

**UNIVERSITY ADMISSIONS
SCHOOL EFFECT AND HE ACHIEVEMENT**

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**for the Headmasters' and Headmistresses' Conference
and the Girls' Schools Association, October 2004**

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EXECUTIVE SUMMARY

The basic concepts of “widening access”, “increasing participation” and “fair admissions” are critically defined and discussed. The role of A-level examination as a mechanism for choosing which students do, or do not, enter higher education is evaluated, drawing on the extensive literature in this area, published over a number of years. It is concluded that a student’s results in the A-level examination remains the best single indicator of success at university.

A detailed analysis of the literature which deals with the factors moderating the relationship between A-level performance and degree class has been carried out. This is summarised and evaluated. The effect of one of these factors – the type of school in which the student was educated – is examined in detail. This includes a commentary on why this factor was chosen for literature discussion and media comment ahead of others which seem to have a greater effect. Critically, this school effect is found to be small. It is also dependent on how the data are analysed. Other factors, such as gender or ethnicity, are found to have a much greater effect than type of school attended.

The link between the average A-level performance of the institution, the A-level results of an individual candidate within that institution and subsequent degree performance is also examined. It is concluded that any rigid system which seeks to adjust in some way any given individual offer by reference to the average A-level performance of the school would be less fair than the arrangements which operate now.

Other factors of relevance in university admissions are also considered. These include father’s occupation/social class, ethnicity and the postcode of the student’s family. None of the conclusions reached in any analysis would suggest that it is sensible to adjust grades by some overall statistical process to take account of these factors. There is evidence that even the mid 1990s, admissions tutors were already making individual judgements and taking account of factors beyond A-level when finalising an offer to a given student.

It is clear from the analyses in the paper that, in admitting students, universities already take into account information beyond examination results. It is suggested that a further refinement this process, which has evolved through treating the candidate as an individual and not as a statistic, represents the best way forward as the university system expands further.

1. REMIT

1. The Centre for Education and Employment Research at the University of Liverpool has been commissioned by the HMC/GSA Universities Sub-Committee to conduct an evaluative survey of the literature relating to success at university as a function of qualifications on entry. In particular, the brief specified links to:
 - type of school attended;
 - the average performance at A-level of the school attended;
 - any other parameter or parameters prior to entry.

2. INTRODUCTION

2. It has been a political imperative of the Labour government since it came to power in 1997 to widen access to higher education. Widening access is different from increasing participation or 'fair' admission. Increasing participation is about admitting more to higher education irrespective of who they are. This has also been a priority for the Labour government since the Prime Minister announced at the Labour Party conference in 1998 that higher education was to be expanded by 500,000 places by 2002 (Smithers, 2001). This became in 2000 the "aim that 50 per cent of those between the ages of 18 and 30 should have the opportunity to benefit from higher education by the end of the decade" (Blunkett, 2000).
3. Fair admission has been considered by the Admissions to Higher Education Steering Group set up by the Secretary of State and led by Steven Schwartz, Vice-Chancellor of Brunel University. In draft recommendations which it put out for consultation in April 2004 (Higher Education Review, 2004, p 4) it stated that the "Steering Group believes a fair admissions system is one that provides equal opportunity for all individuals, regardless of background, to gain admission to a course suited to their ability and aspirations." But it goes on to note that defining merit is problematic. "Merit could mean admitting applicants with the highest examination marks, or it could mean taking a wider view about each applicant's achievements and potential." The Higher Education Policy Institute (2003, para 13) comes at it from a different direction and suggests that "a reasonable definition would be that no institution should exclude applicants on anything other than academic grounds, and in particular that extraneous matters like family circumstances, social class or ethnic origin should not enter into decisions about admission."
4. This is clearly different from, but sometimes conflated with, widening access. The government's intentions here were spelt out by Baroness Blackstone, then Minister of State for Education and Employment, in response to a question from the chairman of the Education and Employment Select Committee in its inquiry into Higher Education Access (Education and Employment Committee, 2001, p 211). She said:

The Government is very committed to widening access to higher education. For many, many years large numbers of people have recognised that access to universities for either young people, or to some extent elder students too, tends to be easier for those who come

from higher income groups than those who come from lower income groups. This Government feels very strongly that we should make sure that people who come from backgrounds where there is no tradition of entering higher education should have the opportunity to do so if they have the ability and talent to do so. We want to correct what I think is now almost an historic imbalance...We have to make sure that all of our higher education institutions, universities and colleges, do reach out to these young people and do so by a variety of different methods.

