

RULES OF THE GAME

Disadvantaged students and the university admissions process

Gill Wyness
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Foreword

For 20 years, the Sutton Trust has been improving the chances of young people from less advantaged backgrounds to get to our most selective universities. Our summer schools support thousands of students each year, enabling them to achieve personal social mobility.

But, as we work with our university partners to deliver these opportunities, we are very conscious that the challenges they face are not just ones of individual circumstance or poor attainment, though they are clearly important factors. All too often the rules of the admissions game are stacked against them and in favour of those with the means to succeed.

Over those 20 years there have undoubtedly been improvements in university access. Disadvantaged young people are more likely to enter higher education, and to go to our best universities. Universities are spending more time and money promoting access and outreach. But the gaps in admissions between those from better off and less well-off backgrounds remain wide, especially at our most selective institutions, whose graduates earn most and access the best career opportunities.

That's why this report is so important. Dr Gill Wyness has looked at the admissions process in detail and finds it wanting. Her data shows that money not merit is driving university choices: disadvantaged high attainers are less likely to choose courses that meet their potential, while advantaged low attainers are more likely to be on courses that exceed theirs.

Back in 2004, I served on the Schwartz commission on fair access to universities which concluded that the system in England of offering places based on predicted exam grades worked better for confident middle class students than for able less advantaged young people who underestimated their own capabilities. We wanted to see admissions based on actual A-level results instead. Universities rejected the idea. Although there is more flexibility today through Clearing with the student numbers cap lifted, it remains an important impediment if students make sub-optimal university applications.

Previous Sutton Trust research has highlighted concerns about the personal statement. Ostensibly a way to allow non-academic talents to shine, they are more likely to reflect the level of coaching and support available to students, as well as the range of extra-curricular opportunities open to them. They must be reviewed. More recently we have also made the case for transparency in what grades students from poorer backgrounds need to access courses, which are often lower than those publicised by universities.

Of course, good advice and guidance remain at the heart of this issue. Our research has shown unwillingness by a significant minority of teachers to encourage their brightest students to apply to Oxford and Cambridge. The new government career strategy is a step in the right direction. But each student must have the right advice for them personally.

Getting admissions right is as important as getting access and outreach right in ensuring that talented and able young people fulfil their potential. I am very grateful to Dr Wyness for this important new report.

Sir Peter Lampi

Founder and Chairman of the Sutton Trust and Chairman of the Education Endowment Foundation

Executive Summary

- Whilst there have been substantial improvements in university participation among students from disadvantaged backgrounds in recent years, the gap between disadvantaged students and their advantaged peers remains significant, particularly at the most selective universities. UCAS figures show that the most advantaged applicants are six times more likely to enter a high tariff institution compared to the most disadvantaged.¹ Given the high average returns to attending university – of around £168k for men and £252k for women - this has important implications for disadvantaged students' future earnings and employment prospects, and hence for equity and social mobility.
- Recent research has suggested that the admissions process itself may be a potential driver of the access gap. This is an area that is surprisingly under-researched, given that the pursuit of 'fair access' for students into the most selective universities remains high on the policy agenda.
- Though the UK's admissions process is highly centralised, the process is still complex, time-consuming, and requires young people to make potentially life-changing decisions far in advance of university entry. Many of the elements of this process may put students from poorer backgrounds at a disadvantage.
- High ability disadvantaged students lack the information, advice and guidance needed in the university application process. Lack of knowledge of the many parameters involved in applying to university (including dates and deadlines, the entry requirements of each course, whether the course is a good match, and the probability of admission), leads many disadvantaged students to make sub-optimal decisions when choosing their universities.
- In addition, students must make their course choices based on predicted rather than actual A-level exam grades. Evidence shows that the majority of grades are over-predicted, which could encourage students to make more aspirational choices. However, high attaining disadvantaged students are more likely to have their grades under-predicted than their richer counterparts. This could result in them applying to universities which are less selective than their credentials would permit.
- Almost 3,000 disadvantaged, high-achieving students - or 1,000 per year - have their grades under-predicted. Additionally, low attaining disadvantaged students are more likely to be matched to courses with similar students, while low attaining but advantaged students are far more likely to be overmatched: to attend courses with higher ability peers.
- Personal statements are a further barrier to entry for poorer students. Those from disadvantaged backgrounds are less likely to be supported in preparing these essays, and as such their statements tend to contain more grammatical and spelling errors. But those from deprived backgrounds are also able to provide fewer examples of the types of work and life experiences that many colleges and universities value, and use to decide between applicants.

¹ UCAS (2016), 'End of cycle report 2016', University College Admissions Service, Cheltenham.

- Providing information, advice and guidance at critical stages can help students to make better choices. But this must go beyond typical “passive” information sources such as websites. Effective information should be customised to the student, timely and interactive.
- At the heart of these issues is an underlying lack of transparency in the admissions process as a whole. Universities are fluid in their approach to admissions, and put different weight on the predicted and achieved grades of students. They have different approaches to the use of contextual admissions and apply different criteria when analysing personal statements. This leads to an admissions process that lacks transparency and consistency, and means that less savvy students are less likely to understand “the rules of the game.” A more transparent and consistent system could potentially level the playing field.

Best practices for improving the admissions process for disadvantaged students

- Disadvantaged students are less likely to be prepared for college, and may be unaware of key deadlines. **Application guidance should start early in a students’ careers**, supporting them through the research process, reminding them of open days and key deadlines, and generally preparing them to enter the applications stage.
- **Information, advice and guidance should be customised to the student.** Students must make decisions which are the best for them – bearing in mind their grades and preferences. Since all students’ grades and preferences vary, information should be customised appropriately. This could include, for example, providing students with a set of universities that are “reach”, “safety” and “match” to their A-level grades at, or before the application stage. This could be an automated feature of the UCAS website.
- **“Hands on” guidance may be the most effective means to help students manage the process.** Where possible, pre-populating areas of the UCAS form – such as the financial aid sections – may encourage students to finish and submit the form. Having school based “application workshops” where students can complete their applications with teachers present, is likely to increase applications. Matching applicants with coaches who understand how to navigate the system may also be effective, but will be more expensive and difficult to manage.
- **Students respond to rules of thumb or ‘default settings’ on application forms.** The UCAS form could be adapted, for example by requiring students to list at least one safety university, reach university or match university.
- Similarly, **personal statements should include ‘prompts’ to increase transparency in what they should contain.** Allowing only one example of an extra-curricular activity or work experience could also help level the playing field here.
- Universities treat grade predictions differently, contextualise offers, and often look at a range of information on the candidates. **They must make their processes more transparent** – by publicising how these decisions are made, and by working more closely with schools to share this information. A more consistent approach to offer-making across universities would also benefit disadvantaged students.

Sutton Trust Recommendations

1. **Post Qualification Admissions (PQA) should be trialled and implemented.** Measures should be explored to minimise the effects on the current examination and admissions timetable.
2. **Universities and UCAS should review the personal statement,** including whether it is beneficial to the application process, and considering if the format could be improved to ensure it is a fair indicator of all applicants' potential.
3. **Universities should use contextual data in their admissions process** to open up access to students from less privileged backgrounds. Highly selective universities in particular, where low and middle income students are substantially under-represented, should make greater use of contextual admissions, including reduced grade offers, to widen access.
4. **There should be greater transparency from universities** when communicating how contextual data is used and how personal statements are evaluated across departments. Information should be shared widely and effectively with applicants, schools and teachers. If they are to take advantage of access measures, it is crucial that applicants are aware if and how they may benefit from contextualisation. Universities should publicise the criteria for contextual admissions clearly on their websites, along with how and when they are taken into account.
5. **All pupils should receive a guaranteed level of careers advice** from professional impartial advisers. For those facing disadvantage – or who are at risk of failing to reach their potential – there should be further support available, including being supported to undertake and reflect upon academic enrichment activities for the personal statement. Staff training should ensure that key messages are consistent and based on up to date guidelines. The Careers and Enterprise Company should also be resourced and encouraged to trial and identify what works in careers advice for disadvantaged pupils.

1. Introduction

Whilst there have been substantial improvements in university participation among students from disadvantaged backgrounds in recent years, the most advantaged students are still six times more likely to enter a high tariff institution when applying to university compared to the most disadvantaged.² And even after prior academic attainment is taken into account, state school students are still significantly under-represented at leading universities.³ Given the average return of attending university is around £168,000 for men and £252,000 for women,⁴ and increasing evidence that there is a significant wage return to university selectivity,⁵ this has important implications for disadvantaged students' future earnings and employment prospects, and hence for equity and social mobility.

Recent research has suggested that the admissions process itself may be a potential driver of the access gap.⁶ This report looks at the UK's university admissions process, and the contribution it may make to the access gap. This is an area that is surprisingly under-researched, given the interest in the socio-economic gap in HE, and in the pursuit of 'fair access' of students into the most selective universities among UK policymakers.

