

Report to the National Council for Educational Excellence



Increasing higher education participation amongst disadvantaged young people and schools in poor communities

The Sutton Trust, October 2008

(Presented to the NCEE in April 2008)

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Some common abbreviations and terms used in this report:

FE	Further education
FSM	Free school meals
HE	Higher education
HEI	Higher Education Institution
IAG	Information, advice and guidance
STEM	Science, technology, engineering and maths
Key stage 2	Curriculum for children aged 7-11
Key stage 3	Curriculum for children aged 11-14
Key stage 4	Curriculum for children aged 14-16 (including GCSEs)

Please contact James Turner or Lee Elliot Major for further information on this review.

Foreword by Sir Peter Lampl

I was delighted when we were asked to conduct this review for the National Council for Educational Excellence, as increasing access to higher education was my motivation for founding the Sutton Trust ten years ago and remains my passion.

When I came back to the UK in the mid-Nineties having spent most of my working-life abroad, I was genuinely shocked at the lack of opportunities for young people from non-privileged backgrounds. It seemed to me completely unfair – not to mention an appalling waste of talent – that the chances of a bright young person going on to university were very much dependent on where they lived, which school they attended and their parents' background.

Being familiar with the summer schools run at US universities, the first thing I did was to fund a summer school at Oxford for non-privileged students in state schools which had rarely or never made applications to the University. The event was a tremendous success, and since then we have established summer schools at a number of universities - which have reached over 10,000 young people - and the government now funds summer schools at the majority of British universities.

But because disadvantage starts before young people are born and continues right through to the workplace, it became clear that we should not think of higher education in isolation; rather as one link in an educational chain that begins much earlier. So we also fund projects in the early years, primary and secondary schools and, in addition to summer schools, a range of other university access initiatives, as well as projects to widen access to the professions.

Acquiring a higher education qualification is key for social mobility. Research we funded by the London School of Economics found that social mobility – or the chances of a young person climbing the social ladder – was higher for those born in the Fifties than for those born in the Seventies. A major reason for this, the researchers found, was that the expansion of higher education opportunities had disproportionately benefited the better off, and the inequality gap in terms of university participation had actually widened. Looking at the most recent data, just 10 percent of people from the poorest fifth of families acquired a degree by age 23, compared with 44 percent of those from the richest fifth. While such inequalities exist, it is no wonder that Britain languishes at the bottom of the league table of advanced countries when it comes to social mobility.

We have tried to take the broadest possible look at this issue, drawing on our project experience over the last decade, the many research studies we have conducted and commissioned, as well as a wide range of other work from academics and practitioners. The report tackles both the

thorny problem of getting more young people from less privileged backgrounds in to higher education, as well as how we can widen access to selective courses and institutions, at which these young people are conspicuous by their absence. This report sets out our preliminary recommendations which we will develop further over the next few months, looking particularly at the practicalities and costs of implementing our proposals.

More widely, this review prompts questions about what the objective of higher education admissions should be. Should universities be solely concerned with recruiting young people who will go on to get the best degrees? Should diversity in the makeup of the student body be seen as a valid aim in itself? And should higher education also be about adding value, looking to nurture bright disadvantaged young people who have the potential to become leaders in their chosen field? These are difficult and controversial questions, but – aside from the concrete ideas in this report – perhaps it is also time to consider these more fundamental issues.

I would like to thank Professor Steve Smith, the NCEE secretariat and all those who have contributed to this report and shared their views, data and analysis with us. I very much hope this piece of work will make a useful and significant contribution and will help to transform the opportunities available to young people from disadvantaged backgrounds.

Peter Lampl

Chairman, The Sutton Trust

Executive summary

Key findings

Higher education participation

- The social class gap in university participation narrowed slightly during the last decade but remains stark, and there are also inequalities by school type, area and income.
- In 2004, just 10 percent of people from the poorest fifth of families acquired a degree by age 23, compared with 44 percent of those from the richest fifth.

Attainment

- The early years are critical as this is where social class and income inequalities emerge.
- The inequalities continue to widen in school: two thirds of pupils on free school meals who are among the top fifth of performers at age 11 are not among the top fifth of performers at GCSE, and half do not go on to university.
- Overall, there are at least 60,000 pupils (10 percent of the cohort) who at some point were among the top fifth of performers in school, but who do not enter higher education by age 19.
- Poorer pupils with A-levels are as likely as others to go on to higher education (although there is a question of to which universities and courses). Getting these young people to A-levels is the major hurdle.
- Independent school pupils account for a disproportionate number of entries and top grades in the core sciences and modern languages at A-level.

Aspirations

- Seventy percent of 11-16 year olds say they are likely to go to higher education, but this is not translated into university progression.
- The main reasons young people cite for not continuing learning post-16 are that they want to start earning, avoid debt, and are frustrated or disillusioned with formal learning.
- Disadvantaged students particularly are deterred from highly-selective institutions as they are not confident they will get in or, if they do, that they will fit in once there.
- Poorer students are less likely to get higher education support from their peer groups and families, which are influential in the decision-making process.

Advice

- Advice and guidance regarding higher education is too often poor and ill-timed – at least half is judged by young people to be inadequate, not objective or unrealistic.
- Teachers are often not equipped with the expertise or knowledge to offer appropriate and partial advice to their students, particularly with regard to research-led universities.
- Three fifths of a representative sample of state school teachers thought less than 30 percent of the entry to Oxbridge was from state schools (it is 54 percent), and almost half said they would not encourage their brightest students to apply.
- Poor standards of advice and guidance have a particularly negative impact on disadvantaged youngsters.
- There are particular issues around pupils in 11-16 schools, who find the transition to sixth form and university more difficult than those in 11-18 schools.

Applications and admissions

- Pupils in non-selective state schools and colleges are less likely to receive support and advice to navigate the increasingly complex and varied university admissions process.
- Application rates to leading research-led universities are much higher for independent schools than non-selective state schools with similar average A-level results.
- Pupils in further education colleges are less likely than those in schools with similar average A-level results to apply to leading research universities.
- Admissions schemes which take into account students' backgrounds (sometimes called 'compact schemes') are widespread in the university sector, but there is a lack of clarity and consistency in their assumptions and aims.

University access work

- Residential programmes, campus visits and mentoring are amongst the most effective outreach schemes to boost aspirations. Other one-off, less intensive interventions do not have as strong an impact.
- There is a widespread lack of awareness of the financial support available and the financial benefits of higher education, particularly among less privileged students.
- There is a disconnect between teachers' perceptions of universities' entry requirements and the reality.
- Links between schools and universities are seen as useful, but there is a lack of strategic co-ordination and concerns over sustainability.
- Universities are not currently required to produce widening participation strategies detailing the full extent of their outreach work.

Policy considerations

Strategic co-ordination

- Local authorities should produce a higher education progression plan to complement the plans they are developing for 14-19 provision.
- Higher education institutions should produce and publish comprehensive strategies for their access and outreach work, building on the information in their Access Agreements.
- There should be one body in each area to ensure the effective co-ordination and brokerage of university access work.

Information, advice and guidance

- Support and guidance should be targeted early on, particularly at the end of primary school, and sustained into Key Stage 3 (age 11-14) and beyond.
- Every secondary school should have a lead teacher responsible for higher education information, advice and guidance at every Key Stage (ages 11-14, 14-16 and 16-18).
- There should be a duty on schools, colleges and local authorities to ensure provision contains certain key elements: for example, one visit to a university campus and activities involving parents.
- A specialist network of local advisors should be created to ensure all young people have access to specific expertise, drawing on the resources of universities, colleges, businesses and independent and state schools.

Finance

- The higher education sector should work towards more coherence in bursary provision so that it is easier for pupils, parents and teachers to understand and for clear messages to be communicated.
- There should be a strong and targeted publicity campaign around the benefits of and routes into higher education.

Schools

- All schools should have an effective gifted and talented programme, which makes links to higher education institutions.
- Higher education and further education progression rates should be published for all secondary schools and colleges, possibly broken down by institution types or courses.
- More partnerships should be fostered between high-performing schools (both independent and state) and other schools, building on the model of successful independent-state school partnerships.
- More support programmes should be developed to ease student transitions from one institution to another, particularly at ages 11 and 16.

- A top-up of the Education Maintenance Allowance should be piloted for pupils taking certain shortage subjects, such as the core sciences.

Universities

- Families of higher education institutions should partner with groups of schools to spread expertise and give pupils a broad perspective of the sector.
- There should be a further development of individual and substantial links between universities and those schools with the lowest university progression rates.
- More top-up fee income should be diverted to the most effective outreach schemes, for example summer schools and mentoring schemes, and more activities should reach younger age groups.
- The move towards a national credit transfer scheme should be encouraged to recognise higher education as a life-long endeavour.
- There needs to be an open debate to clarify the scope and purposes of admissions schemes which take account of students' backgrounds, led by the higher education sector and government.
- Bearing in mind the context in which they are working, universities should consider whether fewer, larger bursaries targeted at low income students taking shortage subjects would be beneficial.

Fair access

- Outreach and access activities should include specific guidance for students and teachers on negotiating the admissions process for highly-selective universities and courses.
- There should be as few exceptions (for example, earlier deadlines and additional tests) as possible to the standard admissions process.
- The sector should work towards more coherence on university admissions tests, and the validity of these - plus their impact on access - should be evaluated.
- Universities should strive to be as transparent as possible about the entry requirements of courses.
- The sector should move towards a full system of post-qualification applications (PQA) as soon as possible.

Introduction

The over-arching aim of this interim report is to propose concrete policy recommendations which will lead to a higher proportion of young people from disadvantaged backgrounds entering higher education (HE). The focus is on increasing the numbers of young students, particularly those aged 18 and 19, who enter university-level study, but the report also has a view on the wider issue of lifelong learning for those who may take time out of education before returning at a later date. There are many barriers to entering HE and many groups who are disadvantaged – but this report looks principally at inequalities by socio-economic class, income and school type. It considers not only the obstacles to HE progression of any description (widening participation), but also the particular access issues affecting selective institutions and courses (often referred to as ‘fair access’).

It has never been more important to ensure we make full use of the talents of all young people and provide pathways into higher education for all of those who can benefit. It is a matter not only of social justice but economic necessity. The Sutton Trust has always believed that it is unfair that some young people stand a significantly lower chance of going to university because of their background, regardless of their talents and abilities. And the Leitch Report made clear that two-fifths of the UK workforce needs higher education-equivalent qualifications by 2020 if we are to remain competitive in the developing global economy.

Despite the increase in the supply of graduates over the last few decades, the demand from the labour market remains strong. The premium for graduate level study remains high, at around £160,000 of extra earnings over a lifetime¹, and the evidence shows that those with higher education degrees are also more likely to be happy and healthy and to take an active part in their communities. This is no time to pull back from our efforts to widen participation in higher education.

The report begins by outlining the current picture as far as access to higher education is concerned, looking at trends over the last decade and, in the appendix, the patterns in participation since the Second World War. It then goes on to analyse the key factors underlying these patterns, which fall into five main areas: those pertaining to attainment at school; those related to aspirations; issues around information, advice and guidance; factors related to applications and admissions to Higher Education Institutions (HEIs); and finally those to do with access and outreach. Throughout, much of the data we consider is (necessarily) on an individual pupil level, but we also consider school level data where available.

¹ This figure is from the 2007 report ‘the economic benefits of a degree’ published by Universities UK, <http://bookshop.universitiesuk.ac.uk/downloads/research-gradprem.pdf>

This document is very much an interim report which reviews the evidence in detail and begins to develop some practical ideas for Government, schools, universities and other to take forward. These ideas have been discussed with a wide range of people from senior policymakers to those delivering access work on the ground, but there are many other opinions we want to seek. More work is needed to flesh out the detail of the costs and implementation of these ideas – in particular looking at which can be delivered immediately with zero or few cost implications – as well as those which will require wider reform.

But we hope that this report is nonetheless a valuable, evidence-based contribution to the work of the National Council for Educational Excellence and will help with the development of its own recommendations to government.

Recent trends in Higher Education participation

The proportion of the population entering higher education has grown significantly since the 1940s and 32 percent of 17-20 year olds now enter university level studies. However, there has also been a widening of the social class participation gap over this period, although there are signs this has narrowed slightly in the last decade. Nonetheless, significant inequalities exist by school type, neighbourhood, social class and income. Forty-three percent of young people from the higher social classes participate in higher education, compared with 19 percent of those from the bottom social classes. And just 10 percent of people from the poorest fifth of families acquired a degree by age 23, compared with 44 percent of those from the richest fifth. One hundred schools (mainly independent and making up less than three percent of all schools and colleges offering post-16 qualifications) accounted for a third of admissions to Oxbridge over the last five years.

The principal way to examine the problem of the under-representation of young people from less well off backgrounds in higher education is to consider the percentage of young people in certain groups in the population as a whole who are in university-level study. We can also consider the social makeup of those who apply to and are accepted on higher education courses. This section considers both these measures, and documents how they have changed, mainly over the last ten years.

Historical trends

A detailed look at the trend in HE participation since the Second World War can be found in Appendix One. However, as the following table shows, the overall picture is that the proportion of the young population entering higher education has increased significantly since the 1940s, from less than two percent to over 30 percent in 1990. Over the same period, the proportion of young people from the higher socio-economic groups entering higher education has grown far more than those from the lower groups – from 8.4 to 37 percent compared with 1.5 to 10 percent.

Age participation index by socio-economic group: percentage of young people entering higher education²

Socio-economic group	1940	1950	1960	1970	1980	1990
Professional, intermediate, skilled non-manual	8.4	18.5	26.7	32.4	33.1	36.7
Skilled manual, partly skilled, unskilled	1.5	2.7	3.6	5.1	6.5	10.3
Age participation index (UK)	1.8	3.4	5.4	13.7	12.6	19.3

The overall Age Participation Index is defined as the number of initial home entrants to higher education aged under 21, expressed as a proportion of the average number of 18 and 19 year olds in the population. The figures for each socio-economic group show the number of entrants aged under 21 in that group as a proportion of the total population of 18 and 19 year olds in that group.

Young people in Higher Education

For more recent years, we have a richer set of data. The Higher Education Initial Participation Rate (HEIPR) is a measure of the proportion of the population aged between 17 and 30 who are engaged in part time or full time higher education. The participation rate has increased overall by half a percentage point during the period from 1999/00 to 2006/07, with a noticeable increase in 2005/06 before the introduction of top-up fees, and a subsequent fall to 39.8 percent in 2006/07³. A similar trend exists for the young participation rate, with 31.6 percent of young people aged between 17 and 20 now in higher education, the vast majority in full time study.

Higher Education Initial Participation Rate 1999/00 – 2006/07⁴

	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Higher Education Initial Participation Rate (%)	39.2	39.6	40.2	41.1	40.2	40.1	42.5	39.8
Full time	33.6	34.4	35.1	35.6	34.5	34.4	36.6	33.9
Part time	5.6	5.2	5.2	5.5	5.6	5.7	5.9	5.8
Young participation rate (%)	31.3	31.9	32.5	32.7	31.7	31.7	33.9	31.6
Full time	29.9	30.6	31.1	31.3	30.4	30.3	32.4	30.1
Part time	1.4	1.4	1.3	1.4	1.4	1.4	1.5	1.5

² <http://www.publications.parliament.uk/pa/cm199899/cmselect/cmduemp/57/5704.htm>

³ A Government 'Public Service Agreement' target is to increase participation in higher education towards 50 percent of those aged 18 to 30 by 2010 and also 'make significant progress year-on-year towards fair access and bear down on rates of non-completion'. A further separate target is to have 36 percent of working age adults qualified to Level 4 and above by 2014. See http://www.hm-treasury.gov.uk/media/A/5/pbr_csr07_psa2.pdf

⁴ <http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000780/sfrdius02-2008.pdf> (2006/07 figures are provisional)

This increase is reflected in the growing number of UK applications and acceptances tracked through the UCAS system. Over the last decade, the number of applicants to higher education courses has risen by nine percent to over 432,000 in 2006. Over the same period, the number of acceptances on HE courses has risen by 14 percent to almost 346,000 in 2006. In other words, a student's chances of being accepted on a higher education course have, overall, increased.

UCAS applicants and accepted students, 1997-2006

	1997	2001	2006
All applicants	398,000	400,000	432,000
All acceptances	303,000	325,000	346,000

Source: UCAS; All UK domiciled applicants and acceptances, all ages

International performance

The UK graduation rate for all entrants to first degrees, at 38 percent, is the fourth highest in the European Union, behind Denmark (42 percent), Poland (44 percent) and Finland (48 percent). France and Germany have much lower graduation rates – 26 percent and 19 percent respectively – but this may be down to the variation in provision and the alternative routes into HE⁵.

Although wider comparisons are difficult, the Organisation for Economic Cooperation and Development (OECD) has compiled data on the proportion of the population in each country which has attained tertiary education in 2005. The UK rate is 30 percent, ahead of the OECD average of 26 percent, but behind countries like Canada (46 percent), Japan (40 percent) and the USA (39 percent)⁶.

Inequalities in access

The social class gap in HE participation, however, remains stark. For example, the proportion of applicants and acceptances tracked through UCAS from the lowest social classes (which make up half the population) was just 33 percent and 32 percent respectively in 2007, and this improved only modestly in the last decade.