5. A few weeks earlier the Government's view had been expressed even more passionately by Gordon Brown, the Chancellor of the Exchequer, in a speech to a Trade Union Congress reception to mark 30 years of the equal pay act. He described it as "scandalous" that Oxford University had turned down an applicant, Laura Spence, "using an interview system more reminiscent of the old boy network and the old school tie than genuine justice in our society...It is about time for an end to that old Britain where what matters more are the privileges you are born with rather than the potential you actually have ...it is now time that these old universities open their doors to women and people from all backgrounds." (Education and Employment Committee, 2001, p viii). The Government's aspirations have been backed by money. In his letter later that year setting out Higher Education Funding for 2001-02 and Beyond, the Secretary of State, David Blunkett, leaves no doubt that, "widening participation in higher education is the main priority and I look to the Council to help the sector work towards social inclusion both nationally and in the local community."
6. The three strands of widening access, increasing participation and fair admissions have prompted some intensive research, particularly by the Higher Education Funding Council for England (2003a), on university admissions, in addition to its annual publication of performance indicators (2003b). A major outcome of the research has been to settle a long running debate about whether A-level results are a good predictor of success at university.

3. A-LEVELS

7. A-levels have long been the main method of allocating university places. Developed in a direct line from university matriculation examinations, since their inception in 1951, they have led to the gradual phasing out of university entrance examinations (until very recently when some high-demand universities have reintroduced selection tests in certain over-subscribed fields such as medicine and law). Yet there has been a continuing strand in educational research which has been interpreted to indicate that A-levels have been more of a barrier to entry than a fair basis for assessing likely achievement at university. Sear (1983) concluded that the correlation between A-level results and degrees results was "relatively weak". Peers and Johnston (1994) in a meta-analysis of 20 published studies reported that "the predictive utility of A-levels is questionable". Wiliam, in Clare (2002), suggested that less than 10 per cent of the differences in student degree classes was accounted for by differences in their A-level grades and that basing admissions on A-level results led to only marginally better decisions than choosing candidates by tossing a coin.

8. Smithers and Robinson (1991) pointed out that the earlier findings were based on inappropriate statistics. When a correlation coefficient is used to assess the strength of the relationship between A-level and degree results it generally yields an association of the order of +0.3 to +0.4. When this is squared to calculate the amount of variation explained, it appears that only 10 per cent is accounted for and the remaining 90 per cent is due to other factors. The raw correlation coefficient is, however, of limited value only. It is a statistic which relies on scores to be spread across the full range of a variable. Only a slice of an age group gets to take A-levels and an even thinner slice obtains a degree. This attenuation of range automatically lowers correlation coefficient. Furthermore, the statistic used cannot strictly be applied to ordinal data across restricted and unequal sets of values.
9. Smithers and Robinson (1989) adopted a different method in which, for two samples of students, they set out the proportions obtaining the different degree classes by high, medium and low A-level scores and demonstrated a strong association hidden by the correlation-coefficient statistics. That approach was refined by the Higher Education Funding Council for England (2003) in its analysis of the results of the 1997-98 university entrants. For simplicity it restricted itself to English-domiciled 18-year-old entrants on three or four year full-time courses at English universities (excluding medicine, veterinary science, dentistry and architecture, entrants with four A-level points or less, and students who could not be linked back to schools listed in the DfES performance tables). The A-level results were scaled by scoring 10 for an 'A' to 2 for an 'E' for a maximum of three subjects and plotted against five outcomes in 2001-02. These were respectively: the proportion of the cohort who had qualified or were still studying (that is, had not dropped out); had gained an honours degree; had been awarded a lower second or better; had been awarded an upper-second or better; had been awarded a first or better.
10. In all cases the plots showed a strong relationship between A-level points and HE achievement. The steepness of the slope increased with the move to higher levels of achievement. The relationship with the proportion obtaining 'firsts' was non-linear with a sharp rise above 26 points. Bekhradnia and Thompson (2002), also of HEFCE, had previously addressed the issue in a different way. They tested out William's coin-tossing assertion by calculating the predictive power of A-levels in terms of the chance of picking the graduate with the better degree. They found that of two randomly-selected graduates from the same institution the one who had entered on 24 points was 2.3 times more likely to have the better degree than the one who had entered on 18 points. The probability ratio varied linearly with the extent of the difference in A-level point scores. The percentage dropping out was also linearly related to A-level scores.
11. The weight of the evidence from HEFCE has been sufficient to convince the Higher Education Review (2004) that "A-level results remains the best single indicator of success at undergraduate level, and continue to be central to the admissions process." This is a big step forward since admissions tutors can have confidence that they are doing the right thing when they give A-level results pre-eminence. The Higher Education Review does, however, make the qualification "that equal examination results do not necessarily represent equal potential." What