The admissions process to higher education institutions in the UK is unique. The process is controlled by a central body, the University and College Admissions Service (UCAS), which allows young people to apply to multiple courses through a single organisation. Whilst the centralised nature of the admissions system in the UK is clearly of benefit to all students, the process is still highly complex and time consuming, and requires young people to make potentially life-changing decisions far in advance of university entry, based on predicted rather than actual A-level exam grades. Many of the elements of this process may put students from poorer backgrounds at a disadvantage.

This report reviews literature on both sides of the Atlantic to study the admissions process, specifically focusing on elements of the process which may prove to be particular barriers to disadvantaged students – including the UCAS form, course choices, predicted grades and personal statements – and looks for evidence of 'best practices' which may help equalise the chances of access to university among able students from different backgrounds. It also includes quantitative research examining the predicted grades system, and which applicants may be negatively impacted by this process. It concludes by examining the small body of research that has focused on activities within the university admissions offices, shedding further light on how universities make the decisions that affect thousands of young people each year.

² See Footnote 1.

³ Crawford, C., Gregg, P., Macmillan, L., Vignoles, A., and Wyness, G. (2016) 'Higher education, career opportunities, and intergenerational inequality.' *Oxford Review of Economic Policy* 32.4: 553-575.

⁴ Walker, I. and Zhu, Y. (2013). *The impact of university degrees on the lifecycle of earnings: some further analysis*. Department of Business, Innovation and Skills, London.

⁵ L.Kirkoboen, E. Leuven and Mogstad, M. (2016), 'Field of Study, Earnings, and Self-Selection', *Quarterly Journal of Economics*, 131, pp.1057-1111.

⁶ Bettinger, E., Long, B., Oreopoulos, P and Sanbonmatsu, L (2009). "The Role of Simplification and Information in College Decisions: Results from the H&R Block FAFSA Experiment." Working Paper no. 15361, NBER, Cambridge, MA.

Background and history of the UK system

The UK admissions process is unique in a number of ways. It is almost entirely centralised, with much of the process run by UCAS. Students use the UCAS website to select the courses they wish to apply to, submit their applications and personal statement, and also to obtain finance such as grants and loans. This is in stark contrast to other countries. For example, in the US, students typically have to make separate applications to each university they wish to apply to, submitting their exam scores and tailored personal essays in each case, with payment involved in some cases. This is also the case in Canada.

UK universities then apply rigorous selection criteria, considering students' exam grades, as well as criteria such as personal statements, and other indicators. The UK's "double-selection" criteria – where both schools and universities have influence on the students' eventual destination is also in contrast to the admissions systems in other countries. For example, in Germany and the Netherlands, the schooling system has far more influence over the destinations of students, since students are tracked at an early stage, with some pathways not leading to a qualification enabling higher education entry. It is also in contrast to the situation in Finland and Croatia, where little pre-selection occurs within the schooling system, meaning that universities apply many more criteria to select students.⁷

Whilst the UK's centralised system appears rather modern in its approach, in fact, the system has been roughly unchanged for almost 50 years. In the 1950s, students had to apply to each individual university separately, and could apply to as many as they chose, bearing in mind the administrative burden of doing so. As applications began to increase, so concerns were raised that the system was becoming unmanageable. A committee of vice chancellors and principals undertook a review, and recommended centralising the process. This new, centralised agency, the 'University Central Council on Admissions' (commonly known as UCCA) was set up in 1961. Though it was optional for universities to be part of UCCA, the vast majority joined from the outset. In 1994, following the conversion of many polytechnics to university status, the body responsible for polytechnic admissions (PCAS – the Polytechnic Centralised Admissions Service) merged with UCCA to form the University and College Admissions Service (UCAS). The system as we know it today – where the entire applications and admissions process is governed by one central body – is very similar to that set up as UCCA in the 1960s. The creation of a centralised system of applications and admissions has been described as a "turning point in higher education".⁸

Table 1 describes the current UK admissions process from beginning to end, including the key dates and deadlines to which students must adhere successfully to gain a place. As can be seen from the table, there are a number of unique elements of the UK system.

Perhaps most importantly, UK students must apply to university before they receive the A-level results that will determine where they eventually end up. Instead of applying on the basis of their actual grades, students apply to university based on their predicted grades, making choices of up to five universities almost a year before entry. They must also include a personal statement with their application, which will be sent to all the universities chosen by the student, and therefore need not be tailored to a particular course. University admissions tutors, at this point, assess the applications of students. Some – mainly Oxbridge, but also medical programmes – may also choose to interview promising applicants. At the end of this selection process, universities must make students offers, conditional on achieving certain grades. Once these offers are received, the student has a short period to choose a first and second choice university. This is an important decision: the student is committed to their first choice university if they

⁷ For a detailed overview of admissions systems across the OECD, see Orr et al (2017).

⁸ David Willetts, (2013) <https://www.timeshighereducation.com/news/ucca-creation-the-true-turning-point/2008581.article>

gain the required A-level grades required, and the university is committed to accepting them. If they do not meet the grades of his first choice, they are committed to their second choice, and the second choice university is committed to them, again assuming that they gain the grades required. Only after this decision is made do students then sit their A-level exams, and only once they receive the results will they know which university they will attend.

Table 1: The UK Admissions Process

School Year	Term	Age	Event	Deadlines
12	Summer	16-17	All universities will hold Open Days in June and in September for people about to apply through UCAS. Most of those attending will be Year 12 students who are about to complete their UCAS applications.	
13	Autumn	17-18	Students receive predicted grades from schools.	
13	Autumn	17-18	Students apply for up to five courses (no order of preference) based on their predicted grades. They must also include a personal statement with their application. Again, open days happen here - often after students have applied to university.	January application deadline for entry that year. September 2017 deadline for Oxbridge courses.
13	Spring	17-18	Students receive offers conditional on academic success. They must choose a first choice and insurance course. Students with no offers may enter "Extra", allowing another choice.	Decisions from universities received in May. June deadline to commit to choices. "Extra" opens between the 25 th of February and 4 th of July.
13	Summer	17-18	Students sit A-level exams which will determine entry.	
13	Summer	17-18	A-level results are published. Both student and university are <u>committed</u> to first/insurance choice conditional on results. Students who missed their predicted grades may still be accepted. Students should apply for finance.	August: A-level results day.
13	Summer	17-18	Those without a place go into clearing; those who exceeded their target grades may go into adjustment.	Clearing opens early July.
	Autumn	18-19	Attend course of choice.	

A number of safety nets are in place for students who do not achieve their expected grades, or indeed overachieve. First, it is important to note that many students who do not achieve the grades required by the university as part of their condition may be offered a place anyway. Those students who over-achieve on their grades and wish to upgrade their course choice may do so through adjustment – but such students may find that many of the most popular courses are already full. Those students who do not achieve the grades required and are not offered a place must enter Clearing. UCAS publish the list of vacancies remaining on clearing day, and individuals must contact them directly to try and gain a place. The remaining students may enter their chosen courses.

As described above, apart from switching from a paper to online system, this process is roughly unchanged since the days of UCCA. The only real differences are that until 1999, students could choose six universities instead of five. The system of predicted grades has also been in place since the outset.⁹

⁹ Though note that the formal system of predicted grades has been in place at least since 1983, though earlier literature makes reference to a “confidential report from the individual’s school, which included a prediction of performance” suggesting that the predicted grades system is not new (Richards, 1983).

2. The UCAS form, and choosing the five courses

The UCAS form is completed online, and students must enter information on their personal details, academic attainment, employment experience, and the five courses to which they wish to apply.

Evidence indicates that the most challenging aspect of the UCAS application is not the completion of the form, but the choice of the five courses that students must make. Research states that the optimal strategy adopted by a student should be to choose a few universities that are a "reach", (slightly above the student's own attainment) four or more universities that are "match", and one or more universities that are "safe".¹⁰ But many students may lack the understanding of which types of courses fall into these categories.

In their major review of the admissions process in 2011, UCAS highlighted that a significant number of issues arising from the initial stage of the admissions process concerned course choices.¹¹ Evidence was gathered showing that:

- 207,000 applications (choices) were withdrawn or cancelled before a university or college decision had been made.
- 35,000 calls were received by UCAS about changing choices and swapping decisions
- About half of applicants reported having made choices that they weren't particularly interested in and that 34% had not undertaken any visits to universities prior to submitting their application.
- Many applicants did not understand the sifting processes used by different universities and courses to differentiate between applicants with similar qualifications.

Thus, the evidence suggests that one of the first barriers to students concerns the choice of the five courses. The fact that these choices must be made in January (for most students), six months before they actually sit their A-level exams (in August), and nine months before they will attend university (in October) means that students are reliant upon good knowledge of their own ability and the requirements of universities.

Do disadvantaged students struggle with the choice of university to apply to?