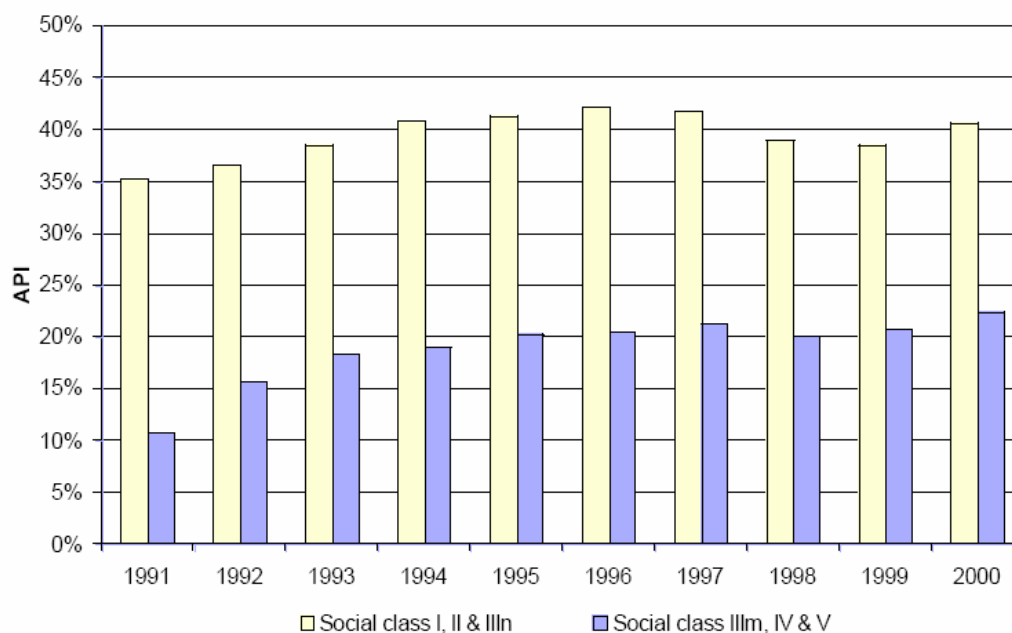
We also know from other data that the proportion of young people from different social classes going on to higher education varies significantly. According to figures from the former Department for Education and Skills shown on the following chart, in 2000 23 percent of those

⁵ http://www.statistics.gov.uk/downloads/theme_social/Social_Trends36/Social_Trends_36.pdf

⁶ See OECD Education at a Glance 2007, <http://www.oecd.org/dataoecd/17/17/39245021.xls>

from the lowest social classes entered higher education, compared with 41 percent of those from the higher social classes – a gap of 18 percentage points. In fact, this ‘gap’ in participation rates has been steadily growing since the Second World War, although there are signs that it has narrowed slightly since 1996⁷.

Participation rates in Higher Education, 1991-2000⁸



More recent figures (which are not comparable with those above due to changes in the social class categories⁹) show that in 2004, 43 percent of young people from the higher social classes participated in higher education, compared with 19 percent of those from the bottom social classes – a gap of 24 percentage points.

Young entrants

It is also possible to look at the recent access picture by considering the backgrounds of young students entering first degree courses. The overall picture is one of gradual improvement over the last decade, with an overall increase in the percentage of students drawn from state schools and low participation areas, plus some signs that the proportion of students from the lower social classes is increasing.

⁷ <http://www.dfes.gov.uk/research/data/uploadfiles/RR806.pdf>

⁸ Based on a the revised Age Participation Index – UK domiciled undergraduate students under 21 (see definition on page 11)

⁹ In 2001 the National Statistics Socio-economic Classification (NS-SEC) was introduced. See: http://www.statistics.gov.uk/methods_quality/ns_sec/

	From state schools / colleges (%)	National Statistics socio-economic classification 4-7 (%)	Low participation neighbourhoods (%)
1998/99	84.4	25*	11.6
1999/00	84.1	25*	11.7
2000/01	85.0	25*	11.8
2001/02	85.2	26*	12.4
2002/03	86.4	27.9	12.5
2003/04	86.1	28.2	13.3
2004/05	85.9	27.9	13.1
2005/06	86.9	29.1	13.5

*NB: Starred figures not comparable with later social class measures because of changes in social class classifications. Based on young full time first degree entrants to English universities
Source: HESA performance indicators*

Half the population (excluding those who have never worked or are long-term unemployed) are from the lower social classes 4-7, yet just 29 percent of young students in higher education are from those groups. And low participation areas are home to around one third of all young people, but less than one seventh of the student population.

Income data

Data from the latest cohort studies¹⁰ shows that the gap in graduation rates between those from the poorest and richest income groups remained the same for those graduating in 1998 and those graduating five years earlier in 1993.

		Lowest 20 Percent of Family Income	Middle 60 Percent of Family Income	Highest 20 Percent of Family Income	Inequality 'gap'
Percentage acquiring a degree by age 23	... in 1993	7	15	37	30
	... in 1998	11	23	40	29
	... in 2002	10	21	44	34

¹⁰ A series of longitudinal cohort studies has been undertaken in the UK, collecting information on a sample of the population born at a given time, and tracking characteristics over a number of years.

For those graduating in 2002, there was a slight widening of educational inequality in graduation rates compared with those acquiring degrees in the 1990s. The proportion of people acquiring degrees among the poorest income groups dropped from 11 to 10 percent while the proportion acquiring degrees among the richest groups grew by four percentage points, from 40 percent to 44 percent. However, the small samples of people involved means the data would support the conclusion that there has been 'no change' in the gap in graduation rates¹¹.

Inequalities by postcode

There are also broad and deep divisions in the chances of a young person going on to higher education according to where he or she happens to live¹². So in some areas fewer than one in 10 young people progress to university, compared with one in two in others. In fact, young people living in the most advantaged 20 percent of areas are five or six times more likely to enter HE than those living in the poorest 20 percent of areas. It is no surprise that the areas of low participation are areas of socio-economic disadvantage too. The gap in participation between the most and least advantaged areas grew slightly in the period 1994-2000, although figures for subsequent years due to be published in 2008 suggest a recent slight narrowing of the gap.

University and subject choices

These overall participation figures do not tell us about the institution and subject choices that young people are making. It is important that pupils are aware of the diversity within the HE sector. There is for example a great variance in the labour market returns between different universities. A recent longitudinal study found that 38 percent of graduates from a handful of elite universities were earning over £60,000 a year in their thirties, compared with eight percent of those who went to institutions designated universities in 1992¹³. And different subjects offer varying returns over a lifetime¹⁴. A medical degree, for example, results in additional net earnings over a working life of £350,000; a history degree results in £90,000 of extra earnings.

The Sutton Trust has been monitoring the performance of 13 highly selective universities which came top of an average ranking of the newspaper league tables in 2000¹⁵. As the following table shows, although improvements have been made in the last decade, youngsters from non-privileged groups remain significantly under-represented at these universities.

¹¹ <http://www.suttontrust.com/reports/Summary.pdf>

¹² http://www.hefce.ac.uk/pubs/hefce/2005/05_03/ (This analysis is being updated at present)

¹³ *Graduating and gradations within the middle class: the legacy of an elite higher education*, Sally Power and Geoff Whitty

¹⁴ http://www.rsc.org/images/EconomicBenefitsHigherEducationQualifications_tcm18-12647.pdf

¹⁵ The universities are: Birmingham, Bristol, Cambridge, Durham, Edinburgh, Imperial College, London School of Economics, Nottingham, Oxford, St Andrews, University College London, Warwick and York.

'Sutton Trust 13' intake	1997/98	2001/2	2002/3	2005/6
% from independent schools	39	35	32	33
% from state schools	61	65	68	67
% from lower social classes	13*	14*	16	17
% from low participation areas	6	7	8	8

Source HESA; NB Starred figures not comparable with later social class measures

According to other Sutton Trust research, 100 elite schools – making up just three percent of the 3,700 schools with sixth forms and sixth form colleges and centres in the UK – accounted for a sixth of admissions to the 13 Sutton Trust universities and a third of admissions to Oxbridge over the last five years¹⁶.

These patterns are confirmed by the representation of students at leading research universities. Government Performance Indicators in 2004/05 for example showed that one in five young degree entrants to Russell Group institutions (20 large leading research universities) were from the four lower class groups – compared with almost 30 percent of students in universities as a whole, and one in two of the wider population.

It is also the case that students from poorer backgrounds are less likely to access highly-selective courses in HE. Looking at medicine and dentistry courses, for instance, Universities UK found that 44 percent of accepted students in 2004 were from higher managerial and professional classes, but just five percent were from semi-routine occupational backgrounds. For business studies, however, the equivalent figures were 18 percent and 10 percent - a much smaller gap¹⁷.

¹⁶ <http://www.suttontrust.com/reports/UniversityAdmissionsbySchool.pdf>

¹⁷ http://bookshop.universitiesuk.ac.uk/downloads/margins_fullreport.pdf

Achievement

Social class inequalities in education emerge during the early years, setting future trends. Furthermore, there is a significant leakage of talent during secondary school -- 60,000 pupils (or 10% of the cohort) who at some point were among the top fifth of performers in school do not enter higher education by age 19. But once poorer pupils get A-levels, they are as likely as others to go on to university. Independent school pupils account for a disproportionate number of entries and top grades at A-level in the core sciences and modern languages.

This chapter documents the extent to which the social class gap in attainment at school determines the subsequent social class gap in higher education participation. The analysis concerns high performing pupils at different stages of schooling – those exhibiting the potential to study at university. The analysis shows, for example, that there are large numbers of high attaining pupils at the end of primary school who lose ground in examinations during later years. If the goal is to increase university participation from state schools, then the priority is to reduce these high attrition rates of high performers.

An important emerging message is that pupils who do make it to A-levels in state schools are just as likely as any other to go to university, irrespective of previous exam results earlier on or whether they come from a poor background. In contrast, it is also the case that pupils from independent schools with the same A-level grades as their state school counterparts are more likely to attend selective universities.

The analysis is limited by the data available. Much of the analysis compares the outcomes of the minority of children in schools who are eligible for free school meals¹⁸, and the majority who are not. This measure highlights one extremity of the class attainment gap by considering the different outcomes of children from extremely poor backgrounds. Other analyses suggest that attainment gaps also exist for the less poor compared with those pupils from the most prosperous backgrounds.

¹⁸ In 2006, 14% of children in English secondary schools qualified for Free School Meals

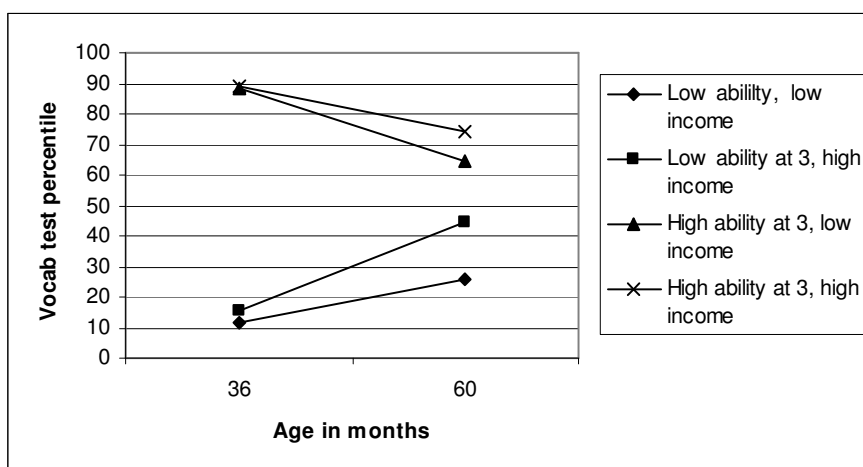
Early years

While the scope of this review extends to the end of primary school when children are aged 11, it is nonetheless important to set the subsequent attainment and participation trends into context of those trends that occur during the early years¹⁹.

Inequalities in the achievement of children from low and high income backgrounds emerge extremely early, well before schooling begins. The most recent evidence for this comes from the results for children born in the years 2000 and 2001 and tracked in the Millennium Cohort Study. By the age of three, children from disadvantaged backgrounds are on average already up to a year behind more privileged children (with degree educated parents) in terms of a “school readiness” assessment²⁰. Particularly bright children from poor backgrounds at age two lose significant ground to initially lower attaining middle class children by age five²¹.

The following graph shows how children from the poorest fifth of households but in the brightest group drop from the 88th percentile on cognitive tests at age three to the 65th percentile at age five. Those from the richest households who are least able at age three move up from the 15th percentile to the 45th percentile by age five. If this trend were to continue, the children from affluent backgrounds would be likely to overtake the brighter but poorer children in test scores by age seven.

Evolution of Test Scores by Early Ability and Family Income for children in the Millennium Cohort Study



Source: 'Recent Changes in Intergenerational Mobility in Britain', published by the Sutton Trust 2007

¹⁹ A key finding from a review of widening participation research published by HEFCE in 2006 is the long term determinants predicating HE participation including family background and initial schooling. See: http://www.hefce.ac.uk/pubs/rereports/2006/rd13_06/barriers.doc

²⁰ Millennium Cohort Study, Centre for Longitudinal Studies

²¹ 'Recent Changes in Intergenerational Mobility in Britain', Jo Blanden and Stephen Machin, <http://www.suttontrust.com/reports/mainreport.pdf>

These early trends mirror those revealed for children born 30 years ago, with low achieving children from rich backgrounds eventually overtaking high achieving children from poor backgrounds in tests by age six²². The gap in educational attainment between the top and bottom socio-economic groups at 22 months was already shown to be 13 percentage points. This study also showed that tests at 42 months are strong predictors of future attainment: more than three-times as many children in the top quarter gained A-level qualifications or above by the age of 26 as those in the bottom quartile.

Attainment gaps at school

The gap in attainment between children on free school meals and those who are not has been well documented and persists at every stage of school, although there has been minor narrowing of the gap in average results at Key Stage 3 and Key Stage 4 in recent years.

The gap is apparent for pupils performing well at various stages of education, as shown by the latest results for 2007. At age 16 for example, 21.1 percent of FSM (Free School Meal) pupils achieved five A-Cs at GCSE (including maths and English) compared with 49 percent of non-FSM pupils. It is hardly surprising given the poor attainment of those pupils on free school meals (predominantly in state schools in disadvantaged areas) that very few go onto university²³.

Attrition rates

A better sense of the leakage of talented pupils that occurs in schools is revealed by considering the numbers and proportions of top performing students at age 11 who perform less well subsequently. These 'attrition rates' are documented by a new study which for the first time also details the subsequent participation rates to higher education for pupils at different stages of the education system²⁴.

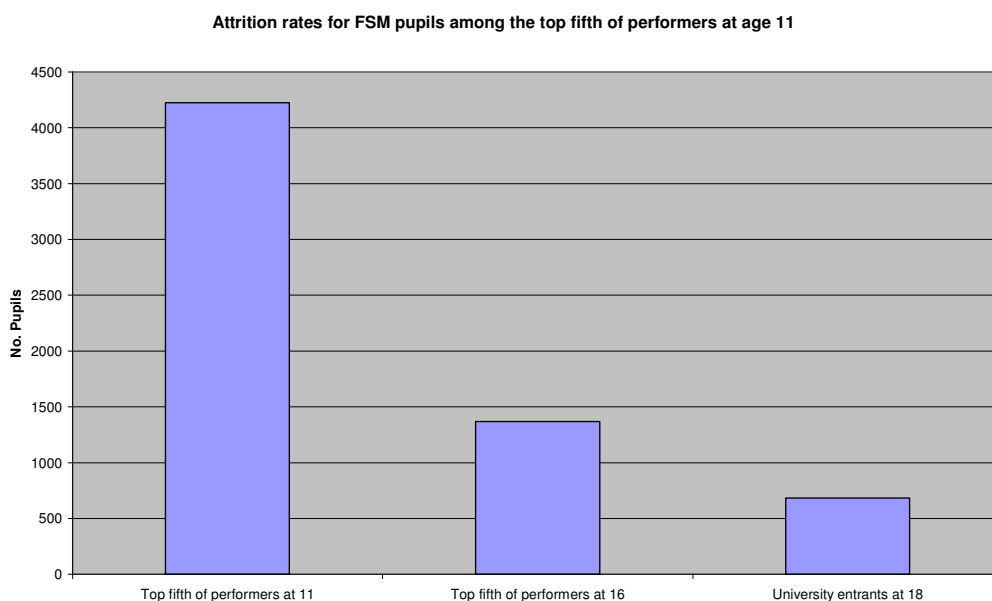
The study allows us to consider what numbers and proportions of top performing students are lost at different stages of the education system, and also to what extent gaps in university participation are due to earlier gaps in attainment at school.

²² *Inequality in the Early Cognitive Development of British Children in the 1970 Cohort*, Leon Feinstein http://www.standards.dfes.gov.uk/research/themes/early_years/ThuApr221020482004/

²³ 11 percent of FSM pupils achieved Level 3 in reading at Key Stage 1 compared with 29 percent of non-FSM pupils. At age 11, 15 percent of FSM pupils achieved Level 5 in Maths at Key Stage 2 compared with 35 percent of non-FSM pupils.

²⁴ These figures are taken from a note produced for the Sutton Trust by Haroon Chowdry, Claire Crawford, Lorraine Dearden and Anna Vignoles at the Institute of Education and Institute of Fiscal Studies. This is part of a project supported by the Economic and Social Research Council to investigate a linked dataset of individual-level school data and HE data. This covers one cohort of pupils, starting at age 11 and entering HE age-18 in 2004/05.

The following graph traces the outcomes for one cohort of pupils on free school meals who were among the top fifth of performers at the end of primary school as they progress through the secondary school system. It shows how high the subsequent attrition rates are for these pupils. Two thirds (2,850) of these top performing FSM pupils at age 11 in Key Stage 2 tests are not among the top fifth of top performers taking GCSEs at age 16. And a further half (680) of these pupils who are among top fifth of top performers at 16 do not subsequently go to university at age 18. This equates to a total loss of around 3,000 high performers in this one cohort of pupils who do not enter higher education²⁵.

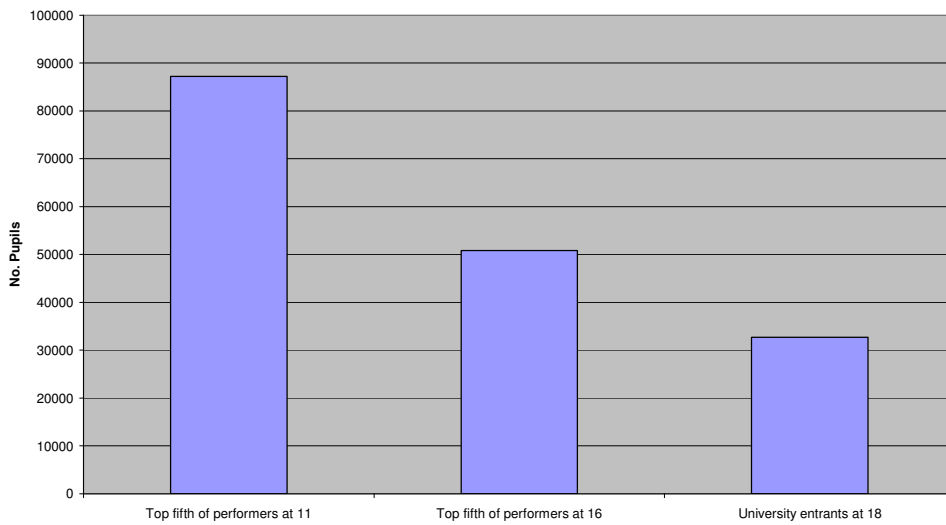


This loss of able pupils from poor backgrounds is dwarfed in absolute numbers however by the attrition rates for the vast majority of previously highest performing pupils who do not qualify for free school meals. The graph overleaf follows the much larger cohort of non-FSM pupils who were among the top fifth of performers at the end of primary school as they progress through the secondary school system.