they had in mind initially were the effects of socio-economic background on attainment. They could also have cited gender, ethnicity or postcode. It is interesting therefore to note that much of the recent debate has homed in on the effects of type of school, in particular the independent schools compared with state schools.

4. TYPE OF SCHOOL

Background

12. Quite why of all the factors moderating the relationship between A-levels and degree class the differences between independent and state schools should have been singled out for particular attention is not clear. Interest seems to have been sparked by two newspaper articles which followed in quick succession in 1998 highlighting different studies. One suggested that independent school pupils were more likely to get into university, and the other that while there they tended to under-perform relative to state school pupils. On 26 October 1998, *The Independent* (Judd, 1998) led its front page with an account of research by McNabb, Pal and Sloane headed 'State school students do best of all at university'. It reported that in a study of 60,000 students who graduated in 1992 (excluding medicine and dentistry where the degrees are not classified) from the old universities those from maintained schools were a fifth more likely to have been awarded a first-class honours degree. The research by McNabb *et al* was eventually published in 2002 when it became apparent that the observation relating to independent school was incidental to a study of gender differences in student attainment.
13. The second newspaper article appeared a day later in the *The Daily Telegraph* when Clare (1998) reported on the research of McCrum and Halsey under the headline 'dons' study proves Oxford school bias'. McCrum and Halsey (1998) looked at what happened to pupils who applied to Oxford with at least three A-levels at grade A between 1994 and 1997. They found that applicants from independent schools were, on average, 1.2 times more likely to be offered a place than state school pupils in the same qualification category. But they also found – not mentioned in the newspaper - that independent school pupils were 1.6 times more likely to apply. They also found differences with subject, with independent school pupils most likely to gain acceptance in physics and classics, two subjects not strongly represented in most state schools.
14. Awareness of the apparent difference in university admissions was heightened by the publication of HEFCE's first performance indicators in higher education in 1999. For each higher education institution it published data on the participation of what it called 'under-represented groups in higher education' in 1997-98 compared with benchmarks calculated from the entry grades and subject mixes of the institutions. It concentrated on three groups of students: those from state schools or college; those whose fathers were manual workers; and those from low participation neighbourhoods. It found that in a number of universities, mainly though not exclusively the leading institutions (Oxford Brookes, for example, was discrepant) fewer state school pupils were admitted than might have been expected from the overall distribution. At Oxford, for example, 47 per cent were admitted

from state schools against a benchmark of 65 per cent, at Cambridge 52 per cent against 63 per cent and at Imperial College, London 53 per cent against 71 per cent.