Unfortunately, there is very little research on the application choices made by students in the UK that can help us to understand which types of students may struggle with the choice of university. Research by using UCAS data on student applications behaviour revealed that UCAS applicants from lower class backgrounds and from state schools remained much less likely to apply to Russell Group universities than their higher SES or private school counterparts, even when they had comparable qualifications – including the same A-level grades and subjects.¹²

Research examining the eventual destination of students from disadvantaged backgrounds also seems to indicate that many disadvantaged students may be making sub-optimal decisions on where to apply. There is a wealth of evidence that students from disadvantaged backgrounds end up at lower quality universities than their higher income counterparts, suggesting that disadvantaged UK students make suboptimal choices in the applications stage of the process.¹³

¹⁰ Hoxby, C, and Avery, C., (2013) "The missing 'one-offs': The hidden supply of high-achieving, low-income students." Brookings papers on economic activity 2013, no. 1: 1-65. Harvard.

¹¹ UCAS (2011), 'Admission Process Review: Consultation', University College Admissions Service, Cheltenham.

¹² Boliver, Vikki. (2013) "How fair is access to more prestigious UK universities?." The British journal of sociology 64.2: 344-364.

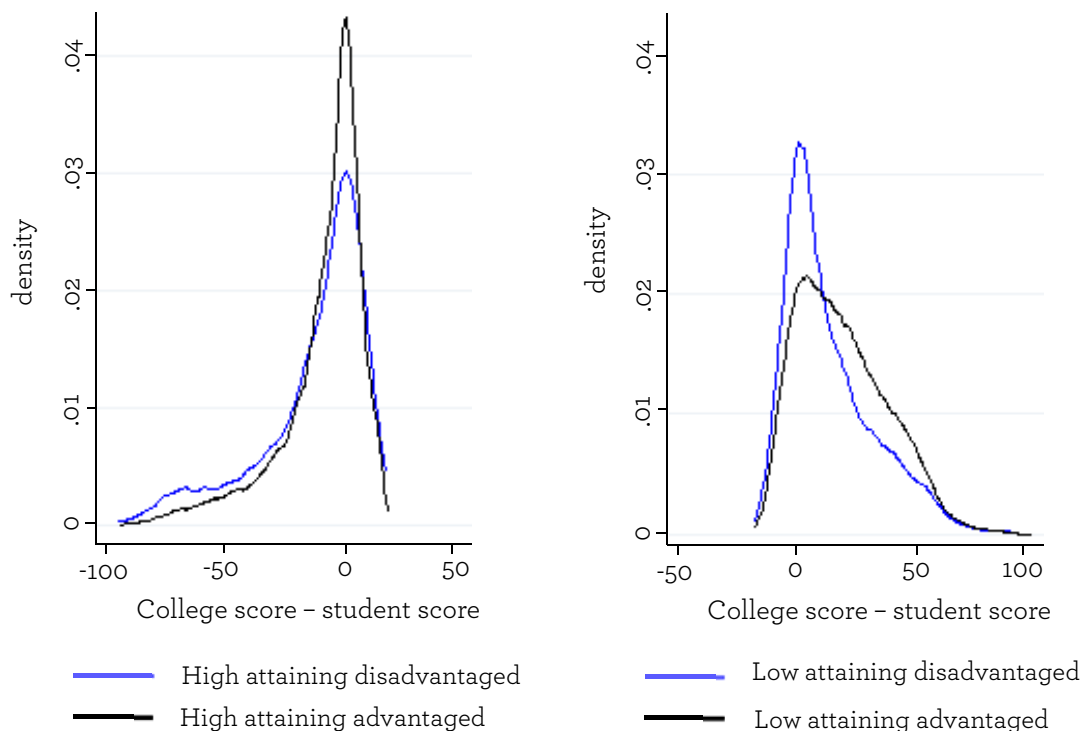
¹³ Chowdry, H., Crawford, C., Dearden, L., Goodman, A. and Vignoles, A. (2013) 'Widening Participation in Higher Education: Analysis Using Linked Administrative Data', Journal of the Royal Statistical Society: Series A (Statistics in Society), 176, pp.431–457; see Footnote 11.

Figure 1 examines the ‘match quality’ of low and high socio-economic status (SES) students to courses in the UK, bearing in mind their own ability. This chart was constructed by comparing a student’s position in the attainment distribution (based on A-level points scores) to the position of their chosen university course in the ability distribution (based on the median A-level points score of students studying that course). On the horizontal axis is the difference between the attended university’s median test score and the student’s own score, in percentiles. A student who is perfectly matched to their course will have a match index of zero; the student is attending a university whose median student has exactly their scores.

If a student is higher on the ability distribution than the median student on the same course, their score will be negative, meaning that they are under-matched. For example, a student at the very top percentile of the ability distribution (the 100th percentile) who is attending a course where the median student is at the 50th percentile, will be under-matched by 50 points (50-100). Likewise, a student in the middle of the ability distribution (the 50th percentile) who attends a course with median scores at the 70th percentile will be overmatched by 20 points (70-50).

The left-hand panel of Figure 1 shows the match index for high attaining students from the highest and lowest quintiles of disadvantage (as measured by the income deprivation affecting children index, or IDACI). As Figure 1 shows, high attaining high SES students are most likely to be matched (that is, many more of them are centred on zero in the histogram), while low SES students are more likely to be under-matched – the histogram is left skewed, meaning they are more likely to attend courses that are less selective than they could have done, based on their academic credentials. This is certainly suggestive evidence that students from disadvantaged backgrounds do not make the “best” decisions when choosing their universities.

Figure 1: Undermatch in UK higher education

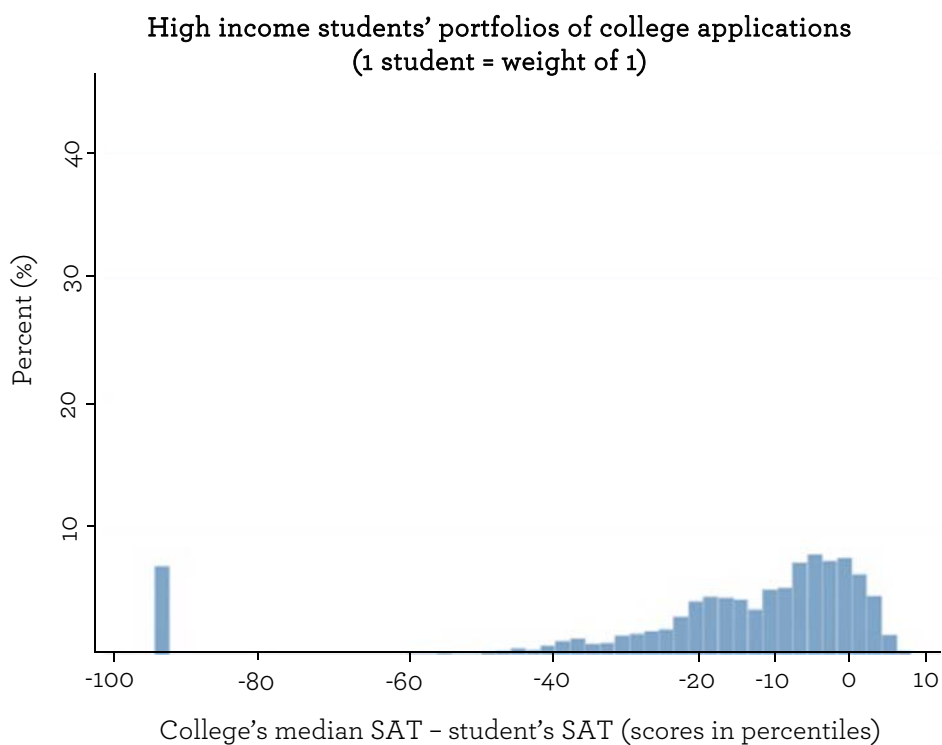


Source: Wyness (2017).

The right-hand panel shows the match index for low attaining students, again from the highest and lowest quintiles of deprivation. Here, interestingly, low attaining disadvantaged students are more likely to be matched to courses with similar peers, while low attaining but advantaged students are far more likely to be overmatched: to attend courses with higher ability peers.¹⁴

Research from the US shows similar patterns of behaviour among disadvantaged students, though in this case the authors have actual applications data on students, rather than purely admissions data. The results, however, follow the same pattern suggesting that disadvantaged students tend to behave sub-optimally when applying to college. Figures 2a and 2b below, which was constructed using a similar method to that used in Figure 1 above (here using SAT scores, the equivalent of A-levels in the US, and importantly, using data on the students' applications, rather than simply the university they were accepted to, as in Figure 1).¹⁵