This shows that 42 percent (37,000) of the top fifth of performing pupils at 11 are not among the top fifth of performers at age 16 – and 27,000 of these pupils do not go onto HE. A further 35 percent (18,000) of the top fifth of performing pupils at 16 do not go onto university at age 18. This equates to a total loss of over 45,000 students in one cohort who were among the highest academic performers at the end of primary school who do not go on to enter higher education.

²⁵ This takes into account some pupils who are not among the top-performers at age 16 but who still go onto HE.

Attrition rates for non-FSM pupils among the top fifth of performers at age 11



So far these figures consider only the attrition rates of pupils who were among the top fifth of performers at age 11 – but we can also consider those who were among the top fifth of performers at age 14 or age 16, but who were not among the top fifth of performers at age 11. Adding up all these pupils, who at some stage of their schooling were among the top fifth of performers, and finding out how many progressed to higher education, provides an overall attrition rate for one cohort of pupils. Using figures generated by Vignoles et al²⁶, we estimate that there are as many as 60,000 pupils in every year cohort of pupils -- who at age 11, age 14 or age 16 were among the top fifth of performers in school – who do not subsequently enter higher education by age 19.

Higher education participation

The other key (and more positive) message from these analyses is that the class gap in university participation (in terms of pupils on free school meals or not) disappears completely once pupils have attained A-levels. It does not matter if you were eligible for free school meals or not, or indeed what results you achieved earlier on in school, if you get A-levels you are as (highly) likely as any other pupil subsequently to enroll on a degree course. The main problem is getting to A-levels in the first place.

This is not to say that everyone who does gain A-level goes onto higher education. The latest figures from the Youth Cohort Survey show that 82 percent of pupils who achieved two grade Es or better at A-level progressed to Higher Education by 19 years of age in 2006/07.

²⁶ Paper produced for the Sutton Trust by Anna Vignoles and colleagues at the Institute of Education and Institute of Fiscal Studies. The figures do not take in to account students who enter HE after 19.

High achieving pupils

We can also consider the attrition rates for highly-able pupils in state schools in comparison with pupils in the independent sector, and the subsequent participation rates in highly selective universities. The figures show high rates of loss of able pupils in the state sector, contrasted with growing numbers of high performers in the independent sector at different stages of the school system.

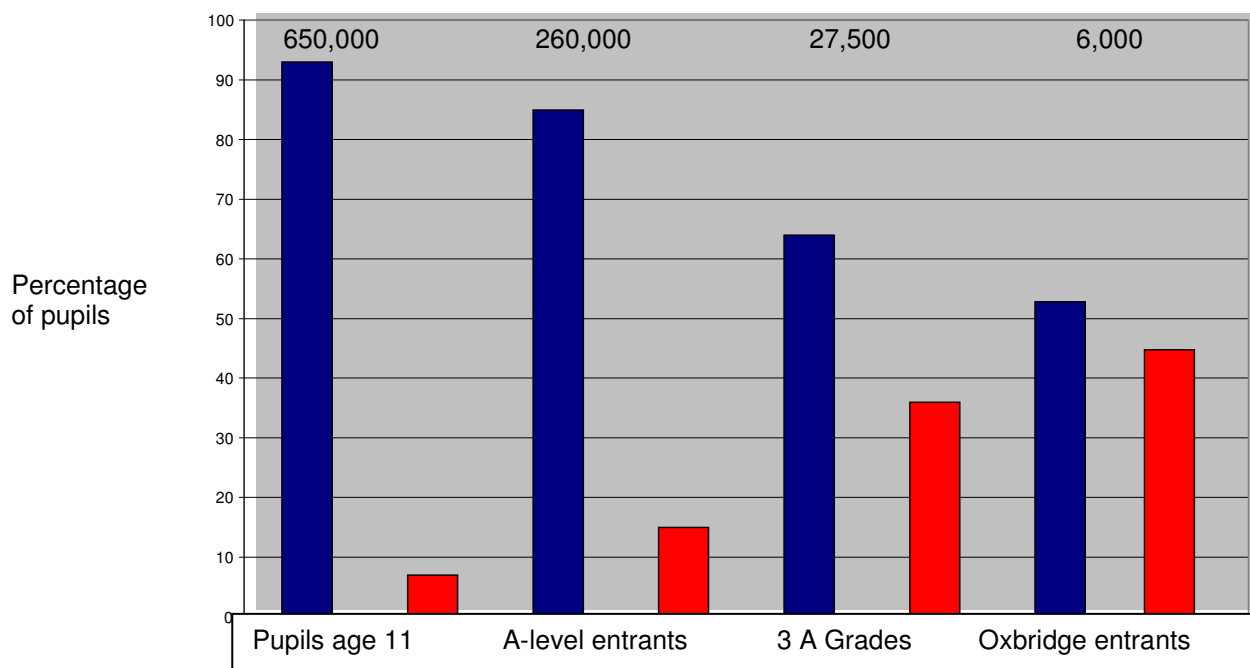
At age 11, there are 30,000 'very able' pupils who are the top five percent performers in Key Stage 2 tests at age 11, compared with 7,000 similarly classified pupils in independent schools²⁷. However, by age 16, 20,000 state pupils achieve five A/A* grades at GCSE, compared with 7,500 in independent schools. At age 18, 17,600 state-educated pupils (including those based in sixth form colleges) achieved three A grades in 2006, compared with 9,900 in independent schools.

One might argue on the basis of these figures that 12,400 highly-able state school pupils are not -- but should be -- in the three As cohort, while an extra 2,900 independent school pupils have now become part of this group of highest performers. Achieving these top A-level grades will make all the difference in terms of being considered for degree places by highly selective universities such as Oxford and Cambridge.

Another way of looking at these patterns is to track numbers for the two sectors at different stages, considering proportions of pupils at age 11, A-level entrants at age 16, pupils achieving at least three As at A-level at age 18, and finally, entrants to Oxford and Cambridge Universities. The share of independent pupils rises from seven percent to 47 percent.

²⁷These figures come from an analysis by David Jesson, Visiting Professor at the Centre for Performance Evaluation and Resource Management at the University of York. See: http://www.schoolsnetwork.org.uk/uploads/documents/David%20Jesson%20Very%20Able%2016_119588.ppt

Proportions of state and independent school pupils from school to Oxbridge



NB: Maintained sector in blue; independent sector in red.

The core sciences and other 'university' subjects

It has been well documented that independent school pupils are also disproportionately represented among those attaining A grades at A-level in the core sciences and modern languages – as can be seen for the following table for A-level results in 2006.

Proportion of total A-level entries and A-grades accounted for by independent school pupils

Subject	% entries	% A grades
Biological Sciences	18.8	34.6
Chemistry	23.4	37.1
Physics	23.9	37.6
Mathematics	23.5	34.9
French	29.6	43.8
German	27.1	43.6
Spanish	36.0	51.6
Other modern languages	48.1	56.4

Within the state sector however, the attainment gap between pupils in the sciences on free school meals and those who are not appears no different to other subject areas²⁸. It is likely that those state pupils who do gain A-levels in particular subject areas are just as likely as any other to go onto higher education.

Gaps in participation to selective universities

The Vignoles analysis also considered whether a class gap in university participation (in terms of pupils on free school meals or not) exists for a particular group of highly selective universities (the 'Sutton Trust 13'). Once again the participation gap was found to disappear completely once A-level and other prior attainment of pupils was taken into account. A state school pupil from a very poor background stands the same chances of going to one of these universities as any other pupil – if they get the appropriate A-level grades. The big problem is that very few FSM pupils get the A-levels in the first place.

This is not the case, however, for those state school pupils competing with their independent school counterparts. A study published by the Sutton Trust in 2004 showed that approximately 3000 state school students each year are not among the 30,000 students who gain admission to the Sutton Trust 13 – even though they academically qualified to do so.²⁹ This 'missing 3000' is discussed in the next chapter.

²⁸ This is found in review of impact of socio-economic status on participation and attainment in science, a report for the Royal Society.

²⁹ <http://www.suttontrust.com/reports/Missing-3000-Report-2.pdf>

Aspirations

Young people have high aspirations towards higher education, but these are not always realised. There are variations by social class, with students from poorer backgrounds being less likely to think of higher education as a natural next step, particularly certain selective courses and universities, even when they have high enough exam grades. Attitudes are affected by parents and peer groups, with poorer students less likely to access the personal and social networks that can offer support and advice on university progression.

Inequalities in achievement are intertwined with inequalities in aspirations. Having high aspirations can drive attainment – the young person with a clear eye on a place at university or a particular career, for instance, may be motivated to work harder to achieve that goal. Similarly, exam grades on their own will not necessarily lead to university – or to the most appropriate course and institution choices - if young people do not have a high level of expectation and make ill-informed decisions.

A young person's aspirations to university are shaped by those around them – family, friends, teachers and other role models, as well as the local environment and the school or college they attend. Recent work from the Higher Education Funding Council has underlined that young people's educational trajectories are a product of a complex interplay of cultural, social and economic factors, linked to learning cultures and identities within their communities³⁰. This work also highlights the need to avoid 'deficit beliefs' around aspirations – that is to say that poorer communities do have ambitions, but these may not be aligned with traditional middle-class perceptions.

Young people's aspirations towards higher education

An annual MORI survey the Sutton Trust has funded over the last five years shows a high overall level of aspiration towards higher education among 11-16 year olds in state schools, with 70 percent consistently reporting that they are fairly or very likely to go on to university-level study, and only relatively minor overall differences between year groups³¹. This agrees with the widely-held view that in most cases the aspiration towards HE is developed well before the age of 16, in early secondary school and before. The challenge is to support and build on those aspirations, particularly at critical junctures.

³⁰ http://www.hefce.ac.uk/pubs/rereports/2007/rd16_07/

³¹ The intentions of young people cement as they grow older: although the overall proportions of 11 and 15-16 year olds who say they are likely to go on to HE is roughly the same, the older age group are more likely to report they are 'very likely' to study at university than the younger age group (32% vs 43% in 2007).

How likely or unlikely are you to go into higher education when you are old enough?

	2007	2006	2005	2004	2003
	%	%	%	%	%
Very likely	37	34	34	33	40
Fairly likely	34	37	35	36	31
Fairly unlikely	8	5	7	7	8
Very unlikely	4	4	5	5	5
Not sure either way yet	17	19	18	18	14
Not stated	1	1	1	*	2

Representative sample of 11-16 year olds in state schools

Within these headline figures, however, levels of aspiration differ significantly by background. In the 2007 survey, while 74 percent of young people from two working parent households say they are likely to go into to HE, the same is true of just 60 percent of those from households where no parent works. And a greater proportion of young people from two-working parent households were 'highly likely' of these intentions (26 percent), than those from households where no parents work (15 percent).

Reasons for not entering higher education

Evidence from those running university outreach schemes highlights that young people's attitudes to higher education are often more likely to change around key transition points – from primary into secondary school and from an 11-16 school in to a school sixth form or college. The main reasons for not going on to HE are rooted in the desire to earn money as soon as possible and to pursue more practical routes, either at age 16 or later:

Leading reasons for not going on to HE (five year average)

I prefer to do something practical rather than studying from books	47%
I want to start earning money as soon as possible	44%
I can get a well-paid job without a degree	31%
I do not enjoy learning	30%
I'm not clever enough	28%
I won't get good enough exam results to get into a university	28%
I do not need a degree to do the job(s) I am considering	27%
I don't like the idea of it	22%

Source: Sutton Trust MORI Young People's Omnibus

Interestingly, just over a quarter of respondents said that not having high enough exam grades – or not being clever enough – was a reason they were unlikely to enter HE. Again, other evidence shows that it is students from manual and unskilled parental backgrounds who are more likely to want to leave education and find employment, partly motivated by frustration with formal education³². And a survey of teachers' views about why able students left school at 16 confirmed that the principal reason was students' desire to enter employment, followed by a lack of interest in academic study³³. Some evidence suggests that the former may be a rationalisation of the latter – that is to say they turn the negative (a dislike of formal education and a lack of self esteem as far as learning is concerned) into a positive (the desire to get a job).

Underlying this reasoning appears to be a lack of awareness of the medium and long term financial benefits of higher education – or concerns about immediate financial constraints which mean that students from poorer families feel they can not afford to forgo several years of wages whilst studying in FE/HE.

Parents' aspirations

Parents and carers exert a very strong – perhaps the strongest – influence on young people's decision-making regarding education – not only in terms of whether they decide to stay on in to post-compulsory education and on to university, but, if so, the institutions and courses they choose. A paper on the Aimhigher programme, for example, found that young people were twice as likely to consider HE if their parents wanted them to stay in education; the probability they will do so increases by twelve percentage points with supportive parents³⁴.

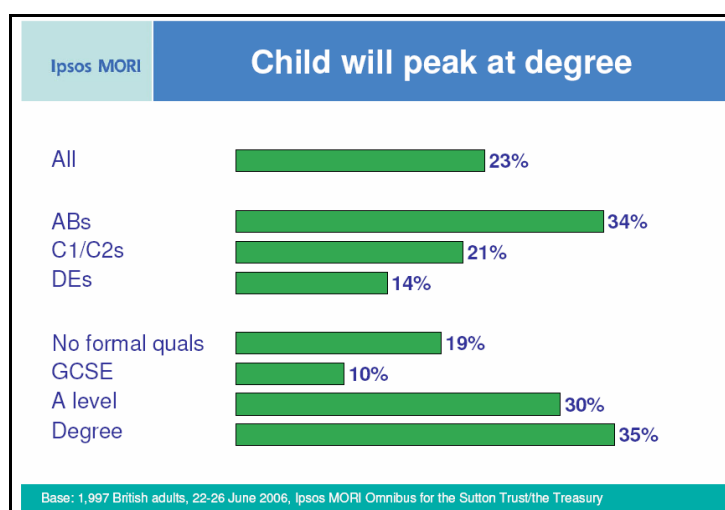
Again, however, there are significant differences in parents' attitudes by class and income. A survey of parents' aspirations for their children commissioned by the Sutton Trust and HM Treasury revealed that those who were highly educated and from higher social groups were considerably more likely to believe that their own children would go on to gain a degree and end up in a graduate level job.

³² For example Biggart et al. (2004), <http://www.scotland.gov.uk/library5/education/edrf4-00.asp>

³³ <http://www.suttontrust.com/reports/SupportingStudentsReport.pdf>

³⁴ http://www.aimhigher.ac.uk/practitioner/programme_information/monitoring_and_evaluation/

Parental expectations for their children



Perhaps unsurprisingly, in the same survey parents from D/E groups were also significantly more likely than A/Bs to describe their time at school as a negative experience³⁵. Research from HEFCE has made the link between areas of low HE participation amongst young people and low levels of skills and qualifications in the adult population. Although this is beyond the immediate scope of this review, which is looking at young entrants, there is a growing body of opinion which suggests that boosting adult learning and education participation is one of the most effective ways to promote HE progression in the poorest areas³⁶.

The combination of a poor and limited experience of education seems often to lead to a belief that your children are unlikely to go on to university – and this inevitably impacts on the aspirations of those children, and whether they see university-level study as a natural next step³⁷. And research the Institute of Education has undertaken for the Sutton Trust suggests that students from graduate families tend to have always aspired to HE, whereas first generation students who choose a university pathway trace this aim back to secondary school, around the time they were making their GCSE choices³⁸.

Even when parents are supportive, many teachers see them as a major – if unwitting – obstacle for increasing HE participation amongst students: *'Parents are becoming my block really... We have very supportive parents but generally they don't know what to do.'*³⁹ In an increasingly

³⁵ <http://www.suttontrust.com/reports/MORIaspirations.pdf>

³⁶ Discussion paper by Tricia Jenkins, Head of Educational Opportunities, University of Liverpool, February 2008

³⁷ Bevins found that parents from poorer neighbourhoods are also less likely to engage their children in discussions about post-compulsory education and career options and to view certain educational trajectories as principally for the better off (from *Current perceptions of the impact of socioeconomic status on science participation and attainment—a focus group investigation of pupils, teachers and parents*, report to Royal Society)

³⁸ *University Entry*, Institute of Education for Sutton Trust, forthcoming

³⁹ <http://www.suttontrust.com/reports/SupportingStudentsReport.pdf>

complex environment, many parents (particularly those from disadvantaged backgrounds) are confused by the pathways on offer and lack a clear sense of which routes lead to further education and into university.

Peer Group

Communities with low progression rates in to HE are often characterised by closely knit social groups of family and friends, whose opinions are highly influential in young people's decisions. While these groups offer support and strength, they often do not have a culture of HE progression or contain members with experience of university to whom young people can look for advice and guidance. Pupils from these backgrounds are also less likely to look beyond their peer group and be in a position to form the sort of horizontal and vertical social networks which would give them access to this support⁴⁰.

Some studies also suggest that students were reluctant to study subjects that were not seen as 'cool', such as science⁴¹. And the Sutton Trust knows from its own experience of running university summer schools and many other initiatives that male students are considerably less likely to apply to take part on these programmes than their female peers. This accords with other evidence which has highlighted an 'anti-education' culture in some male groups, where the principal role models are not associated with academic success and university study.

Aspirations towards selective universities

The second dimension to the aspirations question is whether young people expect not only to go on to HE, but to apply to the institution that is most suited to their talents and abilities.

The Sutton Trust has funded the Higher Education Funding Council to look at the 13 universities which came highest in an average ranking of newspaper league tables, comparing the profile of their student intake with benchmarks⁴² based on subject mix and attainment. The researchers found that each year there are over 3,000 'missing' state school students who get the grades necessary to attend these universities but who end up at other institutions. Another way of looking at this is that students from independent schools are as likely to attend leading universities as students from state schools who achieve two grades higher at A-level⁴³.