15. There were similar results for the other two categories, but the Sutton Trust (2000), which campaigns for university admissions to be on merit, undertook a reworking of HEFCE's data for the "top 13" universities (from the rankings in league tables produced by four national newspapers). The finding that it highlighted was that children from independent schools "who account for 7 per cent of the school population take 39 per cent of the places in the top universities compared to the benchmark of 28 per cent". This is an unfair comparison, and the 7% figure misleading, because independent school pupils are more likely to stay on into the sixth form to take A-levels. Even so the Baroness Blackstone for the government (quoted in Stevens, 2004) claimed that 65 per cent of those who gained 3 As at A-level were at state schools, but only 52 per cent of the entrants to Oxford came from state schools and colleges. However, even this comparison is not exact because it treats all A-levels the same, including general studies, media studies and sports studies which may not be acceptable to the leading universities. It also caps performance at three A-levels whereas in an the highly competitive entry for the leading universities four may be necessary, including, for example, further maths for such subjects as the physical sciences.
16. Nevertheless, the growing sense of apparent unfairness culminated in the Chancellor's unexpected intervention in May 2000 directed against Oxford's failure to admit Laura Spence (cited in Education and Employment Committee, 2000). The facts of the case turned out to be rather different from how they first appeared in the media. The student in question had not been accepted for one of the very few medical places at her first choice Oxford college, but had been offered places at other medical schools, and was going to Harvard to study biochemistry, a subject for which she would have been accepted at Oxford. By the time the further details on her application had emerged the debate on bias in university entries centred on independent/state school differences had been set running.

HEFCE Study

17. Fortunately, since a good deal of emotion has become attached to the issue, HEFCE has conducted a very thorough study of schooling effects on higher education achievement (HEFCE, 2003a). Its main finding is that "schooling effects are both complex and small compared to the effects of individuals' prior educational attainment." It also urges that such results be treated with caution. "If we had been able to take account of the number of A-levels and the actual A-level grades – rather than, for example, treating 'AA', 'ABE', 'BCC' and so on, as the same '20 points' – and if we had taken into account the A-level subjects, we might have made a different assessment of schooling effects." To those caveats one might add that whereas A-levels are a national examination, degrees are awarded by the individual universities and it is unlikely given their very different intakes that the degree classes mean the same across the system, as we have seen, independent school pupils tend to be concentrated in the leading universities. Furthermore, the proportions awarded firsts vary considerably with subject – more than twice as many in chemistry as English, for example (Smithers, 1991). These are important points.

18. HEFCE compared four groups of institution: LEA schools; further education colleges; grant maintained schools; and independent schools. It found across the A-level point scores from 8 to 28 that somewhat more LEA school pupils gained an upper-second or higher than the FE students, followed by the GM pupils and then the independent school pupils. Statistical manipulation of the school types and school performance show that the differences between the different groups is generally only one A-level point, though between independent and LEA schools it reaches 3 points (Annex C, Table C3, page 12). There were no differences for students with 30 A-level points. Moreover, when the four groups are compared on outcome irrespective of A-level entry score, the independent schools pupils were found to be more likely to complete the course, and to at least get an honours degree, at least obtain a lower-second, and at least obtain an upper-second. Ten per cent obtained firsts compared to 7-8 per cent in the other three groups.
19. The HEFCE research looks at results in different universities though it has to take them in groups because of restrictions on the use of data from individual institutions. It compares the top four universities on the average A-level points of accepted students with those in the next 12 and the following 23. It found that students with 28 points (AAB) were less likely to get an upper-second in the top four institutions than the other leading institutions reflecting the greater difficulty of obtaining a good degree in those institutions. In the four leading institutions 89 per cent of the students with 30 A-level points from LEA schools obtained at least an upper-second compared with 86 per cent from independent schools, and 85 per cent from further education colleges (including sixth-form colleges) and grant maintained schools. The study also conducted analyses for the different subject areas with the students from LEA schools being the more likely to obtain good degrees in business studies, while there was little difference in the mathematical sciences, languages and the creative arts (Annex C, Table C9 page 33). There was also a gender effect with any differences found between independent and LEA schools being consistently smaller for female students (Table 5, page 17).