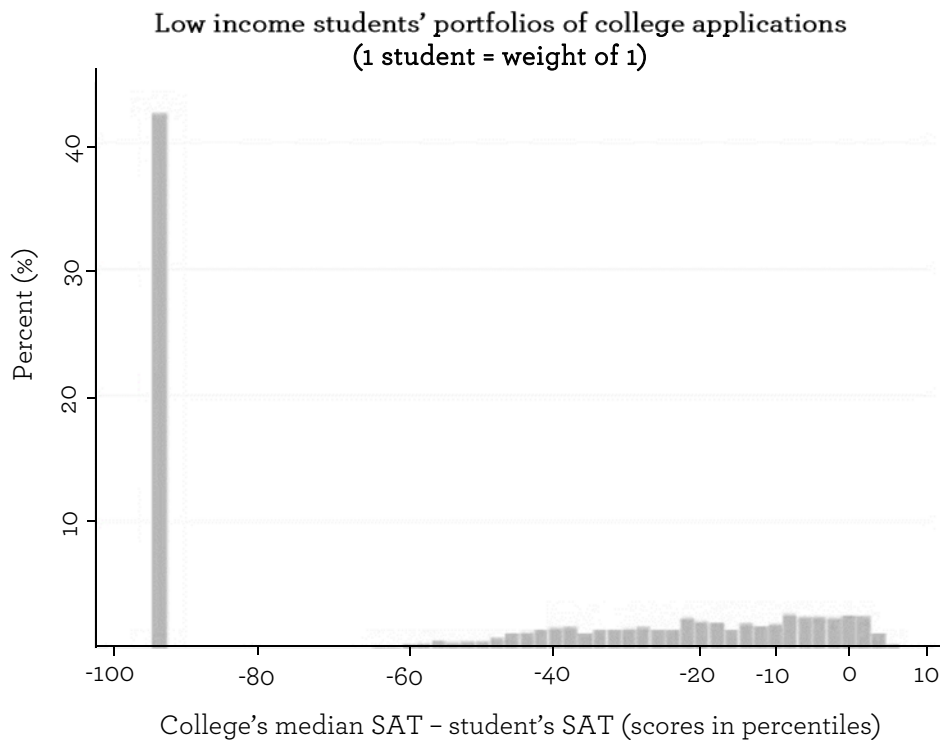
Figure 2a: Undermatch in Higher education - high attaining, high SES students



¹⁴ Wyness, G. (2017), mimeo, UCL Institute of Education, London.

¹⁵ See Footnote 10.

Figure 2b: Undermatch in higher education - high attaining, low SES students



Source: From Hoxby and Avery, 2013.¹⁰

As Figure 2a shows, the most advantaged students tend to adopt the strategies that one might advise – the bulk of their applications centre on zero (so, they tend to apply to schools that match their own attainment levels), but also apply to some ‘reach universities’. Many also, sensibly, apply to safety universities in their application portfolios, though the small peak at around -90 indicates that some apply to “safer than safe” universities (in some cases this may be when the university has a specialist area, such as a conservatoire). On the other hand, as Figure 2b shows, low SES students’ do not follow the ideal application strategy. Their applications are rather spread out among universities where the median student is below their own attainment levels, rather than well-matched colleges, and an extremely high proportion of them apply to non-selective schools. Many disadvantaged students were also found to apply to a single non-selective college, or to a non-selective college plus a highly selective college – strategies that are not ideal for admission to a well-matched college.

How can we help students make better choices?

UCAS did acknowledge disparities in information, advice and guidance strategies which may put less advantaged students at a disadvantage when making their university choices, and set out a plan to provide more detailed information on their website.

However, this approach may not be particularly effective. Simply providing students with information – even easily and freely accessible information, such as that on the UCAS website – is unlikely to be sufficient on its own to improve disadvantaged students’ understanding of the application process.

Previous work which provided year 10 pupils (aged 15) access to a website with detailed information on the costs and benefits of higher education, revealed that even though the website was free and easy to access, the majority of students did not choose to access it. Interestingly, those least likely to access the information (those from lower socio-economic groups and boys) were also the most likely to benefit from it. The study concludes that simply providing information on websites, even in a very simple format, will

not be effective for students who perceive that it is too difficult or costly to process the information and take account of it in their situations. Instead, the study suggests that information should be tailored more closely to individual situations, or indeed be nested in the curriculum.¹⁶

Indeed, research has shown that more “hands-on” solutions are typically highly effective in dealing with these issues.

The ECO project

Research which examined why low-income high achievers made sub-optimal choices showed that, contrary to many beliefs, lack of aspiration may not be an important factor in explaining why some low-income high achievers apply to non-selective colleges.¹⁷ Indeed, these students “expressed no hesitancy about attending the best college to which they could gain admission and afford”. Rather, research has found (through surveying students themselves) that disadvantaged students were often unaware of which colleges would be suitable for them, bearing in mind their grades, and lacked basic information about college quality, such as which schools were more selective, and which schools had the best graduation rates. Crucially, they appeared to be unsure of the admissions probabilities at various universities, and to understand which schools were “peer”, “reach” and “safety schools”. This lack of knowledge meant they were unable to adopt sensible application strategies (for example, applying to a “reach” college, a “match” college, a “safety school” etc.) which would ensure they would have a good range of offers to choose from.

Often, these issues surrounding the lack of information were related to the geography of the student. High achieving students who attend non-selective colleges have been found to tend to live in rural areas with low population density and few college attendees in the local area.¹⁸ The low population density and lack of good students in the area meant that these areas were not typically targeted by universities searching for high-ability disadvantaged students. Students at these schools also tended to lack help from college counsellors, who had thousands of students to deal with, again meaning that they did not receive the right guidance.

The Expanding College Opportunities (ECO) Project, an experiment run in response to these issues, provided targeted, customised information about the college application process to low income high-achieving students.¹⁹ Targeted students were sent a guidance pack in the mail, which contained personalised, tailored information on how to apply to colleges, what each college would cost (taking account of the likely discount a student would receive based on their household income), and relevant statistics on the quality of each college (including the graduation rate and instructional resources). Students were also provided with an easy, no-paperwork means to apply for fee waivers.

A key feature of this intervention is that the information sent to each student was highly personalised to them. The authors accomplished this by collating data from a wide variety of sources on the students themselves, their financial circumstances, their high schools and local colleges and their likely net costs of applying.

The intervention was highly successful. Low-income high achievers were more likely to apply to higher quality colleges (those with more resources and higher graduation rates), and also paid less than they would have paid, due to the generous financial aid that is typically available to poor students attending selective institutions. The intervention was also extremely cost effective, costing about \$6 (£4.50) per student. The authors also argue that the size of the impact on where students choose to attend college is larger than that of interventions that are dramatically more expensive—for instance, in-person counselling and increased financial aid.

¹⁶ McGuigan, M., McNally, S., & Wyness, G. (2016), “Student Awareness of Costs and Benefits of Educational Decisions: Effects of an Information Campaign”, *Journal of Human Capital*, Volume 10, 4, pp. 482–519.

¹⁷ Hoxby, Caroline, and Sarah Turner (2013) “Expanding college opportunities for high-achieving, low income students.” Stanford Institute for Economic Policy Research Discussion Paper 12-014.

¹⁸ See Footnote 10.

¹⁹ See Footnote 17.

The Department for Education letter encouraging people into university

A similar exercise was conducted by the Department for Education and the Behavioural Insights team in the UK.²⁰ Here, the experiment involved sending letters to young people who were high achieving at age 16 (on their GCSE tests) but attended schools which tended to send their best students to their local university, rather than the university that was best suited to them. Similar to the ECO project above, the letters were customised to the young person receiving them. They were written by university students from a similar background as the young person, and who had attended the same school. The letters emphasised that different universities offer different opportunities, that employers care which university you go to, and that more selective universities can even be cheaper than less selective universities for students from low income families. The letters were printed on headed DfE notepaper, and were sent at the beginning of sixth form. In some cases, a letter was sent to the school; some went to students' homes; and some both to the student's home and their school.

Again the results of the experiment were quite striking. Whilst there was no discernible effect on students' likeliness to apply to any university (which was tracked over time using UCAS data), students who received both letters were significantly more likely to apply to a Russell Group university, with the probability increasing from 19.9% to 23.2%. They were also more likely to accept an offer from a Russell Group university: increasing the proportion of students accepting an offer from these universities from 8.5% to 11.4%, an increase of 2.9 percentage points.

Similar to the ECO project described above, the intervention was very good value for money. In total, 11,489 letters were sent, at an average cost of 87p per letter. DfE estimate that 222 additional young people attended a selective university as a result of this trial, at a cost of £45.05 per additional student. Given the aforementioned estimated return to the university, this represents excellent value for money.

The Boston COACH project

Research has also examined a programme in which Harvard graduate students mentor high school seniors in Boston public schools, in an effort to help the high school students navigate the college admission process; the Boston COACH project. The study first examined the aspirations and behaviour of low-income high school students in the Boston area, tracking their progress through high school as they moved towards college, and comparing their pre-application behaviour with students from more high-income suburban schools in the area. A key finding was that, whilst many of the low-income students were initially enthusiastic about the prospect of going to college, once they reached the stage of actually applying, there was a significant drop off in their enthusiasm. This meant that of those students who were suitably qualified to attend a public four-year college in the area, only 65% of those who originally intended to go to a four-year college (as expressed at the beginning of senior year in high school) actually did so.

In response to this, the Boston COACH project involved coaches assisting students in choosing their colleges. This appears greatly to have increased the chances of enrolment, even among low grade students. "Among the COACH students with lower grades, the majority (64.5%) who completed an application were still admitted to and enrolled in a four-year college."

The authors put this success down to "careful selection of colleges on the part of these applicants and their coaches". They reported that more than half of the low attaining students were admitted to private colleges known for having low admission requirements. Thus, it is clear that receiving guidance from someone who is "savvy" about the intricacies of the system is a key advantage.²¹

²⁰ Sanders, M., Chande, R., Selley, E., (2016), "Encouraging People into University", Behavioural Insights Team, Department for Education, London.

