet comes within the ambit of the General Agreement on Trade in Services (GATS) and the World Trade Organisation. Under this agreement no state can bar access to courses over the Internet originating from a provider operating in another state. In the UK there is no direct regulation of foreign providers offering courses in the UK, but providers may apply for recognition by the DfEE and accreditation from any relevant validating body.

13.4   As the number of providers increases, there will be arguments for some form of regulation or monitoring. This would have to overcome problems of identifying the relevant jurisdiction, assessing the credibility of overseas accreditation and regulating bodies and assessing the contribution of respective partners where a consortium or partnership is acting as the provider. The options for government are to maintain the status quo, to seek to develop some international approach on the accreditation of borderless providers or to promote the UK's standards as an international norm. Any government action would almost certainly need to be consistent with European Union policy. The European approach is based on the mutual recognition of professional qualifications and the need to remove barriers to mobility within Europe (as reflected in the Bologna declaration, 1999). Borderless developments are likely to increase momentum for the closer alignment of academic qualifications across Europe.

Greater regulation of UK providers operating overseas

13.5   The Government has a keen interest in the UK's higher education exports, as has been seen in the Prime Minister's initiative in June 1999. The need for close regulation by the Quality Assurance Agency, particularly overseas, has been driven by the wish to maintain the national image of quality higher education that has been threatened by recent evaluations of some overseas collaborative links. The unregulated expansion of borderless provision inevitably carries with it similar risks, and existing quality assurance processes (including proposals for a voluntary kite-marking scheme) may need to be extended to cover all these areas of provision.

13.6   A national strategy of basing the marketing of the UK's overseas higher education on explicit quality criteria could be accompanied by an active role in raising the issue of quality in international fora. Here the aim should be to ensure that other governments are alerted to the dangers of poor quality provision and are briefed on the attempts of the UK to maintain standards. There are two possible ways of positioning the UK as a monitor and upholder of this quality. The first is for the DfEE and the Quality Assurance Agency to sponsor a major international project to address the issues raised in this report. An international conference has recently (January 2000) been held in the USA by the Council for Higher Education Accreditation (CHEA) which initiated a useful debate across quality agencies. Initial discussions now need to be taken forward into detailed recommendations for co-ordinated international action at several levels. The second way is actively to promote UK quality standards on the international scene. Again, this may have implications for the European Union as a whole.

Support for UK institutions

"Traditional universities are struggling to assess how their various market segments are likely to be affected over time by the kinds of developments which are now universally recognised as bearing down on the old order.... Almost every university in the USA, be it large or small, State supported or private is attempting to chart a course in these uncertain waters."
Blaise Cronin, Aslib Proceedings, *Vol 50, No 9, October 1998*

13.7   One response to the threat to international students from private/virtual providers is for UK institutions to enter the global market themselves by offering courses over the Internet. However, because of the cost and complexity of such ventures most institutions may not be willing or able to take the risks or to raise finance themselves. We believe that the options for government, the funding bodies and associated agencies are: to take no action (those main brand name institutions who wish to enter these markets may well all be snapped up by entrepreneurial private partners in due course); to invite bids for pump priming development grants so that institutions can explore their options, identify possible partners and undertake cost appraisals of future projects; to promote partnerships between institutions and relevant parts of the UK commercial sector in order to minimise competition; to commission market research on student attitudes to virtual provision in different countries for different levels of higher education; and to create a fund for major initiatives (such as the recently proposed 'e-university'). Government support could range from offering guarantees, helping with specific market research, as well as the direct investment of funds.

13.8   The Prime Minister's initiative in 1999 was driven by the strategic and long-term economic importance to the UK of international higher education, and an equally strong case for financial support exists in relation to the broader context of borderless higher education. We conclude that there is a case for strategic government assistance with two of the above options: firstly, with pump priming support for the preparation of partnership schemes and sound business cases; and, secondly, with financial support to selected projects. These are in addition to provision in public expenditure forecasts for more significant funding support for UK-wide project activity in view of its strategic importance to the sector and the UK economy.

Scanning the environment and providing market information

13.9   Developments in borderless higher education are moving so rapidly that it is hard for any one institution, or indeed even the funding bodies and government itself, to keep up-to-date. This suggests that a sector-wide information service at the pre-competitive stage would be worthwhile if the UK is to play a leading role. Accordingly we recommend that the CVCP, with appropriate partners, plans a national 'observatory service' that would provide regular intelligence and analyses on developments. Such a service would create links with other web-based information services that already exist. Further proposals are made in the report for the CVCP to continue its role at the centre of policy developments in this area.

14 Strategic implications for institutions

14.1   Borderless higher education will affect UK universities in very different ways, and those universities with large numbers of international students and a significant dependence on information technology, business education and paramedical provision may be particularly vulnerable. Moreover, institutions are simultaneously facing other challenges which will have a major affect on their futures, for example, greater focus on regionalisation, the outcomes of the funding bodies' reviews of research, widening participation and so on. In the circumstances, we are among those who argue that a major restructuring of the higher education sector is very likely in the medium term, but we suggest it will be caused by a combination of factors rather than by the growth of borderless provision alone.

14.2   Such a restructuring may take a number of forms, and numerous speculations about the nature of the university of the 21st century have been put forward, including its death! However, one classification which may have significant implications for the UK has been proposed in the USA by Finn (1998). He proposes moving away from the Carnegie-based typology of institutions that has lasted for approximately 25 years, and that has a parallel in the UK in the use of descriptions such as 'civics' or 'post-1992'. He suggests that higher education provision will come to be divided into three broad categories of institution: 'brand-name', 'mass-provider', and 'convenience' institutions.

14.3   The 'brand name' institutions are - and will continue to be - selective in relation to student entry, engage extensively in research, and will include a number of traditional campus-based providers. 'Mass-providers' are characterised as primarily teaching institutions which award relatively traditional degrees - many of which may be part-time - as well as a wide range of professional and technical programmes. 'Convenience' institutions is a general term describing a large range of public institutions (eg community colleges in the USA) and the new private providers, indeed incorporating almost everyone who can provide community-based credit bearing programmes in whatever form.

14.4   Although this classification is acknowledged to be an over-simplification, it clarifies the choices that both institutions and students are likely to have to make over the increasing costs of higher education and associated issues of quality, and the gradual reshaping of the higher education 'industry' that follows from those choices. In the context of the USA, Finn suggests that the implications will include the growth of both the 'brand-name' and 'convenience' sectors to meet very different markets, with severe pressures being felt amongst 'mass-providers'. Such

consequences are also likely to apply within the UK, and be accompanied by a merging of the categories of 'public' and 'private' providers.

14.5   In this context, chapter 15 of the main report recommends institutions to develop their strategic planning processes actively to take account of the development of borderless higher education, and provides some illustrative planning tools to enable them to do so. By their nature, many of the developments which have strategic implications for institutions will have varying levels of predictability associated with them. For example, many of the future technological developments are unknowable, and we have made no attempt to speculate beyond any reasonable planning horizon. Nonetheless, institutions must consider the long-term trends in the provision of borderless higher education and act accordingly. The unknown factors associated with borderless developments will require institutions to integrate appropriate forms of scenario planning and risk analysis into their strategic planning processes.

14.6   We conclude that 'doing nothing' is not an option for higher education. Courage and creativity will be essential if the UK is to rise to the challenges of borderless education.