Other Studies

20. Smith and Naylor (2001) and Naylor and Smith (2002) have obtained somewhat similar results to those of the HEFCE study using data for students who left the old universities in the academic year 1992/1993. The Universities Statistical Record made these publicly available when it was replaced by the Higher Education Statistics Agency in 1994-5. They found that overall, on a like-for-like basis, male students who had attended independent schools were 6.5 percentage points less likely to obtain a good degree than those from LEA schools, and female students were 5.4 per cent less likely. There was, however, considerable variation across independent schools. For 75 per cent of the independent schools in the case of female students and 58 per cent in the case of male students there was no difference in the likelihood of getting a good degree compared to LEA schools. They found that for male students, but not female students, there was some association between the level of fee charged by the independent school and degree performance, with the difference from state schools being greater the higher the fees. They reject the hypothesis that this is because obtaining a good degree is less important to the future prospects of students from high income homes, though not convincingly. Another possible explanation is that the high performing direct grant schools which

became independent in the 1970s tend to charged lower than average fees. In the Naylor and Smith study, just as in the HEFCE study, male students from independent schools obtained the better results overall.

21. Other studies have found that in broad comparisons between students from independent and state schools that there was little difference in their degree results. Odell (2003) at Bristol found, for example, no difference. The HEFCE study points out that this does not take into account entry qualifications and infers that since the entry qualifications of the students from state schools are likely to have been lower on that basis their performance would have been relatively better. In evidence to the Education and Employment Select Committee in 2000, the Vice-Chancellor of Oxford University provided figures for the proportions of graduates by degree class and school background (EEC, 2001, Q730, page 156). They showed no difference with 20.8 per cent of the independent school pupils obtaining firsts compared to 20.3 per cent of the students from maintained schools, 60.7 per cent upper-seconds against 59.7 per cent, 16.4 per cent lower-second against 17.5 per cent and 2 per cent thirds against 2.5 per cent. The HEFCE researches would perhaps again claim that Oxford University was recruiting on lower entry qualifications from state schools, but given the competition to get in this seems unlikely. On the other hand, if the explanation did hold it would underline that universities do not admit just on A-level results, but already make allowances for the potential of students from low performing schools.

School Performance

22. The findings that, when students from independent and state schools are compared in terms of their degree results those from state schools may do slightly better overall, is consistent with the relative performance of the schools. Sullivan and Heath (2002) have investigated educational success at different types of school. They drew on data from the National Child Development Study which is a longitudinal study of a single cohort born in England and Wales in the week of 3-9 March 1958. The original sample was 17,414, with 14,761 still participating in the third follow-up in 1974 when the children were 16. The study found “that independent schools and state grammar schools achieved superior educational outcomes to students at comprehensive schools.” Sullivan and Heath consider possible explanations, but they conclude the most plausible is that “high academic demands, the regular use of homework and an extensive extra-curricular programme depend on the willingness of both teachers and students to participate, so the composition of the schools in terms of both student and staff characteristics, and the interaction between these, is likely to be relevant.”
23. One of the difficulties of longitudinal studies is that by the time the years have elapsed to study the schooling effects, the system itself has changed substantially. The NCDS study is no exception. However, the marked difference in performance of maintained and independent schools in the most recent GCSE and A-level results (ISCIS, 2003) is a strong indicator that independent schools are still able to educate most pupils to close to the top of their potential. It is not surprising therefore that there might be some falling back at university relative to students from poorer performing schools. It is important, however, not to get this out of

proportion. If the effect exists at all, it is small and dependent on the type of independent school attended.