²¹ Avery, C and Kane, T.J., (2004). 'Student perceptions of college opportunities. The Boston COACH program.' in College choices: The economics of where to go, when to go, and how to pay for it. University of Chicago Press, 2004. pp. 355-394.

The FAFSA experiment

An experiment carried out in 2009 went one step further than merely providing customised information. Here, the hypothesis was that the financial aid application process deterred students from applying to university. In the US, this process is far more complex than in the UK: students must complete an extremely long financial aid application form called the Free Application for Federal Student Aid (FAFSA). This form was, at the time of the study, eight pages long, and comprised over 100 questions, with three of these questions requiring additional worksheet calculations. Whilst this is far more complex than the UK financial aid application (which is folded into the UCAS application), the Bettinger experiment nonetheless offers important insights into how interactive information and guidance can impact student application behaviour.

The experiment took advantage of the individual tax return system in the US, and targeted families with family members aged 17-30 without a degree (who therefore may be considering going to college). When such individuals in Ohio and Carolina went to file their tax returns, a random selection was offered the opportunity to have their college financial aid forms completed for them (crucially, this could be done using information they required to fill out the tax return anyway), and filed there in the office. Others, again at random, were offered guidance on filling out the form, though they did not have their forms completed and filed.

The results were impressive. Dependent individuals with no college experience increased their probability of enrolling from 26.8% to 34.5%, an eight percentage point increase. The results for independent individuals who previously had no college experience also increased, though there was less evidence of an impact upon independent individuals who had already been to college. However, these effects were only found among those who had had their finance forms completed for them. There was no discernible effect on those who simply received guidance. Similar results were noted when examining the likeliness of students to apply for financial aid. Whilst there were significant effects of completing and filing the forms on students' behalf, no effects could be found of the information only treatment. Interestingly, the experiment also impacted the timing of students' applications; those whose FAFSA forms were completed and filed also filled in their college applications around a month earlier, as a result of the intervention.

In terms of value for money, this experiment was also efficient. Even at \$87.50 (around £65) per participant (which included software costs, printing costs, incentive costs and call-centre helpline costs), the resulting eight percentage point increase in college enrolment among the high school senior sample is "particularly impressive. At an average cost of \$1,094 (£814) per participant (\$87.50/0.08) for helping one dependent student get to college, the programme can likely pay for itself if the subsequent average earnings are 2% higher or more."²²

Life after high school

Following up the success of the FAFSA experiment, a study in 2016 created the "Life after high school" programme. This was targeted at high schools in Ontario, Canada with particularly low college transition rates. In the programme, grade 12 pupils (age 17/18) were given three workshops in the school computer lab. In the first workshop they could access a website which displayed a list of eligible courses based on the students' own grades (which they were required to enter into the website themselves). They could access associated information about these courses, such as distance from home, entry requirements, and potential earnings returns. Students were also able to enter their family income information which would reveal grant and loan eligibility personalised to their circumstance.

In the second workshop students could apply - for real - to courses in which they were interested, completing the form in the workshop with teachers and the website instructions on hand to help. The college application fee (up to \$100) was waived. In workshop three, students were guided through the financial aid process and again could apply for aid there and then.

²² See Footnote 6.

On average, applications to college increased by 14 percentage points among grade 12 students who were exposed to the programme, though this increase mainly came through applications to two-year colleges (which are less elite). Enrolment increased by around 5.2 percentage points, but this was virtually all in two-year programmes. These figures were higher for those who had already met their school graduation requirements. Oreopoulos and Ford followed up the intervention with some modifications, finding that the application fee waiver was a critical element of the programme. They also concluded that providing personalised guidance was critical – students given a concise set of programme options that would accept them if they applied were much more likely to enrol later than those left to consider which universities would enrol them on their own.²³

Other relevant research

A simpler experiment found that some students lack information on the basics of application strategies. The author points out that “students must choose one of over 22,400 combinations of colleges to apply to. The value of applying to even one combination depends on many parameters students may not know: the probability of admission to each set of colleges in the combination, the utility from attending each college, and the cost of applying”.

This study examined the applications behaviour of students taking the ACT (a popular college entrance exam in the US) looking in particular at a change in the rules which increased the number of colleges students could send their test scores to for free. Prior to the law change, students could send their test scores to three colleges for free, while each additional score report costs \$6 (£4.50). Afterwards, students could send four score reports for free. The study showed that when students were able to send their fourth report for free, they responded by expanding the range of colleges they applied to, including applying to more selective colleges, or colleges with better admissions rates.

The result was that low-income students ended up attending more selective colleges – though high income students did not. The author concluded that low-income students lacked information about how many colleges to apply to, and interpreted the three college rule as a recommendation that they should apply to three colleges. When the rules changed to four colleges, they interpreted this as a signal that they should apply to four colleges. In other words, such students are looking for ‘rules of thumb’ to adopt, in the absence of information.²⁴ This explanation is consistent with research which finds that individuals are strongly affected by default choices when choosing among savings and health insurance plans.²⁵

Thus, a potentially simple yet effective means of guiding students is to provide them with information on optimal application strategies instead of having them deduce rules of thumb from external sources. This could induce low-income students to attend more-selective colleges, potentially facilitating better student-college matches.

Aside from lacking information, advice and guidance, it could also be the case that poorer students make sub-optimal decisions because they are less well prepared to enter the process than their more advantaged counterparts. As described in Table 1, the UCAS process relies on students submitting their applications as much as six months before they even receive their results. Well-prepared students should have researched appropriate universities and courses, and attended university open days, often well before the time of filling in the UCAS form.

Whilst there is little UK research which helps us to understand how prepared students are by the time of completing the UCAS form, research has shown that school pupils (aged around 15) from disadvantaged backgrounds are less likely to be knowledgeable about the costs and benefits of higher

²³ Oreopoulos, P. and Ford, R., (2016). Keeping college options open: A field experiment to help all high school seniors through the college application process (No. w22320). National Bureau of Economic Research.

²⁴ Pallais, A., (2015). Small differences that matter: Mistakes in applying to college. *Journal of Labor Economics*, 33(2), pp.493-520.

²⁵ Madrian, B. C., & Shea, D. F. (2001). The power of suggestion: Inertia in 401 (k) participation and savings behavior. *The Quarterly Journal of Economics*, 116(4), 1149-1187.

education, and less aware of the key differences between universities than their richer counterparts.²⁶ Many other research studies have shown that disparities in information advice and guidance are greater for disadvantaged students,²⁷ which may result in a lack of preparedness at the point of application. Moreover, a consultation by UCAS in 2011 highlighted that some students preferred to attend university open days after they had received offers rather than beforehand, because of the financial realities of travelling to a university they may not end up attending.

This implies that there may be issues with lack of preparation for the process among UK students. Research from the US highlights the key role that preparation plays in the college admissions process, and suggests that disadvantaged students may face a struggle in this dimension.

The aforementioned Boston Coach Programme highlighted lack of preparation as a key factor in the disparity between aspirations to go to college and actual application-making, among disadvantaged students. Although the students had high aspirations and had a good understanding of the potential payoff to college, they were “far behind their suburban counterparts in the college application process at the beginning of the senior year” (when students are aged 17/18). The disadvantaged students tended to begin their applications process at the beginning of senior year, whilst their more advantaged counterparts had already achieved most of the milestones necessary for enrolment in a selective college by this time (including attaining a sufficient GPA for college entry, registering for the college entry tests, taking the tests and completing a college application). These milestones were extremely important: achieving them was significantly predictive of the students’ probability of selective school attendance.

The school attended by these students was a factor in these differences in preparation: “At Concord-Carlisle, registering for and completing the SAT is simply taken for granted. But at Dorchester High School, one of the three Boston district public schools... only 71% of those students who register for the SAT complete the test”; and even among those students who had high ability, and registered for the SAT, 15% of disadvantaged students did not actually end up taking it. The research also found that these disadvantaged students tended to do things at the last minute, frequently registering for the SAT test close to the deadline when places were already full, and hence having to travel to unfamiliar test locations far from their homes as a result of leaving things too late.

So, could coaching from college students help these disadvantaged young people to achieve the key milestones necessary to complete college? The answer is yes: the evidence showed that among those disadvantaged students who wanted to attend a four-year college and who had attained the grades to get in, more than two-thirds who had attended at least 16 coaching sessions would attend a selective college. Indeed, the study found that this “hands on” method of preparation could make up for the lack of milestones accomplished by the students.

²⁶ See Footnote 16.

²⁷ Oreopoulos, P., & Dunn, R. (2013). Information and college access: Evidence from a randomized field experiment. *The Scandinavian Journal of Economics*, 115(1), 3-26.

3. The predicted grades system

A further layer of complexity in the process of application and admission, is that students are reliant on choosing their courses, and admissions tutors are in turn reliant on basing their decisions on predicted, rather than actual examination grades. An estimated 84% of UK applicants submit applications with predictions of their final examination grades, rather than the actual grades.²⁸ Universities and colleges then make offers conditional on the achievement of specified grades in specified subjects.