⁴⁰ Sometimes referred to as 'bridging and linking social capital' – see http://www.hefce.ac.uk/pubs/rereports/2007/rd16_07/

⁴¹ *Choice, pathways and progression for young people in West London*, J. Lumby et al, 2003

⁴² Performance Indicators are a range of statistical indicators intended to offer an objective measure of how a higher education institution (HEI) is performing. See <http://www.hesa.ac.uk/index.php/content/view/581/141/>

⁴³ <http://www.suttontrust.com/reports/Missing-3000-Report-2.pdf>

Subsequent research undertaken by the Trust also found that there were over 500 'missing' students from low participation areas.⁴⁴

Actual and benchmark entrants to Sutton 13 group of universities

		1998/99	2000/01	2002/03	2004/05
Entrants from State Schools to Sutton 13					
Benchmark	% of intake	74%	74%	80%	77%
	Numbers	21500	22400	26800	21800
Actual	% of intake	64%	64%	68%	66%
	Numbers	18400	19300	22800	25500
'Missing' students		3100	3100	4000	3700

		1998/99	2000/01	2002/03	2004/05
Entrants from Low Participation Neighbourhoods					
Benchmark	% of intake	8%	9%	10%	10%
	Numbers	2443	2595	3448	3147
Actual	% of intake	7%	7%	8%	7%
	Numbers	1910	2061	2587	2304
'Missing' students		533	534	861	843

While the reasons behind these trends are complicated, aspirations as well as the information and advice these young people receive are significant factors. There is some evidence, for instance, that young people from state schools and lower income homes are more likely than their better off peers to choose a local university than one further afield, and so less likely to apply to highly selective institutions in the first place⁴⁵. There is certainly a perception that young people from non-traditional backgrounds are less likely to believe they will get in to and fit in at elite universities⁴⁶.

⁴⁴ <http://www.suttontrust.com/reports/Stateschooladmissionstoourleadinguniversities.pdf>

⁴⁵ See <http://www.suttontrust.com/reports/StaffordshireReportFinal.pdf>

⁴⁶ See for example, Reay, D., David, M. E. and Ball, S. J. 2005. *Degrees of Choice: Social class, race and gender in higher education*. Stoke on Trent: Trentham Books; Archer, L., Hutchings, M., and Ross, A. 2003. *Higher Education and Social Class: issues of exclusion and inclusion*. London: RoutledgeFalmer; Ball, S. J. 2003. *Class Strategies and the Educational Market: The middle classes and social disadvantage*. London: RoutledgeFalmer.

According to a survey of teachers in post-16 schools and colleges⁴⁷ two-thirds believed that able students from disadvantaged areas lacked the confidence to apply to universities with more demanding entry qualifications. About 80 percent believed that able students from disadvantaged areas lacked the confidence to apply to Oxford or Cambridge universities in particular, and half believed that such students would find it difficult to cope socially at these universities. Interestingly, less than ten percent believed that their own students would find it difficult to cope academically.

⁴⁷ <http://www.suttontrust.com/reports/SupportingStudentsReport.pdf>

Information, advice and guidance

Good quality information, advice and guidance are particularly important in supporting the higher education aspirations of students from disadvantaged backgrounds. However at least half (and sometimes more) of the support currently given is judged inadequate, and can be poorly timed and partial. There is a need for particular support at certain key points, such as age 14 and 16, so that young people realise the implications of certain choices on their subsequent higher education prospects. There is also a lack of specialist guidance to help youngsters negotiate the very many - and increasingly complex - pathways open to them.

In addition to the influence of parents, family and friends, young people's aspirations towards university are formed through their more formal interaction with teachers and advisors. Their role can be seen as threefold: contributing to a general sense of high aspirations amongst the students they teach; providing the practical support and guidance which enables students to follow certain paths; and counter-balancing the low expectations and misconceptions that some young people will have formed through other channels.

The challenges faced in fulfilling these functions are highlighted by a Sutton Trust survey of 20 percent of the teachers with responsibility for advising young people on their higher education options⁴⁸. One respondent in a school serving a disadvantaged area reported that students' lack of understanding – or mistaken notions – about careers and HE proved a significant hindrance to their aspirations: *'They've got no idea of what people do or why. They probably know no one who's been to university other than a teacher.'* He believed that *'parents want the best for their children but they're very negative in their outlook'*, and continued that they tended to have difficulties with any development that threatened the status quo. There was also a lack of encouragement from home – *'a lack of tradition really'* which meant that parents knew very little about higher education or what it involved.

(Please see Appendix 3 for a review of the literature around information, advice and guidance.)

Equity

The evidence shows that high quality information, advice and guidance (IAG) can have a positive impact on transitions between Key Stages 3 and 4 (at age 14) and from compulsory to further education (at 16), and a particularly beneficial effect on pupils of moderate to higher ability in schools with lower or average achievement⁴⁹.

⁴⁸ <http://www.suttontrust.com/reports/SupportingStudentsReport.pdf>

⁴⁹ SWA Consulting, (1998), *The Influence of Careers Education and Guidance upon Pupils in Year 11*. RD17A. Department for Education and Employment. Sheffield.

The corollary of this is that when the quality of advice is poor, it has a particularly negative impact on students from less well-off homes. This is partly because these students tend to be clustered in schools and colleges which, for a range of reasons, tend to have least access to advice services, particularly as far as pathways to university are concerned. But it is also because those students who are the least likely to access guidance through formal mechanisms are also the least likely to get it from informal sources – for example through peer and family networks of graduates and professionals⁵⁰. They are therefore particularly sensitive to its absence and likely to revert to a ‘default’ pathway determined by the trajectories of those around them.

Advice at key junctures

The decisions made at the age of 16 – and, increasingly, 14 – are critical in determining the higher education options available to a young person. It is too late, for example, for a student to discover at 18 that certain GCSEs and A-levels are required to study a particular subject at higher education level. And with the introduction of specialised 14-19 diplomas and the raising of the education leaving age, deciding what course to pursue at age 14 is more critical than ever before. But at both stages there are widespread inadequacies in the quality of guidance and significant variations between schools and areas.

Post-16 choices

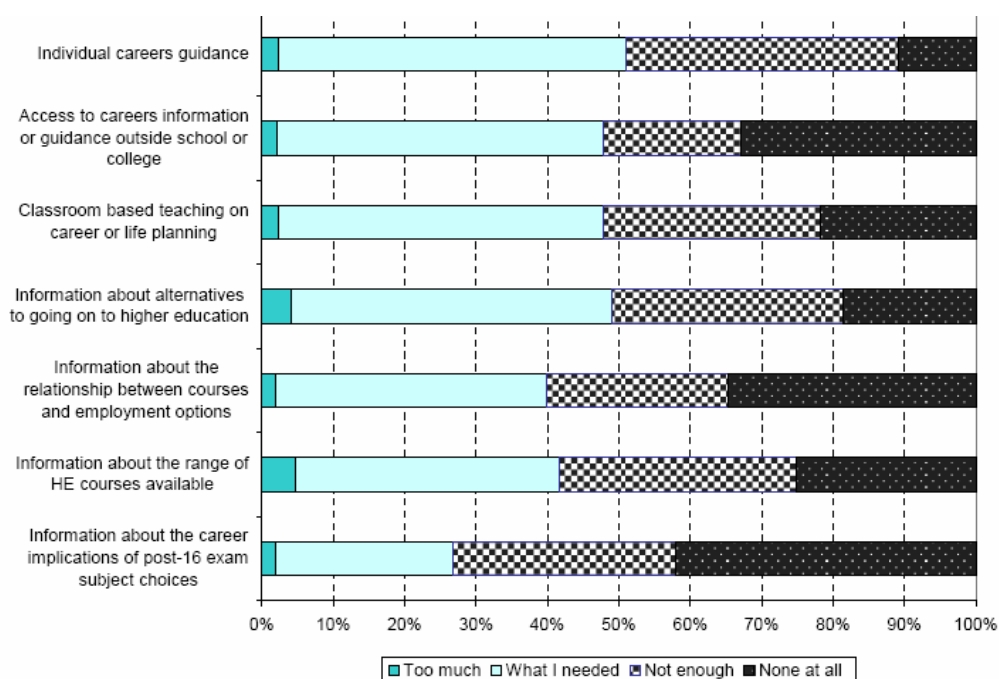
The Education and Skills Bill, currently in Parliament, expects local authorities and schools to provide students with impartial information, advice and guidance about their post-16 options. It is clear that much better provision at this stage is needed. Research from the Futuretrack survey⁵¹ found that just half of young people who had applied for full time courses through UCAS had received an adequate amount of individual careers guidance. Around three quarters felt they had received either not enough or no information on the career implications of post-16 exam choices; and 60 percent had received not enough or no information on the relationship between HE courses and employment, or the range of HE courses available. The authors of the report comment that the lack of access may be a particular problem for those youngsters with non-graduate parents and attending schools and colleges with relatively low progression rates. These findings concur with other evidence from Aimhigher which finds that 58 percent of young people felt they needed more help with careers and education guidance in year 11.⁵²

⁵⁰ <http://www.actiononaccess.org/download.php?f=539>

⁵¹ <http://www2.warwick.ac.uk/fac/soc/ier/research/glmf/futuretrack/>

⁵² <http://www.dfes.gov.uk/rsgateway/DB/RRP/u013575/index.shtml>

UCAS applicants' experience of careers and education advice and guidance



Source: Futuretrack 2006: all accepted respondents to full survey, weighted

Earlier advice

There is some evidence that careers and education advice lower down the school might help to raise pupils' awareness of subject-related careers and counteract external influences, such as peer pressure and low parental expectations. Again, although there are gaps in the research, the provision of such advice seems to be patchy and there is a lack of focus on trajectories - that is to say a clear idea of how GCSE-level subjects affect A-level or equivalent choices, and the opportunities to study in HE. A figure that emerges again and again is that at least half of careers and education advice is inadequate or inappropriate.

It also seems that a swathe of young people with the potential to go on to HE are being missed by current advice and guidance provision. With limited resources, the Connexions service has tended to focus on helping young people who have little prospect of entering higher education find work. For the very able there is some specialist support available, although, again, this seems patchy. But there are a number of youngsters in the middle who fit neither category, but who – if properly motivated and guided – have the potential to pursue university level studies⁵³.

⁵³ http://www.hefce.ac.uk/pubs/rdreports/2007/rd16_07/

Teachers and careers staff

A major reason behind dissatisfaction with the provision of careers and education advice emerges as the lack of training and expertise among staff. The National Audit Office reported that in two thirds of schools, careers advice was not being delivered by appropriately trained staff. A consequence of this is that the advice given might be out-of-date and narrow. In the sciences, for instance, the Royal Society has found that many teachers do not feel they have enough knowledge of the employment options available to science graduates to offer the best advice for their students⁵⁴. And studies have highlighted that those with responsibility for careers and education guidance within schools do not necessarily view it as a priority or a high-status role.⁵⁵

Particular schools and colleges

There is also some evidence of institutional bias. It seems that young people may be more likely to be guided towards certain avenues on the basis of teacher and school preference rather than their own aspirations and abilities. On the one hand it is alleged that some schools with sixth forms present a narrow range of academic pathways to their students in order to encourage them to stay on at school rather than choose a more vocationally-led course at an FE college. As a result, many young people form the impression that A-levels alone lead to university, and if A-levels are not for them, then nor is higher education.

On the other hand, research the Sutton Trust is sponsoring at the London School of Economics suggests that bright young people eligible for free school meals are more likely to pursue vocational routes in schools with high levels of deprivation than in more affluent schools, where they follow a more traditional, academic pathway. Both these findings underline the importance of advice coming from beyond a young person's school or college, not only to ensure it is impartial and best suited to the young person's needs, but also to lend it credibility with disaffected students.

11-16 schools

There are also particular issues for 11-16 schools, which are often concentrated in poorer areas such as the three City Challenge areas⁵⁶. Concerns have been voiced that a disproportionate number of pupils drop out of education from these schools as the transition to post-16 provision is all the more problematic without a sixth form. It may be difficult for these young people to gain entry to the institutions they want, as successful sixth form colleges and school sixth forms are often heavily oversubscribed. Moreover, many young people report feeling 'lost' in larger,

⁵⁴ *Current perceptions of the impact of socioeconomic status on science participation and attainment—a focus group investigation of pupils, teachers and parents*, interim report to the Royal Society, Bevins.

⁵⁵ *Connexions Service – Advice and Guidance for all Young People*, National Audit Office, 2004

⁵⁶ London, Greater Manchester and the Black Country

sometimes more impersonal college environments, and are at risk of dropping out of their FE studies without specific support.⁵⁷ Young people who move institutions at 16 may also be less likely to be identified at the right time for specialist HE support or tailored advice, as they will not have established relationships with their teachers.

Choice of Institution

The advice that teachers and advisors give is not only concerned with whether or not to pursue HE study, but also at which institutions and in which subjects. The Sutton Trust has commissioned a series of surveys looking into the role of teachers in advising and encouraging their brightest pupils to apply to highly selective institutions. A recent MORI survey of a representative sample of teachers found that only just over half (54 percent) would generally recommend their brightest students to apply to Oxbridge, while 45 percent said they would never or rarely do so.

Meanwhile visits to five non-selective state schools that were selected on the basis that they send a relatively high proportion of students to highly-selective universities but also have relatively high proportions of disadvantaged pupils, reveals reluctance among teachers overtly to discuss hierarchies within the academic sector⁵⁸. Partly this is to protect students with varying academic qualifications and expectations; teachers did not want to upset those pupils unable realistically to apply to very competitive universities and courses.

This reluctance may also be rooted in an almost philosophical anti-elitist stance among some teachers. In response to the Sutton Trust's 2007 report on university admissions by individual schools, one state school head teacher for example argued: "The egalitarian ethos of many state-sector institutions can lead to a failure to discriminate for fear of being seen as elitist; it is very hard for some staff to acknowledge that one university might be better than another, or that some students might thrive academically in one setting rather than another. This is particularly the case where teaching staff themselves might have attended a less prestigious institution".

It is also argued that there are some misconceptions amongst staff in the 16-19 sector about the A/AS subjects that are advisable for students to study if they wish to go to leading research universities. Wendy Piatt, the Director General of The Russell Group, has indicated that this is a problem which universities are addressing:

⁵⁷ Conversation with head teacher of London 11-16 comprehensive

⁵⁸ *University Entry* - A study of non-selective state schools that are successful in sending students to leading universities, by researchers at the Institute of Education for Sutton Trust, to be published.

“Russell Group universities ... now offer clear recommendations on the package of A-Levels (or equivalent) which would give the candidate the best grounding for a particular course and which would be a less ideal combination of A-Levels. [...] Clearly if pupils from certain state schools are increasingly taking a combination of subjects which put them at a disadvantage in competing for a course at a Russell Group university, the task of widening participation in our universities becomes even more difficult.”⁵⁹

⁵⁹ <http://www.russellgroup.ac.uk/news/2008/statement-on-a-level-choices-following-sunday-times-article-of-6-january-2008.html>

Applications and admissions

Pupils in non-selective state schools and colleges are less likely to receive support and advice to navigate an increasingly complex and varied admissions process. A tiny proportion of schools dominate admissions to leading research universities. Application rates to these universities are higher for independent schools than non-selective state schools with similar average A-level results. Admissions schemes that take into account pupils' backgrounds are widespread in the university sector, but there is a lack of clarity and consistency in their scope and aims.

Attainment is the major factor driving eventual participation into the higher education sector. However, there is also evidence that pupils from particular types of schools and schools that are poorly performing are less likely to apply to certain types of universities and degree courses -- even when they have the same qualifications as pupils from more prestigious schools. Furthermore, research has suggested that pupils from lower social class backgrounds and particular schools may stand less chance of receiving offers from highly selective universities once they apply – although this finding is contested.

Concerns have also been voiced that the applications and admissions system disadvantages pupils from less privileged backgrounds. There are many reasons put forward for this, including: a lack of support and guidance when producing 'personal statements' on application forms, a greater likelihood of having their A-level grades inaccurately predicted, and a lack of preparation for bespoke university admissions tests.

These issues are inevitably concerned with which universities students are admitted to - 'fair access' – rather than their entry into higher education as a whole – 'widening participation'. Nonetheless, a key point which underlines the importance of appropriate advice and guidance in schools, is the bewildering range and complexity of qualifications and factors that now affect which pupils are admitted onto particular degree courses. The introduction of the new Diplomas in English schools, the new A star grade at A-level, and the increasing use of the International Baccalaureate will only add to the array of existing information used to assess pupils. This information already includes: predicted results for A-levels and other qualifications, unit grades, prior qualifications, bespoke admissions tests, personal statements and references, and in some cases, interviews.

Application trends

An analysis of university admissions by individual schools over a five year period by the Sutton Trust in 2007 suggested that differences in the admission rates to highly selective universities cannot be attributed solely to the schools' average A-level results, and that other factors are at work⁶⁰. At the 30 top performing independent schools for example, a third more pupils were admitted to 13 leading research universities (the 'Sutton Trust 13') than would be expected given the schools' average A-level results. In contrast, at the 30 top performing comprehensive schools, only half the pupils were admitted to the Sutton Trust 13 universities than would be expected given their average A-level results.

However, as we have documented earlier, within the state school sector, a pupil qualifying for a free school meal stands the same chances of going to one of the Sutton Trust 13 universities as any other pupil – if they get the appropriate A-level grades.

A major factor driving differences in admissions to highly selective universities between independent and state schools with similar attainment is the likelihood of making applications to these universities in the first place.

A follow-up analysis for the Sutton Trust reveals that application rates, in this case to Russell Group universities⁶¹, are higher for independent schools compared with comprehensive state schools given similar average A-level results of the schools. Grammar schools have similar application rates to independent schools with similar average point scores. As with earlier work on admissions, these results must be treated with caution as using school averages in this way masks differences in the distribution of individual pupils' achievement and application rates.

Nonetheless a major difference revealed is that the average number of applications to Russell Group universities from further education colleges is significantly lower than for other types of schools and colleges – given similar average attainment of pupils. For example, a student in an FE college will, on average, make one less application to a Russell Group university than a student in a comprehensive school with a similar average A-level point score. The FE sector may warrant special investigation as to why this is so, but one reason may be greater likelihood of pupils taking vocational qualifications.

⁶⁰ <http://www.suttontrust.com/reports/UniversityAdmissionsbySchool.pdf> A limitation of using school average results in this way is that they mask differences in the distribution of results of individual pupils. But differences in admissions rates were found for top performing schools which are likely to have very similar pupil characteristics.

⁶¹ The Russell Group consists of: Birmingham, Bristol, Cambridge, Cardiff, Edinburgh, Glasgow, Imperial College, Kings College London, Leeds, Liverpool, London School of Economics, Manchester, Newcastle, Nottingham, Oxford, Queens University Belfast, Sheffield, Southampton, University College London, and Warwick.