5. AVERAGE A-LEVEL PERFORMANCE OF SCHOOL

24. A discussion document for Universities UK (2003) has suggested that on the assumption that students from lower performing schools achieve better degree results, on average, than those from schools with the better results, then it would be justified in terms of identifying potential to require lower entry grades of them. But is it true? HEFCE (2003a), as well as investigating the effects of school type, has attempted to tease out the effects of school performance irrespective of school type on a student's achievement in higher education.
25. School type and school achievement were not always separable. When schools were divided into four groups on the basis of the average grade of A-level awarded all the schools in the top group were independent. When comparisons were based on the other three groups – with an average A-level grade of C or below – the result obtained for female students was either the opposite of Universities UK's assumption, or very small. For male students there was an effect for students with an A-level points score of 20 or less, but a negligible or negative effect for those with higher scores. Since the proposal was intended to apply to universities in a position to select their applicants and there is little evidence of an effect, there is little to be said for pursuing the proposal.
26. It does, however, apparently derive some support from the unpublished research of Odell (1999, 2003) in the physics department at Bristol University, carried out as part of its 'Widening Participation' strategy. He divided the 1998 graduates from across the University into eight groups according to the performance of their schools. The mean A-level performance of students from the lowest performing schools was about two points lower than those from the highest performing group of schools. He found "the remarkable thing is that there is almost no variation. The expected degree is just below a 2.1 independent of school performance." He concludes that "across all subjects, students who enter from schools where they have suffered relative educational disadvantage do just as well as those from the best schools, in spite of achieving lower A-level scores. This should justify lower offers and favourable treatment for those applicants from the lowest achieving schools." HEFCE (2003), however, has pointed out that Odell has confounded school type with school performance. When HEFCE applied the same methods as those used by Odell to the 1997-98 entrants it found that independent schools were over-represented in the higher performing school groups. Controlling for school type, it reported that as in the main study school performance *per se* has little effect in the Bristol results. It seems likely that again a rigid system incorporating a candidate's school performance would be less fair than the arrangements which operate at present.

6. OTHER FACTORS IN UNIVERSITY ADMISSIONS

27. Although the spotlight has been on the effect of school type and school performance on students' achievement at university, a number of other factors have been shown to be associated with degree results. As we have noted elsewhere, A-

level performance is the best predictor, and this point is accepted by Schwartz's Higher Education Review. If, however, we move beyond previous academic attainment, it has also been shown that father's occupation, gender, and where the student was brought up are all related to degree result. There are also a number of other correlates such as, for example, month of birth which seems to have an effect through age of entry to school (Startup, 1979).

Father's Occupation/Social Class

28. The widening access agenda stemmed from analysis of university entry and performance by social class, which means essentially – as is often overlooked – father's occupation as classified by the Registrar General. HEPI (2003) has shown that, if anything, the absolute gap appears to have widened even though the higher education system has been greatly expanded. In 1970, 32 per cent of the higher social groups attended university compared to 5 per cent of the lower groups, a gap of 27 percentage points. But in 2000, while 48 per cent of the higher social groups went to university, for the lower groups it was 18 per cent a gap of 30 percentage points. This does not, however, take into account social mobility. According to HEPI 90 per cent of the population were defined as being in the lower social groups in 1970 compared with about 40 per cent in 2000.
29. The apparent effects of father's occupation on entry and performance at university are strongly mediated by the qualifications obtained. Robinson and White (1997) found, for example, in an analysis of home-domiciled entrants to degree courses in 1995 that 29.9 per cent of the students admitted from social class I had 26 A-level points or higher compared to only 11.1 per cent of the much lower proportion of students from social class V. Conversely, 12.3 per cent of the former had 10 points or less compared with 25.8 per cent of the latter. Nevertheless, although students from social class I comprised 18.6 per cent of the applicants they contributed only 16.7 per cent of the acceptances, whereas those from social class V while they amounted to only 1.6 per cent of the applicants contributed 2.0 per cent of the acceptances. There was a gradation across the other social groups. It looks, therefore, that if admissions are based on academic achievement there will inevitably be an imbalance in the social groups. Interestingly, the data also show that even in 1995 universities were looking beyond A-levels and recruiting on their individual assessments of the applicants. There is nothing new in admission tutors showing judgement with individual students.