Here there is limited research from other countries as to the potential issues with this system, since it is (to the author's knowledge) unique to the UK. However, previous research, and a consultation conducted in 2011 by UCAS, highlighted various issues with this rather unique system.²⁹

First, grades are not always accurate. Research has shown that there can be differences amongst applicants' predicted grades and the actual grades upon which the offer is confirmed or otherwise. Indeed, almost 3,000 disadvantaged, high-achieving students (or 1,000 per year) have their grades under-predicted.³⁰ Second, in the UCAS consultation, schools acknowledged that, given the competitiveness of the UK admissions system, there was an "increasing feeling of pressure from parents for teachers to predict grades at the top end of expectations". This could potentially impact disadvantaged pupils more, if their parents are less likely to attempt to influence teachers.

Because of these issues, UCAS itself proposed a means by which the UK could move to a system where students apply after they have received their exam results (so-called PQA or Post Qualification Admissions). However, among responses to this consultation, practitioners argued that such a move may actually damage the chances of disadvantaged students. This is because their grades tend to be over-estimated by schools, particularly at the lower end of the distribution, where disadvantaged students tend to be.³¹ If these pupils are over-predicted, this could have a positive impact, encouraging them to apply to more "aspirational" universities. Indeed, Papay et al, find persistent effects of earning a more positive school attainment label on college going,³² and Diamond and Persson show that pupils in Sweden are much less likely to be marked just below a grade threshold, resulting in positive signalling effect in the labour market.³³

But, are disadvantaged students more likely to be over-predicted? This question is considered in research which studied the difference between applicants from different SES backgrounds' actual and predicted grades.³⁴ Figure 3 shows the difference in predicted and actual grades of students from different levels of advantage (here measured using the POLAR measure of advantage). Here, the measure of grades used comes from UCAS and is the points score attached to the highest three A level grades achieved by the applicant, with the following points per grade used in the calculation: A*=6, A=5, B=4, C=3, D=2, E=1.

As Figure 3 shows, it is indeed the case that students from disadvantaged backgrounds are more likely to be over predicted. Looking, for example at students who received a prediction that is five points higher than they actually attained (those at -5 on the x-axis) who, for example, may have been predicted CCC but actually achieved DEE, there is a clear social gradient, with low SES pupils far more likely to fall into this category (and indeed more likely to be over-predicted at all levels than high SES pupils).

²⁸ UCAS (2011) 'University Admissions Consultation', University College Admissions Service, Cheltenham.

²⁹ UCU (2015), 'Undergraduate application and admission survey', University and College Union, London; Everett, N. and Papageorgiou, J., (2011). Investigating the accuracy of predicted A level grades as part of 2009 UCAS admission process.

³⁰ Wyness, G (2016), 'Predicted grades: accuracy and impact', University and College Union, London.

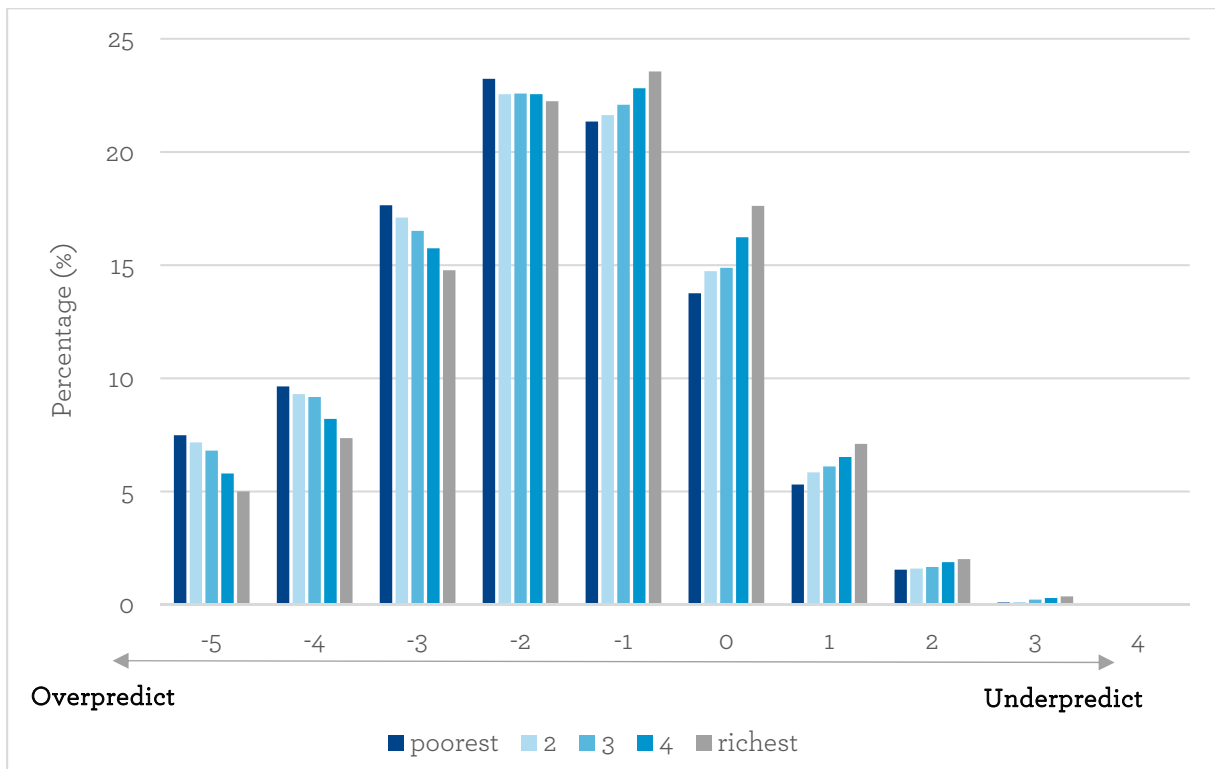
³¹ Everett, N. and Papageorgiou, J., (2011). Investigating the accuracy of predicted A level grades as part of 2009 UCAS admission process.

³² Papay, J. P., Murnane, R. J., & Willett, J. B. (2011). How performance information affects human-capital investment decisions: The impact of test-score labels on educational outcomes (No. w17120). National Bureau of Economic Research.

³³ Diamond, R., & Persson, P. (2016). The long-term consequences of teacher discretion in grading of high-stakes tests (No. w22207). National Bureau of Economic Research.

³⁴ See Footnote 31.

Figure 3: Difference between actual and predicted grades, by level of disadvantage



Notes 1: each point on the x-axis represents the achieved point score of the applicant minus the predicted point score of the applicant.

Notes 2: Points score is defined by UCAS as the points score attached to the highest 3 A level grades achieved by the applicant, with the following points per grade used in the calculation: A*=6, A=5, B=4, C=3, D=2, E=1.

Source: Wyness (2016). SES is measured using POLAR 3.

However, arguably what we are really interested in is how accurate predictions are among high-achieving but disadvantaged students, since these students are most likely to apply to university. This is also of interest since research has shown that predictions are more accurate at higher attainment levels.³⁵ Table 2 therefore presents regressions where the dependent variable is the probability of being over predicted, controlling for socio-economic status, and other demographic characteristics. Column 1 presents the raw regressions for all students, confirming that students from the lowest SES quintile are less likely to be under-predicted than students from the highest SES quintile (the reference category). This result holds when controlling for basic demographics in Column 2. However, in columns 3-5 presents the results for students according to their eventual A-level attainment. As can be seen, in the case of the highest attaining students (AAB+), after including controls, in column 5, low SES students are 1.1 percentage points more likely to be under-predicted than those from more advantaged backgrounds. In other words, amongst high achievers, those from disadvantaged backgrounds are more likely (by 1.1 percentage points) to receive predictions that are lower than they actually go on to achieve.

³⁵ See Footnote 3.

Table 2: Probability of being underpredicted, by socio-economic status

Variables Quintile of disadvantage (ref=richest)	(1) raw	(2) +chars	(3) CCC	(4) CCC-AAB	(5) AAB
lowest SES quintile	-0.026*** (0.001)	-0.024*** (0.001)	-0.003*** (0.001)	-0.001 (0.001)	0.011*** (0.004)
2nd lowest quintile	-0.019*** (0.001)	-0.016*** (0.001)	-0.003*** (0.000)	0.001 (0.001)	0.008** (0.003)
middle quintile	-0.015*** (0.001)	-0.010*** (0.001)	-0.002*** (0.000)	0.001 (0.001)	0.013*** (0.003)
2nd highest SES quintile	-0.008*** (0.001)	-0.007*** (0.001)	-0.001*** (0.000)	0.000 (0.001)	0.002 (0.002)
Observations	858,720	858,720	146,890	480,610	231,220
R-squared	0.001	0.006	0.001	0.004	0.013

Source: Wyness (2016). SES is measured using POLAR 3.