Post-qualification applications (PQA)

It has been argued that the current system of using predicted - rather than actual - A-level grades in university admissions creates a systematic disadvantage for students from less privileged backgrounds, who are less likely to have their grades accurately predicted. This would be addressed if universities were able to judge students on their actual grades – the so called post-qualification applications system (PQA).

The evidence suggests that the issue is, however, far from clear cut. Research commissioned by UCAS (Universities and Colleges Admissions Service) showed that predicted grades are accurate for 45 percent of applicants⁶². In nearly nine percent of cases, the predictions are too pessimistic; while in 47 percent of cases they are too optimistic. Just over half (51 percent) of pupils from the highest socio-economic group receive accurately predicted grades compared with 39 percent in the lowest socio-economic group. A separate analysis carried out by Bristol University meanwhile tracking the application patterns of students with actual A-level grades (those who delayed entry into university) revealed no changes in the application behaviour of students from lower social groups⁶³.

Support for a PQA among the teaching profession however remains strong: a MORI poll commissioned by the Sutton Trust in 2006 showed that 82 percent of secondary school teachers backed the idea of a university admissions system based on actual A-level results⁶⁴. Moreover, advocates of the PQA argue that the current system of predicted grades is inherently unfair to all students as it is unreliable – an argument set out in the Schwartz report on fair admissions in 2004⁶⁵. Knowing actual A-level grades would empower students from less privileged backgrounds in particular.

Meanwhile reforms introduced for the 2009 admissions cycle will allow students who do better in their A-levels than predicted to 'trade-up' during a five day 'post-qualification adjustment' period and apply to a degree course with more demanding entry requirements. The Government is committed to a further review in 2010, with the possible introduction of fully fledged PQA from 2012.

⁶² 'Estimating the Reliability of Predicted Grades', UCAS research report. This is referenced in the Government's 2005 consultation on a proposed Post Qualifications Admissions System: [http://www.dfes.gov.uk/consultations/downloadableDocs/Improving%20the%20HE%20Applications%20Process%20-%20summary%20paper%20\(PDF\).pdf](http://www.dfes.gov.uk/consultations/downloadableDocs/Improving%20the%20HE%20Applications%20Process%20-%20summary%20paper%20(PDF).pdf).

⁶³ This was undertaken by Tony Hoare, School of Geographical Sciences, University of Bristol

⁶⁴ http://www.suttontrust.com/reports/MORI_teacherSurvey2006.pdf

⁶⁵ <http://www.admissions-review.org.uk/>. An update on the progress made in implementing the review's recommendations will be published in June 2008.

Likelihood of university offers given applications

Some research has suggested that pupils from poorer backgrounds with similar A-level attainment are slightly less likely to receive offers when they apply to selective universities. This finding, however, is contested with others arguing that the differences would be explained away if richer datasets and more sophisticated modelling were used to predict offer rates.

An analysis of 100,000 university applicants indicated that even after taking A-level attainment, subject choice and numbers of applications into account, university candidates from low skill manual backgrounds were still slightly less likely than those from professional backgrounds to receive one or more offers from Russell Group universities after making applications to these institutions⁶⁶.

Differences in offer rates for candidates from different class origins were found to be 'negligible' after taking A-level attainment, subject choice and numbers of applications into account for other old universities (institutions established before 1992), and new universities (institutions established after 1992).

The research also found differences in offer rates for pupils from different types of schools and colleges. University candidates from further education colleges for example were less likely to receive initial offers from Russell Group universities in comparison with independent school candidates. In relation to other old universities, only those from FE colleges were less likely to receive initial offers than independent school candidates. Grammar school candidates had the most favourable odds for these universities.

An earlier study by Hefce also found a small unexplained difference in the offer rates by social class, with those from skilled manual social classes having lower offer rates from all types of Higher Education Institutions⁶⁷. The authors of this study argue strongly that differences in offer rates are most likely to be due to limitations in the research, and do not provide evidence of bias in university admissions practises.

Nonetheless these results are consistent with findings from an analysis of applications at school level for more recent cohorts of students (up to 2006) carried out for the Sutton Trust⁶⁸. Those in

⁶⁶ <http://www.sociology.ox.ac.uk/research/workingpapers/2006-07.pdf> Vikki Boliver, based at University of Oxford's sociology department, used a random sample of 100,000 university applicants in 2001-02. Interestingly, Boliver finds less of a social class bias in offer rates at Oxford, in comparison to other Russell Group universities.

⁶⁷ See Hefce analysis, http://www.hefce.ac.uk/Pubs/hefce/2005/05_47/; updating the paper, Shiner, M and Modood, T (2002) 'Help or hindrance? Higher education and the route to ethnic equality', British Journal of Sociology of Education

⁶⁸ This is part of a joint research project between the Sutton Trust and the Department for Innovation, University and Skills

poorly performing schools in the state sector were found to be on average less likely to gain offers once applications were made to Russell Group institutions than those in better performing state schools.

The analysis also found:

- Generally, students from FE colleges applying to a Russell Group university have less than a 15 percent chance of ending up at such a university, although a relatively small number of colleges have higher success rates.
- Applicants from comprehensive schools have a 30 percent chance of success, although this rises to about 40 percent in the most academically successful schools.
- Over 50 percent of applicants to Russell Group universities from the most academically successful independent schools are accepted at one of these universities. Grammar and independent schools with similar average point scores had similar success rates.
- Sixth form colleges are similar to comprehensive schools (with the exception of a few high-performing colleges, which are as successful as independent schools).

However, once again these results need to be treated with caution as they relate only to school averages. Also what these studies, based on actual A-grades not predicted ones, are unable to do is identify why the differences in offer rates occur. They may be due to a possible under-prediction of grades for particular groups of pupils, or decisions made in the admissions process by universities, or both.

Supporting materials in the applications process

It has been found that the type of school attended by university candidates has a significant impact on the supporting materials that accompany applications, including references from teachers, candidates' own personal statements, and additional examples of written work.

One report⁶⁹ argues that in terms of personal statements – the one page of prose that candidates are required to submit with their application forms – those candidates from non-selective state sector institutions are less likely to be as 'polished' as those of independent and grammar school educated candidates. Independent and grammar school pupils are more likely to receive informed advice on how to approach the writing of effective personal statements, and more help in producing drafts and redrafts.

This picture is confirmed by the Sutton Trust research conducted in five non-selective state schools that send a relatively high proportion of students to 'leading' universities but also have

⁶⁹ <http://www.sociology.ox.ac.uk/research/workingpapers/2006-07.pdf>

relatively high proportions of pupils qualifying for Free School Meals⁷⁰. Staff and students were interviewed to determine why they were successful in the university application process.

The researchers found that teachers were intimately involved with the UCAS process in all the schools. The personal statements in particular were repeatedly corrected and in some cases heavily re-written by staff. It was also seen as important to start the application process early. Directors of University Admissions meanwhile said that the personal statement will be one of only two or three pieces of information that admissions tutors have about applicants, although the statement had far less weight at Oxbridge, where other information is gathered.

Admissions tests

Admissions tests are now deployed by many higher education institutions to help distinguish between student candidates. These tests could in principle be beneficial to applicants from less privileged backgrounds as many aim to measure 'aptitude' rather than achievement.

However, the proliferation of bespoke tests used in particular for highly competitive degree courses has prompted concerns that they will create another advantage for those students from schools with the resources to prepare for them. Most recently, a research report for the Assessment and Qualifications Alliance added to the concerns, arguing that it is as easy to coach pupils for an aptitude test as it is for an A-level exam and this leads to an unfair advantage for more privileged pupils. Another concern is that often students are also required to pay fees to undertake the tests (although fee waivers do exist). An audit by the Supporting Professionalism in Admissions (SPA) programme in 2007 identified a total of 57 tests administered in 45 academic institutions (predominantly universities)⁷¹.

No.	Tests
2	'Generic' tests being piloted or researched in the UK (SAT and uniTEST)
5	'National' tests devised by test bodies or with academic institutions (UKCAT; BMAT, LNAT, STEP and GAMSAT – although the latter is for graduates to accelerated Medicine courses)
15	Tests developed by the University of Cambridge (some in conjunction with test bodies)
20	Tests developed by the University of Oxford (some in conjunction with test bodies)
15	Tests developed by other universities and colleges (some in conjunction with test bodies)
57	Total

Source: SPA

⁷⁰ *University Entry* - A study of non-selective state schools that are successful in sending students to leading universities, by researchers at the Institute of Education for Sutton Trust, to be published

⁷¹ <http://www.spa.ac.uk/admission-tests/index.html>

Single generic test

Some have suggested a single national test used by all universities measuring aptitude or potential for higher education in contrast to A-levels (measuring achievement) would be more desirable than numerous tests for different degree courses. However, the efficacy of the two generic tests so far developed remains unproven.

The National Foundation for Educational Research is currently undertaking a major trial of the American SAT among English six formers. An earlier research trial suggested the SAT could identify potential among students in below average performing state schools⁷². A separate trial meanwhile is being proposed for uniTEST, developed by Cambridge Assessment and the Australian Council for Educational Research⁷³.

Compact schemes

Compact schemes -- arrangements between universities and schools that provide special conditions or consideration for pupils from particular backgrounds including lower grade offers -- have attracted much debate and controversy.

A report by researchers at Leeds University found that compacts were widespread in the higher education sector -- to such an extent that it urged greater sharing of good practice to ensure common standards. The Higher Education Funding Council for England meanwhile has commissioned a further review, looking at the number and range of compact agreements which are in place within institutions, and where possible, assessing the impact of schemes on pupils and universities.

A range of evidence is emerging which suggests that students who are given lower A-level offers due to their circumstances do at least as well as other students when at university. Most recently an evaluation by St George's Medical School showed that students from poorly performing schools who are accepted into the school with lower grades do just as well as their higher-grade peers⁷⁴. In the first-year final exams, there was less than a one percent difference in the average mark achieved by students on the access scheme, and those accepted with the standard offer. Similarly, research for the Sutton Trust by Glasgow University found that two-thirds of students admitted to their science and engineering courses with lower entry grades because of their background made satisfactory progress in their first year at the university⁷⁵.

⁷² http://www.suttontrust.com/reports/SAT-Pilot_Report.pdf

⁷³ <http://www.unitest.org.uk/>

⁷⁴ <http://www.sgul.ac.uk/index.cfm?5BD25ADF-99A1-3752-953B-E079E11F4373>

⁷⁵ http://www.suttontrust.com/reports/glasgow_science_and_eng.pdf

However, other evidence indicates that differences between types of school, rather than differences between schools of the same type, are important in this respect. Research by the Higher Education Funding Council for England tracking students across the whole university sector concluded that on average pupils from independent school perform less well in degrees than their state school counterparts with the same A-level grades⁷⁶. However, no difference in degree results was found for pupils with the same A-level grades at state schools with different average A-level results.

Debates over relative degree performance however obscure the bigger issue regarding 'contextual offers' or compact schemes which is the need to clarify their ultimate purpose. The Schwartz report on fair admissions in 2004 found that most universities agreed that creating a diverse student community was a beneficial end in itself⁷⁷. This view was also taken previously by the House of Commons Education and Employment Committee, which concluded that it is desirable 'to achieve a more representative social mix in admissions to high-status research-intensive universities, many of whose graduates go on to occupy positions of power and influence in business, industry, the professions and in politics'⁷⁸. Others meanwhile have argued that given their charitable status, UK universities should also follow the example set by US institutions and be 'in the value-added business', meaning that students from non-privileged backgrounds are selected on the basis of their potential to become future leaders in their chosen fields.

⁷⁶ http://www.hefce.ac.uk/pubs/hefce/2005/05_09/#exec

⁷⁷ <http://www.admissions-review.org.uk/>

⁷⁸ House of Commons, Education and Employment Committee (2001)

Access activities

Sustained or intensive access interventions - such as mentoring or residential schools - tend to be more effective in raising aspirations towards higher education than one-off initiatives. Campus visits can also be effective in breaking down barriers. An analysis of Sutton Trust interventions has shown an average present value return to the individuals who take part of £14 for every £1 invested. There is also evidence that young people are confused by the bursaries on offer and that these have only a limited impact on widening participation. Links between schools and universities play an important role, but a challenge is to make the relationships sustainable, and for every school to benefit.

Over the last decade increasing resources have been devoted to a broad range of university access work by schools, Higher Education Institutions and government agencies, as well as third sector organisations. Aside from £1.9 billion spent on student support⁷⁹ annually, around £80 million a year is spent on the Aimhigher programme, and £356 million a year on other widening participation initiatives, including those for disabled students.

Expenditure from 2001/02 to date on widening access in higher education:

<i>£ million</i>	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Aimhigher and predecessors	50	69.5	120	136	102	87	80
Regional Projects	5	5	—	—	—	—	—
Student support	1,213	1,096	1,084	1,195	1,405	1,622	1,887
Widening participation allocation	37	48	266	273	284	345	356
University bursaries and outreach	—	—	—	—	—	116	Not yet available ⁸⁰
Total	1,295	1,208.5	1,460	1,604	1,791	2,170	2,323

Source: Hansard 1 Feb 2008 : Column 720W

As time has gone on and expertise has developed, widening participation activities have evolved too, covering a wider age range and a greater variety of activities. The investment in these

⁷⁹ Students in England are eligible for a Maintenance Grant, dependent on household income (up to £2,765 in 2007/08), and loans to cover the cost of fees (up to £3,070 in 2007/08). A review of fees policy in England is due in 2009.

⁸⁰ Bursaries are likely to provide £358 million a year as the full impact of fees takes effect

activities has not been without criticism: some commentators have argued that in view of the amounts spent, the impact of widening participation work on the makeup of the student population has been disappointing⁸¹.

This chapter looks at some of the evidence regarding what have been the most effective HE access interventions and what role universities and colleges have taken in widening participation before the point of admission at age 18. It also considers the use of financial incentives, most notably the Education Maintenance Allowance and university bursaries, to encourage pupils to stay on in further and higher education.

Aimhigher

In 2004, the Government's Excellence Challenge access programme was integrated with Hefce's Aim Higher progression activities under the Aimhigher brand; it was then operating in 91 areas and 86 new areas were added as funding was extended to 2006. The programmes included partnerships between schools, colleges and universities in disadvantaged areas to encourage and support young people to increase attainment, raise aspirations and enable them to apply successfully to university; out of school/college study support programmes, including extra classes, summer schools and mentoring programmes; visits to universities and taster programmes; and information, advice and support to young people about higher education. From 2008-11 Aimhigher will continue to receive funding for those outreach activities which are proven to work best, targeted at those from lower-socio economic groups, and delivered through a more coherent management structure with a stronger focus on evaluation⁸².

Analysis by Action on Access on a sample of Aimhigher activities has shown that 15 percent were delivered to pupils in year 12 and 13 (age 16/17/18). Of the remaining 85 percent delivered to younger age groups, half those reached were in years 10 and 11, and less than 10 percent were in primary schools or year 7. While this is a limited sample – and based only on those activities with sufficiently detailed evaluations – it does indicate that the majority of work reaches those aged 14 plus.

School year	% of pupils reached
Primary	8
Year 7	1
Year 8	8
Year 9	34
Year 10	24
Year 11	25
Total reached	100 (n=146,000)

⁸¹ <http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2008/02/06/nuni106.xml>

⁸² See *Guidance for Aimhigher partnership, 2008-11* at www.hefce.ac.uk/widen/aimhigh

The original Aimhigher programme targeted pupils in one of two categories:

- The 'gifted and talented cohort' consists of pupils who are expected to be high achievers but who are at risk of under-achieving
- The 'widening participation' cohort are those identified by schools and colleges as having the ability to progress to HE, but who are from disadvantaged backgrounds without any family history of participation in HE.

An evaluation of Aimhigher, published in 2006⁸³ found that Year 10 students who were designated as part of the 'gifted and talented' cohort advanced by over 13 months on average (far more than those put in the 'widening participation' cohort) and that long-term membership of the gifted and talented cohort was particularly effective. The study also found significant improvements in aspirations among young people who had been given the chance to discuss life at university with undergraduates; those who had attended residential summer schools; and those who had visited universities. A positive post-16 transition experience correlated to positive attitudes to university, and a greater willingness to find out more.

A DFES topic paper on Aimhigher⁸⁴, drawing on research from the National Foundation for Education Research, concluded that 17-18 year-olds who spoke to university staff were three times more likely to aspire to university; those 16-17 year-olds who went on residential visits were twice as likely; and those 17-18 year-olds attending an Aimhigher roadshow were 1.5 times more likely to aspire. Being in the gifted and talented programmes was particularly important for Key Stage 3 underachievers, especially Black African students, significantly increasing their chances of gaining good GCSE results. It seems that Aimhigher has coincided with some narrowing of the participation gap, though the extent to which the programme is responsible remains unclear.⁸⁵

Sutton Trust work

The Sutton Trust has run a range of access projects over the last ten years, including one week summer schools for non-privileged youngsters at research-led universities and school-based projects to raise aspirations and attainment. More recently, the Trust has focussed on interventions that begin earlier in a young person's educational career and are sustained over a longer period of time. The Trust's Academic Enrichment Programme, sponsored by the Goldman Sachs Foundation, targets 16 year old students from non-professional backgrounds with little family tradition of higher education, and who attend state schools with a low rate of progression to university. The programme begins with a one-week summer school, which is followed by

⁸³ Available at www.aimhigher.ac.uk/practitioner/programme_information/monitoring_and_evaluation/

⁸⁴ See *Aimhigher Topic Paper* (DfES, 2006) at www.aimhigher.ac.uk

⁸⁵ Part of the success of the scheme may be down to the backgrounds and attitudes of pupils who take part in the scheme who may, for example, be more motivated than their peers.

revision sessions during the next year and leadership training and personal development sessions. Participants are also paired with a student mentor to provide support and advice.