Gender

30. Gender is also strongly related to both admission to, and success at, university. Whereas only about 40 per cent of the university intake in 1979 was female (Smithers and Robinson, 1995), females are now in the majority at 53 per cent (UCAS, 2003). In the HEFCE (2003a) study of the 1997-98 entrants 45 per cent of males and 56 per cent of females were awarded a first or upper-second. In the analysis of McNabb, Pal and Sloane (2002) gender was found to be related more strongly to degree performance than type of school attended.
31. Yet no arguments are put forward for either balancing the intake with respect to gender, or making offers to women with lower grades on the grounds that they might be expected to do relatively better. The reason according to HEFCE is that

such a policy would be illegal because it would contravene the Sex Discrimination Act of 1975. It is difficult to see how while positive discrimination on one characteristic can be against the law, it can be advocated on another which has less of a connection with degree results. HEFCE itself remarks that taking account of factors such as school-type may be in breach of the Human Rights Act which incorporates the European Convention on Human Rights into English law, though the implications of this have yet to be tested.

Ethnicity

32. Smithers and Robinson (2000) showed, on the basis of 1996 data, that students from the ethnic minorities were more than twice as likely to go to university as to be expected from their proportion in the population. Again there is no suggestion, for obvious reasons, that one should seek to correct this imbalance through the admissions procedures.

Postcode

33. HEFCE's annual Performance Indicators in Higher Education show that, as with school-type and social class, the leading universities fall short of the benchmark for the recruitment of students from low participation neighbourhoods. Universities receive extra payments for admitting students from specified postcodes though this "is intended to be a reimbursement to institution for the additional resources they have invested in recruiting and retaining students from lower socio-economic groups. It is not intended as an incentive payment."(EEC, 2001b) That is how it is commonly regarded, however, and the Select Committee (EEC, 2001a) recommended raising it from 5 per cent to 20 per cent. A major difficulty with this approach is the variability of participation in terms of postcode. A project undertaken by the Four Counties Consortium of Higher Education Institutions (2000) attempted to identify 'hot spots' and 'cold spots' among the wards of East Anglia, but found that cold could turn to hot and vice versa within a year. Funding of this kind, therefore, runs the risk of creating new disparities.

7. POLICY IMPLICATIONS

Interpretation

34. The research of HEFCE (2003) and Naylor and Smith (2002), among others, have found that students from independent schools do somewhat less well in terms of degree results relative to their entry qualifications than students from LEA schools. However, the difference is small and is not consistent. In addition, there are differences with university, the schools, the subjects studied and gender. The picture is complicated still further by the finding that, in terms of actual results rather than relative to A-levels on entry, students from independent schools do better or as well as students from maintained schools. Students from maintained schools already tend to be accepted on lower entry qualifications than students from independent schools which suggests that, over the years, universities have evolved ways of identifying the potential of individual applicants. The system seems to have evolved in a way that is fair to the individual candidate.
35. Given the small size of the school-type effect, its variability across different situations and that universities already take into account a student's background,

there is no case for instituting formal procedures to secure the entry of maintained school pupils on lower entry qualifications. Indeed to do so in blanket fashion could well make university admissions less fair than they are now. Furthermore, HEFCE found no consistent evidence that students admitted from low scoring schools did better in degree examinations than those admitted from high scoring schools scotching Universities UK's case for routinely making differential offers on the basis of a candidate's school's performance.

36. School type is only one of a number of factors having a bearing on participation and performance in higher education. These factors include father's occupation, gender, ethnicity, postcode and even month of birth. Some factors, gender for example, more strongly moderate the relationship between A-level and degree results than does school type, yet it is recognised that to discriminate on the basis of gender would be illegal. It is difficult, therefore, to justify discriminating on other grounds, especially where the effect is less obvious or indeed debatable. In any case, it is clear that isolating just one factor of questionable general effect and making it the basis of a deliberate bias in university entry would make admissions less fair than they are now. Comparisons of university entry qualifications of those applying and those admitted indicate that universities already take into account information beyond examination results. That is surely the appropriate approach: careful weighing the merit of individual applicants. Refining those subtle processes should be the way forward, rather than introducing blunt mechanisms favouring students on one social characteristic or another. Such mechanisms are, in any case, treating the candidate as a statistic and are as such inherently unfair.

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