These findings suggest that while the predicted grades system may indeed put some lower attaining students at an advantage, they may actually do the opposite for *high attaining low SES students*. In turn, this suggests that a PQA system may benefit these students more.

However, the inaccuracy of grades was not the only reason given by practitioners for keeping the system as it is, as fed back into the UCAS 2011 consultation. A further key concern was that moving to PQA would involve moving the entire admissions process to earlier in the cycle, thus shortening the length of time students would have to prepare and make decisions. Moreover, the loss of conditional offers from universities could be seen as damaging to students who see these as a motivating factor to go on and achieve the grades required of them. Schools also objected, as they would be likely to lose teaching time since exams would have to be brought forward to accommodate a PQA system.

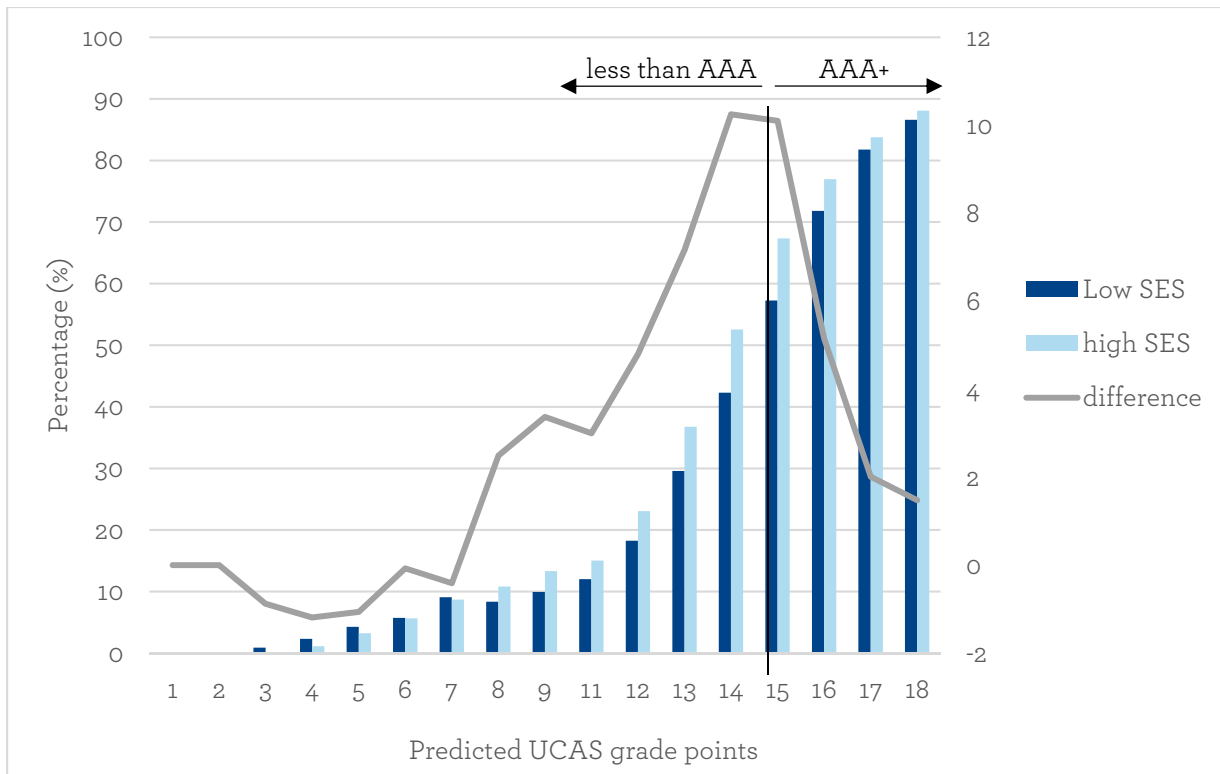
A final objection raised by practitioners in the UCAS consultation is more telling about the admissions process as a whole, and how the predicted grades system impacts it.

UCAS and other respondents pointed out that the system of predicted grades adds a layer of unpredictability and complexity to the admissions system. University admissions tutors are often aware of which schools may regularly inflate grades, and may take account of this. They may also make conditional offers to students whose predictions are lower than their advertised entry grades, since they have an understanding of the level of error in the system, and the fact that some students may just miss the grade. However, less savvy applicants (and those from less savvy schools) may not understand this, and may therefore be less likely to apply to a university to which they in fact may have gained entry, because of over-reliance on predicted grades as an indicator. As the UCAS consultation stated “Inflation of predicted grades is well understood and discounted for offer making purposes by HEIs. However, this is not well understood by applicants and is well understood only by the best informed schools and colleges, who are experienced in supporting applications to higher education.”

As the UCAS consultation also noted “*The more complex territory relates to the extent to which some types of applicants might be disadvantaged by the unreliability of predicted grades. While the preponderance of overprediction may encourage more disadvantaged applicants to make aspirational applications they might not otherwise have made, disadvantage potentially stems both from over or*

under-prediction. This may be exacerbated by the presence or absence of knowledgeable advice about which applications may succeed based on predicted and then real results.”

Figure 4: Applications to Russell Group universities by predicted grade



Source: author’s own calculations using UCAS data.

Figure 4 attempts to explore this, showing the proportion of applicants applying to Russell Group universities with different predicted points scores. Here again, the grade points are defined by UCAS so that 14 points is equivalent to AAB, 15 points is equivalent to AAA and so on. In this chart, regardless of the number of points predicted by the student, high SES students are more likely to apply to Russell Group than low SES students, though at very high and very low points scores, their application behaviour is quite similar (with a prediction of 18 points – A*A*A*, almost everyone applies to Russell Group, and at very low levels, almost no-one applies). However, it is interesting that the greatest difference between application behaviour of low and high SES students (depicted by the grey line) occurs around the AAA threshold (15 points). For example, for students with a 14 grade point prediction – equivalent to AAB – 52% of high SES students apply to the Russell Group, compared with just 42% of low SES students. Perhaps with a better understanding of their chances of gaining a place with these grades, more low SES students would apply.

A further potential socio-economic disparity is implied by research which, in interviewing admissions tutors, found that tutors likened the predicted grades system to “crystal ball gazing”. The author noted that as a result, the small number of students who applied based on actual rather than predicted grades enjoyed a higher propensity for gaining an offer than pre-qualification applicants, since they were lower risk. “The advantage in admissions chances enjoyed by post-qualification applicants appears to be related to the lower risk they pose with regards to their attainment.” Such applicants tended to be those who were applying to highly competitive courses or who had missed out in their preferred university and wished to wait and apply again next year with their actual grades.³⁶ It is easy to see that these might be more likely to be among advantaged candidates.

³⁶Zimdars, Anna. (2010). “Fairness and Undergraduate Admission: A Qualitative Exploration of Admissions Choices at the University of Oxford.” *Oxford Review of Education* 36 (3): 207–323.

4. Personal statements

The final element that all students must deal with in the admissions process is the personal statement. This is a 4,000-word statement which, according to UCAS, must document “your ambitions and what interests you about the subject, course providers and higher education” and describe “What makes you suitable – any relevant skills, experience or achievements gained from education, work or other activities.”

The UK is by no means the only country to make use of the personal statement in the university admissions process. In the US, the “application essay” is widely used, and covers similar ground, whilst personal statements are also used in Hong Kong and Australia.³⁷ However, the research points out that the UK and the US place more emphasis on this than other countries.

In the US, the importance of the personal statement has been growing over time. The NACAC survey of admissions trends highlighted the application essay as valued to be equally important as a student's rank in class by colleges and universities, having grown in importance over many years as student's class rank declined. Moreover, more than half of all colleges have been found to consider a student's stated interest in the institution during the admission process. The growing importance of this more qualitative information on students may be as a result of perceived grade inflation: “an increased reliance on essays or writing samples at the same time that reliance on standardized test scores and grades in college prep courses are reaching all-time highs hints at the need for admission officers to consider some information as part of the admission decision that is not standardized or otherwise impersonal”.³⁸

Similar concerns may have increased the importance of personal statements in the UK. A key government white paper acknowledged “good evidence that, for some students, exam grades alone are not the best predictor of potential to succeed at university”.³⁹ The personal statement is another piece of information for universities to utilise in a system where there are many high quality candidates, and where grade inflation and school quality are a concern. The small body of research in this area also shows that personal statements may present a further barrier to disadvantaged students. This is clearly of concern if these are becoming more important in the admissions process.

Do personal statements differ by the background of the student?

Does the personal statement requirement put disadvantaged students at a disadvantage? Unfortunately, there is very little research on the personal statement in this context. The main body of research comes from Jones in the UK, some of which has been published by the Sutton Trust. To the author's knowledge, there is no comparable research from the US or other countries.⁴⁰

In a study of the personal statement commissioned by the Sutton Trust, over 300 personal statements were analysed which had been submitted to the Russell Group by applicants who, crucially, had similar levels of academic achievement (students who achieved BBB at A-level). The aim of the work was to understand whether personal statements differ according to the background of the applicant, and how they impact fairness in the admissions process. Linguistic analysis of the statements was undertaken, and the work-related and extra-curricular activities detailed in the statements were examined.