A cost-benefit analysis of some of the Trust's established interventions by the Boston Consulting Group has shown high present value returns to the students who take part of £14 for every £1 invested. Low cost, well targeted programmes - such as the STEP programme to prepare maths students for Cambridge exams or the Chelmsford High School First in the Family project to help bright students applying to university - bring the highest returns. The research also found that educational investment is better deployed when it is focused on targeted individuals, such as those at highest risk of falling behind in primary school or bright pupils who may not fulfil their potential. High impact outcomes, such as a place at university, mean higher returns.⁸⁶

There seems to be general agreement – drawing on this work and evaluations of Aimhigher – that residential schools, campus visits, mentoring, subject-tasters and good advice are the most effective interventions for boosting aspirations. One-off activities, including roadshows and theatrical presentations, tend to be less effective, possibly because they do little to challenge ingrained stereotypes or to make a substantial difference to aspirations and attainment. Universities also believe that stand alone master classes and revision classes tend to be ineffective compared with more sustained and individualised activities, even if such one-off activities can have some attitudinal benefits.⁸⁷

University-school links

The government views links between secondary schools / colleges and universities as a potentially useful way of encouraging pupils from non-traditional backgrounds to apply to university. Recent focus has been on developing formal structural and governance partnerships between schools and universities⁸⁸ through the Academy and Trust school frameworks. But there is a range of other ways that universities and schools already work together to boost progression rates, often as part of the Aimhigher programme.

A consultation of university heads found that every higher education institution in the UK has partnerships with schools and colleges⁸⁹. The review concluded that projects work best when relationships are developed over time, are strategic and support the missions of the universities, colleges and schools in a targeted way. A challenge is to create sustainable and long-term relationships, not just short-term funded projects.

⁸⁶ *Investing for Impact* (Sutton Trust, 2008) at <http://www.suttontrust.com/reports/InvestingForImpact.pdf>

⁸⁷ See *Aimhigher – which activities are most or least effective* at www.aimhigher.ac.uk

⁸⁸ John Denham highlighted structural links between schools and HEIs as one of seven key priorities for HE for 2008/09 (see Press Notice <http://www.dius.gov.uk/press/21-01-08.html>).

⁸⁹ *Higher Education Engagement with Schools*, a report for the NCEE by Professor Steve Smith, vice-chancellor of the University of Exeter

Research the Institute of Education is currently conducting for the Sutton Trust on schools' perspectives of university links⁹⁰ has highlighted the range of activities underway:

Type of contact / link	% of schools
Pupils attending university open days	96
Pupils visiting universities for other reasons	92
Initial Teacher Education partnerships (eg trainee teacher placements)	88
Provision for gifted and talented pupils	76
Continued Professional Development for teachers	75
Other	54
University staff and students teaching in school	50
Other – through Aimhigher	50
University representation on school's governing body	28
Mentoring arrangements between pupils and university students	21
Formal links through school's Trust or Academy status	12

Sample: 25 schools

All the schools surveyed viewed such links as important and effective, although a small number said they had not had very much contact with HEIs over the last year. The main aim of such partnerships is, overwhelmingly, to increase participation in higher education. In this regard, one area which appears potentially under-utilised is mentoring arrangements between university staff or students and school pupils, as these have been shown to be especially effective in raising aspirations.

One problem identified by teachers, though, was the lack of strategic co-ordination of access activities by HEIs. This means that partnerships often rely on personal contacts (and therefore may not be sustainable in the long term) and that schools are sometimes unable to capitalise on the opportunities available. Some teachers, for instance, reported that they receive numerous ad hoc invitations from HEIs to take part in events, but not enough notice is given to allow their pupils to participate or to properly integrate the activity within a wider programme. Schools which cater for 11-16 pupils were found to have more difficulties in establishing links with universities, although these problems were not insurmountable and effective partnerships do exist.

Another emerging issue is the importance of seeing the links as an equal partnership, and recognising the different pressures – as well as the shared agendas – of schools and universities. Some teachers reported that certain HEIs were open to participating in projects instigated by

⁹⁰ Please see Appendix 2 for the full report on emerging findings

schools, while others preferred to take part in activities which they had started. One factor here is that funding for the majority of activities comes from the HEIs, and some schools complain of limited funds and – particularly - insufficient staff and curriculum time to devote to access work.

Geography and practicality are also important considerations. Clearly there are many more schools than there are universities and so it is impossible for all schools to have substantial links with HEIs (for example through Academy sponsorship or involvement in a Trust). Schools reported that the links they form tend to be with the closer HEIs, which can mean that the view of higher education students receive can be narrow. Being paired with a Russell Group university will result in a very different view of the sector than being partners with, say, an HE college. Indeed, at least one school rejected involvement with their nearest HEI as they didn't regard it as 'good enough' for their pupils.

Interestingly, the research also found that the first contact pupils had with HEIs was during Key Stage 4 (age 14-16). Some teachers felt that younger pupils may not be mature enough to appreciate the activities on offer and also that universities were generally less able to pitch activities at the appropriate level for younger age groups. Most schools did, however, feel there were benefits in involving pupils at Key Stage 3, but that, with limited capacity, the priority should be given to their older peers.

Staff exchanges

University-school links can also take the form of secondments or staff transfers between institutions, which can have beneficial impact on progression rates. The Researchers in Residence programme⁹¹, for instance, brings university research staff to work in schools. One of the student interviewees in the Institute of Education's *University Entry* project mentions this scheme as being an important factor in raising his aspirations:

“...there was some scheme where some post-graduate student from Cambridge spent time in our class, and took students, our class, down to Cambridge for the day. And that like got out me quite interested in it [going to Cambridge].”

From the other perspective, the Excellence Fellowships project⁹² provided an opportunity for teachers in schools and FE colleges to spend time working and studying in a higher education institution and to take part in widening participation projects. The scheme had some success in strengthening links between universities, schools and colleges, and in increasing the understanding of the HE experience from the school perspective. However it was hampered by a lack of focus and difficulties in recruitment, as school staff found it difficult to be released from

⁹¹ <http://www.researchersinresidence.ac.uk/rir/>

⁹² <http://www.hefce.ac.uk/widen/fellow/>

teaching posts. HEIs also have an important role to play in teacher training and development, for instance through the Professional Development Schools⁹³ scheme.

Bursaries and student support

Since the introduction of variable tuition fees in 2006, universities have been required to sign access agreements before they could charge tuition fees, prompting a big increase in the number of bursaries being offered to poorer students, as well as other measures. Bristol, for example, introduced £1,100 annual bursaries for all UK students in receipt of full state support; £700 annual bursaries for all UK students in receipt of partial state support; additional hardship funds, totalling £250,000; scholarships, valued at £2,500 per year (for students also in receipt of a bursary) or £500 per year (for non-bursary holders), to attract applications from students with high academic potential; and top-up £1000 bursaries for local students. Warwick University included work experience internships involving 150 hours a year of paid work in its package. Oxford pledged to top up widening participation funding by £350,000 a year in addition to a generous bursary package.⁹⁴ In 2007, the universities secretary John Denham raised the family income threshold for eligibility for a full maintenance grant to a minimum of £25,000 a year, with a sliding scale of grants payable to student from families with incomes of up to £60,000.⁹⁵

In 2008, Offa reported that universities were spending a quarter of their student fee income on access, with 70,000 students benefiting from the £96 million spent on bursaries and the £20 million being directed to other outreach activities.⁹⁶ However, 12,000 students had failed to claim bursaries to which they were entitled, in part due to a data protection requirement on the student loan form. Sir Martin Harris, Offa's director had said in a foreword to his annual report⁹⁷:

"I was surprised that despite the significant efforts of institutions and others to ensure both the clarity and accessibility of financial support, some students have still not yet consented to share family income information which will enable them to collect the institutional bursary to which they may be entitled."

Research by the University of Staffordshire for the Sutton Trust has shown that had they known that they were eligible for a bursary of £2,000, nearly 85 percent of those from low income homes said it would have encouraged them to apply for university, including many who cited fear of debt as a deterrent. The research showed a low awareness of bursaries generally among would-be students, but that 80 percent of those with the highest grades were aware of bursaries for high

⁹³ 'Professional Development Schools are schools that have joined with a university to accomplish common educational goals that include developing exemplary practice to maximize student outcomes, providing optimum sites for pre-service teacher training, offering connected in-service teacher professional development and implementing reflective inquiry to enhance teacher and student learning and development.' (<http://coe.winthrop.edu/pds/>)

⁹⁴ See www.offa.org.uk/access-agreements/a-z/

⁹⁵ See DIUS press release, 5 July 2007

⁹⁶ *Access agreement monitoring outcomes for 2006-07* (Office for Fair Access, 2008)

⁹⁷ *Annual report and accounts* (Office for Fair Access, 2007)

achievers. However, even these students had a patchy knowledge of their eligibility for a bursary at universities to which they had applied. It also concluded that “a smaller number of larger bursaries will make more difference than a larger number of small bursaries. Unless a bursary is large (say £2,000 or more) it will be unlikely to exert much influence in the face of other factors that bear upon a student’s financial situation.”⁹⁸

There is also evidence that up to 40 percent of bursaries are not being allocated to students on the basis of financial need, but on academic merit. Professor Clare Callender of Birkbeck, said that this approach contradicted the aim of widening participation, as the key beneficiaries of this type of financial aid are students from middle and higher income backgrounds who do not need additional support⁹⁹.

Another issue that has been raised in relation to fee income is that, although HEIs are required to submit to OFFA agreements detailing the use of their additional fee income for access work and bursaries, they are not required to produce and publish over-arching strategies covering the full extent of their access and outreach work. This, some have argued, has implications for the co-ordination of activities with schools and other organisations.

Educational Maintenance Allowances

The evidence suggests that the Educational Maintenance Allowance has had some impact in improving the numbers of young people from low-income backgrounds staying in education. In 2003, 72.3 percent of 16 year-olds were in full-time education at the start of the academic year; this had risen to 78.1 percent by 2006. At age 17, the proportion increased from 59.8 to 65 percent. In part, though, this reflected a shift from training to school: over the same period, the proportion in work-based learning or employer funded training fell from 10.4 to eight percent at age 16 and from 14.2 to 11.8 percent at age 17, equivalent to 15,900 fewer trainees in each age group.¹⁰⁰ Those with experience of the scheme also report the benefits of EMAs in terms of requiring eligible students to turn up on time and to work hard on their courses.

⁹⁸ Davies, Slack, Hughes, Mangan and Vigurs, *Knowing Where to Study? Fees, Bursaries and Fair Access* (Staffordshire University, 2008) available at www.suttontrust.com/reports/StaffordshireReportFinal.pdf

⁹⁹ *Student support does not go to the neediest, Birkbeck research finds*, Times Higher Education, 13-19 March 2008

¹⁰⁰ See DFES statistical press releases SFR 27/2005, 30 June 2005 and SFR 22/2007, 26 June 2007 available at www.dcsf.gov.uk/rsgateway. Analysis in C. Ryan “Choice not Conformity” in *Staying the Course* (Social Market Foundation, 2008)

Foundation degrees

Foundation degrees, launched in 2000, are an important vehicle for progression, providing a pathway to HE for those young people who want to combine academic study with workplace learning. Around 60,000 students were registered on the two-year courses in 2006/07 and 36 percent of students are under 21 when they start the courses.¹⁰¹ The proportion of younger students is even higher in biological sciences, engineering, business studies and creative arts. Encouragingly, over half the students on foundation degree courses went on to begin an honors undergraduate degree.

¹⁰¹ “Foundation Degrees: Key Statistics 2001-02 to 2006-07” (Hefce, 2007)

Policy considerations

The evidence gathered in the review strongly supports the notion that early and sustained interventions are the key to raising the participation rate amongst disadvantaged young people. Recognising this, the main elements of our policy considerations are as follows:

- 1. that there is better local co-ordination of HE access work and of links between Higher Education institutions and schools, so that opportunities are well-targeted and young people are less likely to slip through the net;*
- 2. that HE-related information advice and guidance is provided from the end of primary school upwards and that there are certain statutory expectations as to what this should cover;*
- 3. that more funds should be invested in access activities which are proven to be most effective – summer schools, campus visits and mentoring and ambassadorial programmes – and that these should begin with younger age groups;*
- 4. that schools develop more programmes to support young people on a trajectory to HE, and that staff are given the time, expertise and incentives to do this.*

This interim report sets out our initial ideas. Further work and consultation is required to develop these, to flesh out the details and cost their implementation.

Strategic co-ordination

Over-arching all of the points made in this report is the need for more strategic local co-ordination of HE progression work. While we recognise the need for local flexibility, there is evidence of gaps and duplication in some areas, which works against a consistently high quality support structure for university progression.

We therefore recommend that the following are considered:

- Local Authorities are required to produce a Progression to HE Strategy directly linked to the 14-19 plans they are currently developing. This strategy should also be connected to local school improvement plans and school improvement partnerships. These steps would help to give status to the issue of HE progression within Town Halls and, again, encourage a joined up approach in a given area.

- Building on the information contained in their Access Agreements, all HEIs should produce and publish comprehensive strategies for all their outreach and access activities, including which schools and age groups they intend to work with, how and why.
- Local arrangements for the strategic co-ordination and brokering of HE access work are kept under review by HEFCE to ensure they meet the needs of young people, schools and colleges, particularly in low progression areas. The newly-created Aimhigher Area Partnership Committees are a welcome step forward. However, their role should be monitored to ensure they develop meaningful links with all schools in their area.

Information, advice and guidance (IAG)

The inadequacy of higher education advice and guidance is a key concern. Current provision is patchy and the quality and nature of advice depends very much on the institution attended. While the provisions of the Quality Standards for young people's Information, Advice and Guidance are welcome, we believe additional measures are needed.

We suggest that the following are considered:

- The content of IAG at certain key points is more clearly defined and resources are invested in targeting younger age groups. The current Education and Skills Bill places a duty on schools and local authorities to provide independent careers advice; and it is important that this is provided as early as possible, certainly from Key Stage 3 (age 11-14). The guidance resulting from the current Bill should stress that this duty includes drawing pupils' attention to university outreach activities and the bursaries and other support available; and guiding students to the courses – including appropriate A-level or Diploma subjects – which are most suited to their abilities and aspirations.¹⁰²
- Every primary school should be required as part of the citizenship curriculum to devote a minimum amount of time to university aspiration raising and access work (we suggest a total of five days across years 5 and 6). This should include general information about university and the requirements of certain types of careers, at least one visit to a university campus and – critically – activities which involve parents.
- Young people should begin Progress Files (currently mainly used from Year 9 upwards) at the end of primary school briefly to set out their emerging career and education ambitions. If young people form a clearer idea of these ambitions early on, it may help to

¹⁰² There are two important pieces of work in this area already underway. The Specialist Schools Trust is developing a Higher Education Related Learning Framework, along the lines of the Work Related Learning Framework. Action on Access, meanwhile, is working on the Aimhigher Progression Framework, which aims to develop a planned, integrated and sequential approach to progression activities.

focus their academic work and ease the transition to secondary school. It would be the responsibility of the secondary school to follow up this work in Key Stage 3, so that young people can review their progress and goals before making choices at 14.

- Since it is not possible for one individual to have comprehensive knowledge of all the options at every stage, a local network of specialist advisors should be created which schools and colleges can call on to offer impartial and expert advice to students. One advisor may be a specialist in science-related careers; another in work-based routes into HE; and another in selective universities and the gifted and talented. The network could build on the Aimhigher Personal Advisors and elements of the Connexions service, but would draw more widely on other expertise – for example in high-performing state or independent schools, local businesses and universities. The network could be co-ordinated by local authorities or by other appropriate partnerships, such as the Aimhigher Area Partnership Committee.
- It is nonetheless critical that those staff with whom young people come in to contact day-to-day have a working knowledge of access routes into HE, and that the advice they give is best-suited to each young person's needs. We therefore suggest that all secondary schools appoint a lead teacher with responsibility for careers and education guidance at each Key Stage, and that this teacher is expected to undertake regular and relevant training to keep this knowledge up to date. The posts should be seen as high-status within schools and therefore attract a higher salary and sufficient non-teaching time to fulfil the role effectively.

Finance

Debt aversion and the desire or need to begin earning money are some of the reasons given for young people deciding against higher education. There is also some evidence that perceptions of cost may be influencing young people's choice of university. This may not have worsened under the current fees regime, but tackling the lack of awareness of financial support, clarifying the current fees structure and promoting the economic benefits of university are critical.

We believe the following should be considered:

- The sector works towards more coherence and simplicity in bursary provision, so that clearer messages about financial support can be communicated to pupils, teachers and parents. While we do not expect there to be common criteria throughout the sector (in effect, a national bursary scheme), it may be that groups of similar institutions could offer similar guarantees to low income students.

- Linked to this, there should be a stronger national publicity campaign, accurately targeted at under-represented groups of students and poorer areas, and funded by Government.

The campaign should seek to highlight:

- the benefits of university study, in terms of the extra income earned over a lifetime compared to alternatives;
- the various routes into higher education, to give young people an honest and accurate idea of which pathways may lead them to higher education; and
- the financial support packages on offer and the true cost of university study, on the premise that it is the perception of debt which is an obstacle to widening access.

Schools

A message that emerges from the evidence is that, overwhelmingly, the key to increasing applications to HE from disadvantaged groups is to raise attainment early on in school. The Government already does a significant amount of work to raise overall standards and school improvement issues are beyond the scope of this review. Nevertheless, the evidence shows that a high percentage of high-performers at age 11 do not go on to attend university.

We therefore recommend that the following are considered:

- Having an effective gifted and talented programme should be a clear expectation in Ofsted inspections. Research suggests that participating in gifted and talented programmes can boost both aspirations and results. The new national gifted and talented champion should also encourage schools explicitly to link university partnerships with the gifted and talented programme, particularly for 11-16 schools, and ensure that opportunities exist for students to visit universities and meet inspiring academics.¹⁰³
- Higher Education progression rates should be published for all schools and colleges (including 11-16 schools). While schools are accountable through published data for examination scores, there is no publicly available data on the pathways students take once they have left and so no clear focus on outcomes. Consideration should also be given to disaggregating the progression rate (for example by groups of universities or courses), and to developing some contextual element to the measure. As drop-out at 16 is a critical issue too, school progression rates to Further Education should also be published.
- State and independent schools with particular expertise (for example in shortage subjects or Oxbridge admissions) should be encouraged to link with other local schools

¹⁰³ The Excellence Hubs may be one way to achieve this - <http://www.cfbt.com/teach/giftedtalentededucation/excellencehubs.aspx>

to offer specialist support and, where appropriate, joint activities such as staff training and extra lessons. This should build on the models developed by the most successful independent-state school partnerships.

- Support programmes should be developed to ease student transitions from one institution to another, as this can be a critical time in the development or decline of aspirations. Those involved with access work report that the expectations of primary schools pupils can be lowered when they enter a secondary school and that some students also feel out of place when entering college or sixth form from an 11-16 school.¹⁰⁴ One idea would be for sixth form ‘coaches’ to help new students settle in; another would be to maintain one point of support from the 11-16 school into FE and HE.¹⁰⁵

Educational Maintenance Allowance

The evidence suggests that Educational Maintenance Allowances (EMAs) have had some impact in improving the numbers of young people from low-income backgrounds staying in education post-16. However, as staying on in some form of education will be a legal requirement from 2013, a review of the purpose and targeting of EMA may be appropriate at this stage.

We therefore suggest that the following are considered:

- In the short term, the government should consider piloting a top-up to the Educational Maintenance Allowance to incentivise students to take shortage subjects at 14 and 16. Although 14 year olds are not eligible for EMA, the prospect of an increased allowance at 16 may encourage them to follow a certain pathway, raising the status of shortage subjects and underlining the premium that is attached to specialist expertise in the labour market.
- More widely, consideration should be given to attaching greater conditionality to the EMA and any replacement. For example, a top up could be linked to young people from low income groups gaining certain grades in their GCSEs. Or it could be a condition of the EMA that students on certain types of courses take part in visits to universities or other HE access schemes.

¹⁰⁴ The Sutton Trust and the DCSF fund a ‘Raising Aspirations Programme’ in Wandsworth, which aims not only to help parents and pupils with their secondary school choices, but also to ease the transition between schools for gifted pupils.

¹⁰⁵ The 11-16 Morpeth School in Tower Hamlets, for instance, continues to provide support for its former students when they enter FE and HE. The young people report that they feel comfortable speaking to a familiar and trusted contact in a well-know environment.

Science Technology, Engineering and Maths (STEM) and other shortage subjects

Although there are signs that the number of students wishing to study certain science-related subjects at university is stabilising, it is clear that more needs to be done to attract students in certain critical subject areas. This is particularly the case as the independent sector accounts for a disproportionate share of top grades in physics, chemistry and mathematics, meaning that many state school pupils are not plausible candidates for certain university courses.

We recommend that the following are considered:

- More weight should be given to shortage subjects in the examination league tables and Contextual Value Added scores in order to encourage schools and colleges to offer subjects such as individual science GCSEs and Further Maths A-level.
- Taking into account the context in which they are working, universities should consider whether fewer larger bursaries targeted on hard-to-recruit STEM subjects, but maintaining an income criterion, might be more valuable than general income-related bursaries. In doing so, universities should consider that the take-up of bursaries has fallen short of expectations and there is evidence that the most effective bursaries are those that are significant in size – perhaps £2,000 a year.

Links between school and university

Many Higher Education Institutions already have links to schools, and a number of others are becoming involved in the Academies and Trust Schools programmes. One tension here is that the existence of a specific link with a university may give a narrow view of HE to students in that school and / or disadvantage other students in non-linked schools. It is also the case that there are many more schools and colleges than Higher Education Institutions.

We suggest that the following are considered:

- Families of Higher Education institutions should link with schools in certain geographic areas (first and foremost low participation areas). The idea would be not to compete for students, but to offer all young people in the area the broadest possible view of different HE options, including different institution types and subject areas.
- More specific, sustainable and concrete links are established between individual school with particularly low progression rates and local HEIs. The aim would be to provide the schools in the most need with the most intensive support.

- A programme of secondment opportunities for university staff and teachers should be developed. Such a programme could include both subject-based transfers (for example a university maths lecturer spending a term in a secondary school) and advice and progression secondments (for example a school's HE adviser spending time in a university admissions and outreach team). Although there may be logistical difficulties in school staff spending time away from teaching, it is important that the programme works both ways and, if necessary, that schools and colleges are given funds to cover staff members on HE secondment.

Higher Education Institutions

While many of the obstacles to widening participation can be traced further down the educational chain to primary school and before, there are positive steps that HEIs can take both at the point of student recruitment / admission, and in raising aspirations earlier on in a young person's educational career.

We recommend that the following are considered:

- A higher proportion of fee income should be targeted at significantly increasing the number of opportunities for young people to take part in outreach initiatives which raise aspirations (including summer schools and visits to universities). While last year roughly a quarter of fee income was spent on 'access', the majority of that funding - 83% - was spent on bursaries, with just 17% going towards outreach activities, which may, overall, be most effective in widening participation. A better balance between bursary and outreach spending should be sought, with more activities aimed at younger age groups, at the end of primary school and key stage 3 particularly.
- Systematic mentoring / ambassadorial programmes should be established in low participation areas, as these have proved particularly effective in supporting aspirations and giving disadvantaged young people access to useful social networks and role models. It is important that these people are seen as coming from 'outside' the school or college environment, but can relate to the young people they mentor (e.g. are from the same community, school or have realised the ambitions of the mentee). Potential mentors would include current undergraduates, former students and local business employees. Consideration should be given to the effective use of new technologies, such as e-mentoring.
- Building on the recommendations of the Burgess report, the Government and HE sector should ensure that a national credit transfer scheme is developed by the target date of 2009/10. The evidence shows that many young people who do not complete a full degree course (often referred to as 'drop outs') have sound reasons for doing so and intend to

return to HE at a later date when financial and other circumstances allow.¹⁰⁶ An 'all or nothing' approach to HE is likely to deter some students.

- There needs to be an open debate to clarify the scope and purposes of compact schemes, led by the higher education sector and government and informed by research and practice overseas. The debate should consider which criteria it is valid to take into account when making contextual offers to students and what should be expected in return. More widely, we need to consider what constitutes a successful scheme and what, overall, the role of higher education is in society.

Fair access

As well as the over-arching aim of increasing HE participation rates, there are also specific steps that can be taken to encourage young people to apply to the selective institutions and competitive courses which are most suited to their talents and abilities.

On this point we propose that the following are considered:

- Outreach and access activities should include specific advice on how successfully to negotiate the admissions process for highly-selective universities and courses. These activities would need to reach both teachers and students, and should cover issues such as the drafting of personal statements, references, admissions tests, interview preparations, subject choice and – critically – where to find specific, specialist support when needed. There is a need particularly for this work to reach students in FE colleges, who are less likely to apply to highly-selective universities - and to get offers when they do apply - even when attainment is taken in to account.
- Selective universities should seek to have as few 'exceptions' to the standard applications process as possible. This means that bespoke admissions tests, earlier deadlines, interviews and additional application forms should only be used when absolutely necessary and the impact on access and equity should be carefully considered.
- Linked to this, the sector should work towards more coherence on university admissions tests, and that the validity of these – and, again, their impact on access - should be evaluated. There is a case for the development of a single, generic university

¹⁰⁶ <http://www.jrf.org.uk/knowledge/findings/socialpolicy/0525.asp>

admissions test, but failing this the number of different tests should be kept to a minimum so as not to deter students from non traditional HE backgrounds.¹⁰⁷

- Universities should strive to be as transparent as possible about the entry requirements of courses, particularly those that are highly selective, as there is evidence of a disconnect between teachers' perceptions and HEIs' expectations. There is also uncertainty amongst students and teachers around the relative weighting of different elements of the admissions process – predicted A-level grades, admission test scores and interviews. This should build on the work already being undertaken by UCAS on Entry Profiles.
- The sector should move to a full system of post-qualification applications as soon as possible. Although the current arrangements are a useful half-way house, all students should be able to make more informed HE choices on the basis of real - rather than predicted – examination grades.

¹⁰⁷ The Supporting Professionalism in Admissions (SPA) group is considering “issues relating to the rationale, purpose and validity of admissions tests from HE perspectives and issues to do with the costs, manageability and impact on the 14-19 curriculum for schools and colleges from pre-HE perspectives with regards to good practice.” See: <http://www.spa.ac.uk/admission-tests/index.html>

Appendices

Appendix 1

Trends in university admissions since 1945

The expansion of HE in the 1960s was an effective response to the post-war baby boom, and over the whole period the expansion of university places has kept pace with the growth of the professional and managerial classes, as the size of the manual working class has shrunk relatively. Training in such professional fields as law, accountancy, business studies, as well as education and nursing, has become increasingly concentrated in HE as the sector has expanded. This has reinforced the continued social class and income inequality in access to HE and there appears to have been no effective measures to completely counter this.

Numbers to 1960s

Numbers of students admitted to universities and Higher Education Institutions (HEIs) in Great Britain grew only a little from 1900 to World War 2. This was followed by a slow and still relatively small expansion until the 1960s, and then by a faster increase from the 1960s and especially from the early 1990s.

Number of Students in full-time higher education, Great Britain 1900/1-1962/3

	University	Teacher training	Further Education	All full-time higher education
1900/1	20,000	5,000	—	25,000
1924/25	42,000	16,000	3,000	61,000
1938/39	50,000	13,000	6,000	69,000
1954/55	82,000	28,000	12,000	122,000
1962/63	118,000	55,000	43,000	216,000

Notes:

1. Figures for further education in 1924-25 and 1938/39 are approximate

2. Part of the large increase in teacher training between 1954/55 and 1962.63 was due to the lengthening of the Training College course in England and Wales.

Source: Robbins *Report*, Tab 3, P.15

Percentage of under 21s entering full-time higher education, Great Britain, 1900-1962.

	University	Teacher training	Further education	All full-time higher education
1900	0.8	0.4	–	1.2
1924	1.5	1	0.2	2.7
1938	1.7	0.7	0.3	2.7
1954	3.2	2	0.6	6.1
1958	4.1	2.4	1.2	7.7
1962	4	2.5	2	8.5

Source: Robbins *Higher Education, Report* Table 4, p.16.

The Robbins Report

By the early 1960s there was growing concern at government level that the UK was producing fewer graduates than competitor nations, with a detrimental impact on the economy. The 1963 Robbins report recommended expansion in all forms of tertiary education.¹⁰⁸ As a result, between 1963 and 1970/71 the total population in full-time higher education more than doubled from 216,000 to 457,000. Seven new universities were founded in England, one in Scotland, and colleges of advanced technology were given university charters. Teacher training colleges in England and Wales were renamed Colleges of Education and doubled their student places; thereafter many of them were drawn into the university or polytechnic sectors.

Expansion

In 1964 the Labour government announced a 'binary policy' for higher education: a division between 44 autonomous, but mainly publicly funded, universities and a 'public sector' led by 30 polytechnics, composed mainly of former technical, art and commercial colleges. Totals in all full-time higher education institutions were: 457,000 in 1970/71, 579,000 in 1985, 1,131,000 in 1997/98, 1,279,000 in 2001/02, 1,426,000 in 2004/05¹⁰⁹. Numbers stagnated in the mid 1980s following cuts in HE funding, including in student grants (which had been mandatory, on a means-tested basis, from the early 1960s), then rose again.

Participation rates give a more accurate picture of university access as they take account of demographic trends. The total number of 18 year olds in UK peaked at over a million in 1965, fell to 800,000 in 1973, rose again to nearly a million in 1981, then fell almost to the 1973 level in 1990 and has since continued to decline. However, the numbers of young people qualified for HE

¹⁰⁸ L. Robbins (1963) *Higher Education, Report and Appendices*, CMND 2154, HMSO, London.

¹⁰⁹ *Social Trends* Nos 1 (1970) – 36 (2006).

rose as the proportion of the age group gaining two or more A-levels increased, from under eight percent in England in 1962/63, to 21 percent in 1988/89 and 39 percent in 2006¹¹⁰.

Home students entering HE full-time and sandwich courses for the first time

	1970/01	1980/01	1990/01	1997/98
New students aged under 21 as % of 18-19 populations	13.7	12.7	19	33

Source: *Social Trends*, No 16, 1986, Table 3.14.

The expansion of university places meant that, by 1997/98, around one third of young people were entering HE.

Social Class and Higher Education

Access to HE of students from different social class backgrounds, female and male, has remained persistently unequal. There are difficulties of precise comparison over 60 years. Before the early 1970s there are no robust, long-run datasets providing this information, and different social class schema were used by studies at different times. But the broad picture of continuing inequality of access across socio-economic groups is clear.

The Robbins Committee found that 'There was little change between 1928-47 and 1961 in the proportion of students at university coming from working class backgrounds, in spite of the fact that the number of students at university had more than doubled during this period'.¹¹¹

Percentage of undergraduates with fathers in manual occupations

	Men	Women	Men and women
1928-47	27	13	23
1955	27	19	25
1961	26	23	25

Notes:

1. Data for 1928-47 relate to England and Wales; data for 1955 and 1961 relate to Great Britain.

2. Data for 1928-47 relate to those aged 18 in these years who at any time attended a university; data for 1955 relate to entrants in that year; data for 1961 relate to all undergraduates in that year.

Source: Robbins *Appendix Two (B)* p. 5.

¹¹⁰ *Social Trends* 36, 2006.

¹¹¹ Robbins *Appendix Two (B)* p. 4

Evidence from the three British cohort studies, each of which has tracked the lives of a sample of people born in 1946, 1958 and 1970 respectively, tell a similar story of social inequality in access to higher education.

Percent of cohort with Higher Education qualifications by age 32

Father's social class	1946 cohort (age 32 in 1978)		1958 cohort (age 33 in 1991)		1970 cohort (age 30 in 2000)	
	men	women	men	women	men	women
Professional	50	39	65	63	70	70
Intermediate	36	23	42	42	46	53
Sk.non-manual	38	20	35	35	42	38
Sk.manual	21	7	20	19	25	26
Partly skilled	10	6	13	15	10	24
Unskilled	5	0	12	12	26	12
All	22	11	26	25	33	35

Source: Ferri, *Changing Britain*, pp.44-5.

It was concluded from analysis of these three cohort studies that:

The proportions attaining the highest levels of qualifications have steadily increased over time for all social groups, particularly between the 1946 and 1958 cohorts [i.e. before the great HE expansion] and women have made larger gains.

But:

More individuals from the highest social groups gained high qualifications than did those from the lowest groups. Indeed, despite the expansion of educational opportunities across the board, the gap in the chances of gaining tertiary qualifications for the offspring of fathers in the highest and lowest social classes has widened steadily over time.¹¹²

If we pick up the story in the early 1990s, we see a continuation of the same trends: expansion in participation rates for all social classes, but a greater expansion for those from the higher groups.

¹¹² *Changing Britain* pp. 44-5.

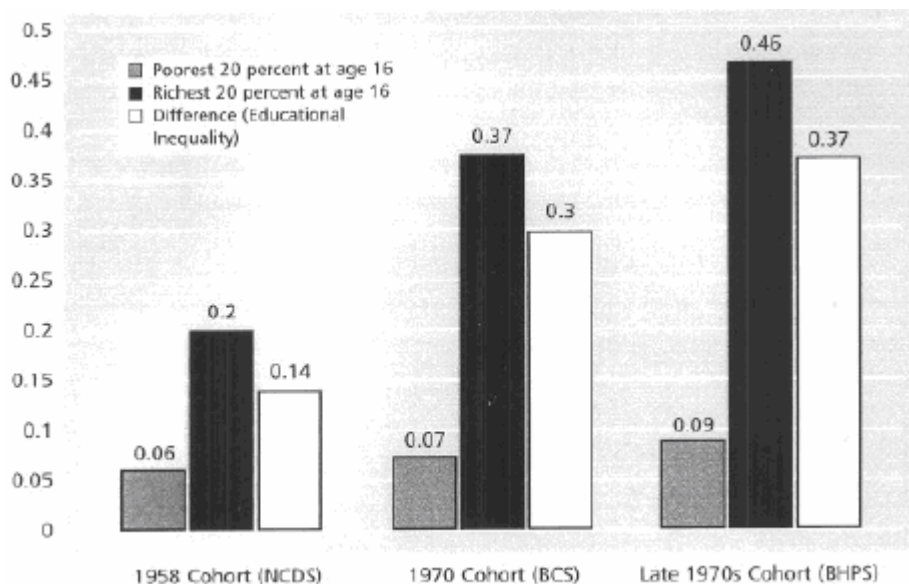
Participation rates in HE by social class

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99
Professional	55	71	73	78	79	82	79	72
Intermediate	36	39	42	45	45	47	48	45
Sk.non-manual	22	27	29	31	31	32	31	29
Sk.manual	11	15	17	18	18	18	19	18
Partly skilled	12	14	16	17	17	17	18	17
Unskilled	6	9	11	11	12	13	14	13
All social classes	23	28	30	32	32	33	33	31

Source: *Social Trends 30*, 2000, p.56, Table 3.13

A similar trend can be found using income data from the cohort surveys. Although more of those born in the late 1970s have gone on to university than those born in 1958 and 1970, the 'gap' between the richest fifth and the poorest fifth completing their degrees by age 23 has grown to 37 percentage points – higher than for both the previous generations.

Percentage of cohort completing degree by age 23



Source: *Intergenerational Social Mobility*, Blanden, Gregg, Machin (2005)

Appendix 2

School-university links project

This report provides an update of progress and a summary of the emerging findings from a project based at the Institute of Education and funded by the Sutton Trust to look at links between schools and universities from the schools' perspective.

Progress to date

The sample of schools has been established. The first group of schools was chosen as they have been identified as having successful links with higher education institutions. This group included the schools previously identified through the University Entry project (5 schools), schools which have been identified through a survey carried out by the SSAT as having excellent sixth forms (14 schools) and schools which were showcasing their partnerships with HEIs at a two-day conference on this topic (14 schools). These schools (33 schools in total) form group 1 schools.

Each of the schools in group 1 were matched to 2-3 schools using a number of variables including the proportion of free school meal pupils, school type and location. These matched schools (75 schools in total) formed the comparator group (group 2). The total sample size involved 108 schools.

A survey was designed and sent out to all the schools in the sample. To date 25 schools have responded to the survey (the target is to achieve 30 responses).

Eight of these survey responses have been followed up with telephone interviews with the relevant member of staff which has enabled the researcher to gain a deeper understanding of the relationships schools have with HEIs, how effective they are and how they are established and maintained.

A two-day conference was attended by a member of the research team. This event was organised by the SSAT and the focus of the event was partnerships between schools and HEIs. The event involved over 100 university staff and school staff from across the country and included keynote speeches and a variety of workshops exploring different types of links between schools and HEIs.

The research team has also spoken to a range of people working in this area such as those working with Aimhigher.

Emerging findings

1. Frequency and quality of links

All schools responding to the survey to date have some links with HEIs. Fifty per cent of respondents felt that there had been 'a lot' of contact with HEIs over the last year and 88 per cent felt there had been 'a lot' or 'quite a lot' of contact. The remaining schools (12 per cent) reported 'not very much' contact with HEIs over the last year.

Of those schools which felt that they did not have much contact, the main barriers to setting up links and maintaining them were identified as staff time and capacity to build these relationships.

The survey asked the schools to comment on how effective they felt their links with HEIs were in achieving the school's objectives with regard to HE partnership. For the majority of schools, the central objective was to encourage pupils to consider going on to university through familiarisation with HE (including the application process). Other reasons stated were staff development and access to facilities and other subject-specific support.

All of the respondents to the survey felt that the links their school did have with HEIs were 'very' (54 per cent) or 'quite' effective (46 per cent). Schools which reported that they did not have much contact with HEIs still felt that the links they did have were at least quite effective.

2. Types of links

The table below shows the percentage of respondents (n=25) who had each of the following links with universities.

Type of contact/ link	Percentage of schools
Formal links through school's Trust or Academy status	12
University representation on your school's governing body	28
Pupils attending university open days	96
Pupils visiting universities for other reasons	92
Provision for gifted and talented pupils	76
Initial Teacher Education partnerships (eg trainee teacher placements)	88
Continued Professional Development for teachers	75
Mentoring arrangements between pupils and university students	21
University staff and students teaching in school	50
Other – through Aimhigher	50
Other	54

All schools with sixth-forms had at least some pupils attending open days at universities. One area which appears potentially under-utilised is mentoring arrangements between university staff or students and pupils. Mentoring was identified as one of the more effective outreach activities by Aimhigher evaluations (see [http://www.aimhigher.ac.uk/sites/practitioner/resources/Aimhigher%20-%20which%20activities%20are%20most%20or%20least%20effective%20\(Apr2006\).doc](http://www.aimhigher.ac.uk/sites/practitioner/resources/Aimhigher%20-%20which%20activities%20are%20most%20or%20least%20effective%20(Apr2006).doc)). The majority of schools had contact with universities through Initial Teacher Training links with particular institutions but often these relationships did not develop or lead to broader contact with the universities.

As indicated earlier, the main reason for having links with HEIs was around raising pupil aspiration and opening pupils' eyes to possible pathways beyond school although broader reasons were mentioned such as raising standards in teaching and learning and access to facilities. The primary focus (especially in the sixth form) was increasing the chances of pupils applying and getting accepted to HEIs. Some schools also spoke about improving the transition to university ie equipping pupils with the skills needed to survive at university and preparing them for university life.

3. Differences between schools

Schools which cater for 11-16 year old pupils (i.e. those without sixth forms) can have greater difficulty in establishing links with HEIs, although the research team has also encountered 11-16 schools which have developed strong links. Rather than presenting an insurmountable barrier, the fact that a school did not have a sixth form meant that establishing links could require more effort on the part of the school in terms of engaging the right university and developing the right activity (see section on younger pupils below). For example one 11-16 school found developing links very difficult partly due to being an 11-16 school but this was compounded by geographical considerations (not many HEIs in locality) and the fact that the school was a faith school (see below).

Grammar schools were over-represented in the sample.

4. How and why are links established

In most cases, contact between schools and universities existed between different staff members in the school and the university – i.e. the contacts were not all coordinated by one member of staff. The head of sixth-form was often the member of staff who completed the survey and thought to have the most knowledge of links due to their role around the university application process etc. Other staff members such as the gifted and talented coordinator and also subject leaders were also mentioned as having specific links with HEIs.

As mentioned above, the main reasons for establishing links were around widening participation and progression of pupils. Other reasons were teacher training and professional development for

staff, gifted and talented provision, access to facilities and links associated with a schools specialism.

Some links had been initiated by the school and some by the university. Although not many activities had been developed jointly, schools often mentioned that where links/activities had been particularly successful the universities had been flexible and responsive to the school's needs and requirements.

5. Barriers to initiating and sustaining links

Most of the schools had a combination of established ongoing links and more ad hoc one-off activities. The key constraint reported to both establishing and maintaining links was time. Through the interviews it became clear that biggest time restriction was finding the space in the school calendar and curriculum to take pupils (and teachers) out of normal lessons. Staff time regarding the practicalities of planning activities and developing and maintaining links was also mentioned.

Many of the links had been established through people's personal contacts and networks and, although perhaps now embedded, had often developed in quite an ad hoc way – through for example a random meeting at an event.

Related to this, schools sometimes found that locating the right people at the university was difficult and it helped where there was a personal contact or link.

Many schools felt that one barrier to engaging with HEIs and taking advantage of the courses and activities they offered was lack of co-ordination and regularity of arrangements. In order for schools to plan their timetable and curriculum to ensure that pupils got the most out of activities (through preparation and follow-up as well as the activity itself) it was necessary to plan events a significant time in advance. Schools reported offers from universities which they had not taken up as either the timing was not possible (due to not receiving enough notice or competing priorities such as SATs preparation) or they were not relevant to the curriculum at the time. Joint planning of activities would help address these issues and help embed the activities in the school calendar and make the links more sustainable and less reliant on personal relationships.

Some schools felt that their geographical location was a significant barrier. This was manifested both in terms of travel time and costs but mainly through capacity issues on the side of the HEIs (exacerbated by low HEI to school ratios in certain areas). One school reported that it had lost a link with a university as it has been taken off the university's target school list as it had started achieving too high results. Capacity for HEIs to engage with the relatively large number of schools it would need to in order to ensure all schools had links with HEIs was a general concern.

Funding was mentioned as a significant barrier in some schools. Funds for activities from the schools were often found through Aimhigher resources or through funding allocated to the school's specialism. A significant minority of schools mentioned issues around access to Aimhigher funding either relating to how this funding is allocated between schools in an area or because staff were unclear how to apply for these funds.

One school wanted to establish formal links with a HEI through academy status but was finding this difficult for two reasons. The first was geographical in that HEIs that wished to engage with schools in this substantial and formal way wanted to do so with schools which were located close to their institution. The second reason the fact that the school was a faith school and certain universities were not willing to establish formal links faith schools due to their conditions laid out in the University's Charter.

6. Younger pupils and parents

In most schools the first contact with HEIs was with pupils in Year 10 or 11 (Key Stage 4) for the majority of pupils.

A significant minority of schools did have activities which involved pupils in Key Stage 3 (normally Year 9) but these would usually only involve a small group of pupils. These activities normally involved Gifted and Talented provision and contact with the HEI was therefore with a select group of pupils rather than the whole year group.

Most schools (although not all) felt that there were benefits in involving Key Stage 3 pupils in activities with HEIs. Some staff felt that Key Stage 3 pupils may not be mature enough to appreciate the contact or that starting too young may lead to lack of interest later on. Others felt that including younger pupils was important but that due to capacity issues priority was given to older pupils. Some schools commented that universities were often more likely to engage in activities aimed at older pupils and were sometimes not able to pitch activities at the appropriate level for younger pupils.

Only a few schools mentioned activities which specifically aimed at engaging parents and HEIs. Those which did exist took the form of evenings held at the school to discuss aspects of progression to university – for example, events to learn more about financing attendance at university. One school tried to engage parents in simple but powerful ways much earlier on through for example, asking parents to collect their children from the university after an activity held for the pupils. There are also examples of parents engaging with HEIs through adult learning arrangements facilitated by the school.

Policy recommendations

Improved co-ordination both between HEIs and between HEIs and schools

This would help ensure that more offers made by HEIs to schools were taken up as activities could be timed to fit with the school curriculum and timetable. This would involve better communication between the two sectors. Planning further in advance and more strategically with other HEIs and schools could also lead to more effective use of resources.

More opportunities for planning and developing activities jointly

This would allow for more tailored and relevant activities for schools. It would mean more activities are pitched at the appropriate level for pupils ensuring maximum impact. Again, this would help embed activities in the school curriculum and timetable and enable follow-up work.

Increased focus on engagement for younger year groups

Most schools did not report that all Key Stage 3 pupils were engaged in activities with HEIs (instead it tended to be a select group of Gifted and Talented pupils). Engagement early on in secondary school is important especially in terms of increasing awareness of HE. As the 14-19 qualification reforms develop, choices taken at the end of Key Stage 3 are likely to become increasingly important and therefore awareness of pathways beyond school is vital. The most effective contact between younger pupils and HEIs is likely not to take the same form as that with older pupils (i.e. activities specifically focussed around progression to HE) but there are many other potentially fruitful links which could be explored and developed such as use of HEI facilities.

Explore opportunities to develop mentoring provision between pupils and university students

Evaluations of Aimhigher have identified mentoring as one of five more effective outreach activities. In our sample mentoring was only used by one fifth of schools. E-mentoring would be useful in areas where there are not many HEIs locally.

Outstanding issues and future plans

The vast majority of the respondents to the survey (and therefore interviewees) felt they had 'very effective' or 'quite effective' links with universities. It would be useful to speak to more schools that feel that their relationships with universities are not so effective.

The research team will undertake further analysis of the data to establish whether there are any significant patterns relating to characteristics of the schools and the types and quality of the links they have. A full report will be produced when this work has been completed.

This progress report has been produced at the request of the Sutton Trust by Sarah Tough, Researcher to the Director, Institute of Education, University of London.

Appendix 3

Information, Advice and Guidance in Schools: A Brief Literature Review

Sandra McNally¹¹³

Introduction

For students emerging from compulsory schooling, there is increasing choice about what type of education to pursue and where to do it. On average, there are high returns from staying on in education beyond the age of 16. However, there is great variability around this average – for example a degree in Science yields a much higher wage return than a degree in the Humanities. Furthermore, as there are more courses on offer, the variability in expected returns is likely to be increasing.

What we observe is that many students drop out of education at age 16 (despite high returns from staying on) and there are problems of apparent ‘mismatch’ between demand and supply for different types of skills. A question is whether a lack of sufficient information, advice and guidance in schools might be behind some of these problems. This concern motivates this brief literature review on what is known about the quality of information, advice and guidance in English schools.

The Current Situation

Since the Education Act of 1997, all maintained schools have a statutory duty to provide a planned programme of careers education for pupils in Years 9 to 11. In 2003, this was extended to years 7 and 8. There is no statutory duty for colleges to provide careers education though according to the Association of School and College Leaders, most do so as a matter of good practice.¹¹⁴

There is a national, non-statutory framework for careers education and guidance 11-19 which sets out recommendations on aims, learning outcomes and content (DfES, 2003). It is a requirement that maintained schools make impartial careers advice available to young people. ‘Provision must be differentiated to meet individual need and may be provided by a range of staff including tutors, teachers, careers and personal advisors’ (Education Act 1997, Learning and Skills Act 2000).¹¹⁵

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¹¹⁴ <http://www.cegnet.net/files/CEGNET0001/ManagingCEG/ASCL%20careers%20guidance%20for%20England.pdf>

¹¹⁵ <http://www.iagworkforce.co.uk/site/iag/content/national-requirements--guidance/careers-education--iag>

A major review of the secondary curriculum is currently underway which includes development of a (non-statutory) careers education programme. There are also plans to reform the way externally provided careers education and guidance is organised. The Connexions service is currently being dismantled and from April 2008 their responsibility for commissioning information, advice and guidance services for young people will be given to Local Authorities. Quality standards have been written to support the development of consistently high quality and impartial information, advice and guidance services across England (DSCF, 2007).

Evaluation of Information, Advice and Guidance and Schools

It is one thing for frameworks to be set and another for them to be implemented. In the OECD review of career guidance policies in the UK (CeGS, 2003) it is noted that while there is a legislative requirement for the provision of career education, the exact nature of this has not been specified other than through guidelines issued to schools. As a result, significant diversity can be observed in the ways in which schools actually implement career education programmes. In some cases it is a separate and clearly identified element in the curriculum whereas in others it is integrated into another subject (most commonly Personal Social and Health Education). In some schools it is systematically integrated into the whole programme of the school whereas in others it is given little time and accorded a very low priority and status. They also note that the qualifications and training of the teachers who provide or co-ordinate career education vary widely, with many having no specialised training.

There have been two systematic literature reviews on the impact of careers education and guidance (CEG) on schools that have been conducted by the Transitions Review Group. The first is concerned with the impact on transitions from Key Stage 3 to Key Stage 4 (Moon *et al.* 2004) whereas the second relates to the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities (Smith *et al.* 2005).

Some (selected) findings of the two reviews are as follows:

The impact of CEG on Transitions from Key Stage 3 to Key Stage 4:

- Six UK studies focused on the quality of general provision of CEG in schools but only one was judged as providing a high weight of evidence (Howieson and Semple, 1996). Overall, the evidence suggests that the provision of CEG varies from school to school, depending on a range of factors that can be seen as 'indicators' of quality, including: school policy and management, content and organisation of CEG programmes; qualifications of teaching staff designated to deliver CEG; standards of students' work; and library resources. The research implies that these factors affect the transition of young people. Where provision is good, the impact on young people in transition appears to be positive.
- The evidence suggests that young people's participation in specific CEG programmes or interventions can have a positive impact on the transition between Key Stage 3 and Key

Stage 4. However only one study was found to provide a high weight of evidence (Edwards *et al.*, 1999).

- There is a suggestion that factors such as socio-economic background may modify the effect of career education and guidance, with young people in areas of high urban deprivation being particularly hard to reach.
- One of the conclusions of the review is that there is a lack of research evidence that provides high-quality, up-to-date evaluation of the impact of CEG delivered in schools or through external organisations.

The impact of CEG during Key Stage 4 on young people's transitions into post-16 opportunities

- There appears to be inconsistencies in the quality of CEG provision and providers with the quality varying from school to school (Keys *et al.* 1998; SWA Consulting, 1998).
- Access to information about post-16 options is important to the development of young people's learning outcomes but provision of such information is patchy (Morris *et al.* 1999; Munro and Elsom, 2000; SWA Consulting, 1998).
- Earlier CEG interventions, lower down the school, might help to raise pupils' awareness of subject-related careers and to counteract external influences such as peer pressure (Munro and Elsom, 2000).
- There is evidence to suggest that careers advisors need access to systematic training designed to ensure that their occupational knowledge is kept up-to-date (Munro and Elsom, 2000).
- The review revealed evidence to suggest that only one in seven pupils received a CEG package that met acceptable criteria; positive pupil outcomes were most evidence in schools where career education was effectively integrated with guidance and into the wider curriculum, and where CEG tended to have a higher profile. There appears to be no recent evidence to suggest that this situation has improved.
- None of the ten studies in the review has been judged as providing a high weight of evidence relating to the impact of CEG on the transition from Key Stage 4 to post-16 opportunities, and only two were judged as providing a medium-high weight of evidence. There is a need for high quality research.

Concerns about the quality and consistency of CEG provision have also been identified in other studies. For example, in a survey of schools reported by the National Audit Office (2004), it was reported that many did not feel they had the capacity to provide appropriate levels of CEG for young people. Specifically, in nearly two-thirds of the 580 schools they surveyed, career guidance was being delivered by staff without formal qualifications for their role. It was reported that in over half of the schools surveyed, it was not possible to find space within the curriculum for careers education lessons due to time pressure. The OECD review team (CeGS, 2003) reports an estimate that half of all schools have a good or high level of provision of career

education and guidance. They also cite Barnes *et al.* (2003) who suggest that around one third of teachers involved in career education and guidance hold a relevant qualification. Among several policy issues raised in the OECD study are consideration of options such as a mandated careers curriculum, mandated qualifications for school staff who provide (and in particular co-ordinate) career education and guidance, and a more precise specification of pupil entitlements. Among their recommendations is the development of a strategic national research and evaluation agenda for career information, advice and guidance.

There have been a number of more recent studies relevant to this review. Purcell *et al.* (2007) report the first findings of the 'Class of 2006' applicants for Higher Education who applied through the Universities and Colleges Admissions Service to study on full-time courses.¹¹⁶ The report suggests a shortfall in the careers and advice applicants received from schools. For example, 73% of those surveyed reported that they had received either not enough or no information on the career implications of post-16 exam subject choices; 60% had received not enough or no information on the relationship between Higher Education courses and employment. The authors comment that the lack of access to career guidance may be less of a problem for those with graduate parents attending schools and colleges where the majority go to HE. However, it might be a particularly important problem for those without these advantages, leaving them vulnerable to making poorer choices.

Another recent study by Beck *et al.* (2006) is critical of information and careers advice provided in schools. Their study is based on a mixture of quantitative and qualitative evidence on 14 and 15 year old students in four English local Learning and Skill Council areas. They find that lack of information about the labour market as well as specific occupations was a central theme to emerge from the empirical work conducted. They state that their evidence indicated that the availability and quality of careers information and guidance was patchy and dependent on the ability and willingness of individuals to dedicate time and interest to this area of young people's development. The authors note the vulnerability of particular groups. For example, young people from ethnic minorities appear to have to rely on 'official routes' – rather than friends and families – for their labour market knowledge. The authors suggest that young people need much more detailed information about how to compare a work-based pathway with full-time education. At the same time, they also need to understand that apprenticeships (and jobs more generally) in some sectors may result in very limited opportunities for career advancement.

The information, advice and guidance provided in schools has been shown to be inadequate in an evaluation of the Aimhigher/Excellence Challenge policy¹¹⁷. Ireland *et al.* (2006) survey a sample of young people aged 16-19 who had attended schools participating in this policy. Only just over half of those aged 16 to 17 said that the careers education and guidance they had received in Year 11 had been helpful (22% were unsure; 19% said that it had not been helpful; 4% had not received any). 58% said that they would have liked more help. Among 17 and 18

¹¹⁶ The Futuretrack study: this tracks 130,000 2006 UCAS applicants for five years, starting from their initial application to higher education.

¹¹⁷ This is a policy aimed at increasing young people's participation in higher education in disadvantaged areas.

year olds, only half said that the careers education and advice they received post-16 had been helpful (17% were unsure; 14% said it was not helpful; 19% said they had not received any). Only 44% said that they had received sufficient guidance (44% would have liked to receive more; 12% didn't know).

Conclusion

The evidence reported here suggests the quality of information, advice and guidance available in English schools is 'patchy', with much scope for improvement overall. There is a suggestion that access to information provided at school may be more important for some groups than for others (i.e. people whose friends and family do not know about opportunities - which is more likely to be the case among lower socio-economic groups). There is also a need that such information be made available early enough to influence students choice of subjects when at school (and possibly the effort they put into doing well in these subjects). Finally, there is a need for high quality research on the effects of providing information, advice and guidance to students.

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