³⁷Jones, S., (2013). “Ensure that you stand out from the crowd”: A corpus-based analysis of personal statements according to applicants' school type. *Comparative Education Review*, 57(3), pp.397-423.

³⁸NACAC (2004), ‘The State of College Admissions Report’, National Association for College Admissions Counselling, Arlington, USA.

³⁹Department for Business, Innovation and Skills (2011) “Students at the Heart of the system.”

⁴⁰Jones, S., (2013). “Ensure that you stand out from the crowd”: A corpus-based analysis of personal statements according to applicants' school type. *Comparative Education Review*, 57(3), pp.397-423.; Jones, S., (2015). “Non-academic indicators and the Higher Education admissions process: a case study of the Personal Statement.” In *Handbook of Higher Education Admission Policy and Practice*, ed. Virginia Stead. New York: Peter Lang Publishing.

This analysis uncovered clear differences between the statements of private/grammar school applicants and those from state schools. The statements of those from private/grammar schools were longer, with longer sentences and longer words, and perhaps more importantly, the statements from comprehensive school pupils contained more spelling errors and punctuation errors. These differences were quite significant – the chance of a personal statement received from a private school applicant being entirely free of typing/spelling errors was almost double that of one from a sixth form college applicant.

What might be behind such issues? Again, it is likely that independent schools offer their students more guidance on the personal statement. The author pointed out that private school pupils submitted statements which were “carefully crafted, written in an academically appropriate way, and filled with high status, relevant activities.” This suggests they received help from the school they attended.⁴¹

Whilst research in this area is thin on the ground, in 2009, Cambridge's director of admissions, Geoff Parks admitted to the *Guardian* newspaper that the university disregarded this element of the admissions process, since the university believed that many students received help from their parents or schools.⁴² Such help may be more prevalent at independent schools: in the same article *the Guardian* reported an independent school teacher admitting “of course we help our students with their personal statements, their parents are paying £7,000 a term!”. It is also widely known that students can now purchase statements online. The Sutton Trust report on personal statements also highlights the increasing role of admissions consultants, especially in the US, which help applicants to tailor their personal statements. Again, simply by virtue of the costs involved, it is likely that more affluent students are more able to avail themselves of such services.⁴³

But as well as these spelling and grammar errors, the analysis also revealed that private/grammar school pupils had access to many more work experience opportunities to discuss on their personal statements. These were also broader and more diverse, whilst the experiences described by comprehensive pupils tended to refer to organised school trips. Differences also arose in terms of the extracurricular activities described by pupils, with private school applicants able to refer to more social and cultural capital (“I attended a cordon bleu course”) than comprehensive pupils (“I go to gigs”). Private school pupils were also more likely to mention the name of their schools in their statements, evidently believing it put them at an advantage.

Although it is not possible to conclude that these differences cost comprehensive school pupils a place at an elite university, the author notes that “despite being identically qualified the pupils in this study were twice as likely to enter HE if from private school”.

How can we help disadvantaged students in this area?

Again, there is a real lack of research in this area on the best ways to assist students with their personal statements. One example of a programme which aimed to help students with their personal statements was run by the Higher Education Access Network programme, for the Sutton Trust.

In this programme, students were provided with a set of structured activities enabling them to analyse wider reading and academic activities related to their course. This would hopefully enable them to gain a deeper understanding of the subject they wished to apply for at university, and therefore to draw on specific examples of their interests to include in their personal statements (rather than simply listing various texts they may have read about the subject). In the case of vocational subjects such as medicine, applicants were encouraged to scrutinise a work experience placement in depth. The results of this pilot programme were very promising. Analysis showed that all the treated students received an offer from a Russell Group university, versus 73% in a control group. 60% went on to study in the Russell Group compared with 40% in the control group.

⁴¹ Jones, S. (2012). “Is the personal statement a fair way to assess university applicants?”, Sutton Trust, London.

⁴² <https://www.theguardian.com/education/2009/may/20/cambridge-university-personal-statements>

⁴³ Jones, S. (2015). “Non-academic indicators and the Higher Education admissions process: a case study of the Personal Statement.” In *Handbook of Higher Education Admission Policy and Practice*, ed. Virginia Stead. New York: Peter Lang Publishing.

A study looked at the potential mechanisms for why this worked. Admissions tutors from Russell Group universities, and teachers were asked to read 44 statements created by treatment and control pupils. Teachers were also asked to look at them.

A key outcome of this analysis is that admissions tutors tend to value focused and sustained analysis of a specific topic rather than general statements, or attempts to make something personal. They also responded well to apparent intellectual curiosity, and real examples of personal experiences rather than statements that were unsubstantiated, such as describing being “captivated” by a subject.⁴⁴

Lack of transparency in the assessment and value of personal statements

However, perhaps more enlightening is the fact that the results showed a lack of consistency in what teachers viewed to be a good personal statement compared with admissions tutors. Indeed, their views of which were best were often quite different – for example admissions tutors tend to value focused and sustained analysis of a specific topic rather than general statements, or attempts to make something personal. It is easy to see why this might be problematic given that schools are the most likely means for disadvantaged students to get advice on how to write a personal statement, yet these statements are read by universities.

A study examined the personal statements of 119 applicants to the Masters in Social Work (MSW) program of a state university in 1998. The authors matched the personal statements of admitted students to their outcome data at the end of first year. Each personal statement was scored by a full-time faculty member (including full, associate, and assistant professors and one non-tenure track field director), with the statements scored on a number of criteria thought to be relevant to success in social work (such as writing proficiency, commitment and values). Each essay was scored by two different faculty members, and scorers could not observe any details about the candidates. The study discovered no significant relationship between the end of year test scores and the personal statement (though a relationship between undergraduate GPA and end of first year outcomes was observed, as one might expect). The study also unearthed issues with inconsistency in faculty scoring, even despite the fact that a category scoring system was used. In particular, a lack of consistency among rating was found. For example, writing proficiency (which one might expect to be a less subjective measurement), was the category least agreed upon by the two assessors.⁴⁵

Other research has shown that personal statements may not actually contain useful information. Ferguson et al. examined the personal statements of 176 UK medical students, and coded them into “information categories”.⁴⁶ The students were then tracked over one year, and rated on 21 measures of academic attainment (such as observations, exams and essays). The research concluded that “neither the personal statement information categories nor the amount of information in personal statements were found to be predictive of future performance”. Similar findings have been reported in other studies.⁴⁷

Perhaps one solution to these issues can be found in the US system. Rather than the lengthy free responses statement, which generates a high degree of variation within the essay, making disparities more likely across class, and making the essay more difficult for admissions tutors to assess, US students are instead offered a set of prompts as they go through the essay. These add structure to the personal statement. For example, prompts invite applicants to consider how they have learned from personal failures rather than to catalogue personal successes and are often framed in terms of potential contribution to a university or program rather than capacity for individual gain.⁴⁸ The Australian system meanwhile spells out the cost of non-compliance with the personal statement, and offers applicants clear guidance of how it will be scored. Other useful features of the US system come from Harvard, which

⁴⁴ Jones (2016), ‘Making a Statement’, Sutton Trust Report, Sutton Trust, London.

⁴⁵ GlenMaye, L. and Oakes, M., (2002). Assessing suitability of MSW applicants through objective scoring of personal statements. *Journal of Social Work Education*, 38(1), pp.67-82. Vancouver.

⁴⁶ Ferguson, Eamonn, Andrea Sanders, Fiona O’Hehir, and David James. (2000). “Predictive Validity of Personal Statements and the Role of the Five-Factor Model of Personality in Relation to Medical Training.” *Journal of Occupational and Organizational Psychology* 73 (3): 321–44.

⁴⁷ Norman, Geoff. (2004). “The Morality of Medical School Admission.” *Advances in Health Sciences Education* 9 (2): 79–82.

⁴⁸ McGinty, Sarah Myers (2012). *The College Application Essay*. 5th ed. New York: College Board.

reassures applicants that a lack of opportunity will not count against them, and Princeton which 'contextualises' the personal statements of students. Thus, at least the rules of the game are laid bare.

Given that research indicates that personal statements do not actually have much predictive power, that they seem to put poorer students at a disadvantage, and that they add yet another layer of transparency to the admissions process, perhaps a solution would be to remove the personal statement requirement from the admissions process altogether.

5. Admissions practices within the university

So far, this report has considered the admissions process largely from the point of view of the student. However, there is a small body of work which examines the admissions process from the point of view of the university, typically considering whether admissions are “fair”.

This includes a small body of quantitative work, which has examined applications and admissions statistics. Work has shown that whilst A-level grades (and subjects studied) can account for the main differences between admissions rates of low and high SES students, there are still disparities in the acceptance rates of students from different school types and ethnic backgrounds, even when they have highly comparable A-level grades and subjects.⁴⁹ Studies which purely looked at Oxford university admissions also revealed discrepancies in the offer rates of students from different social classes, ethnic backgrounds and school types,⁵⁰ even when controlling for prior attainment.⁵¹ More recently, work carried out for the Scottish Funding Council and the Sutton Trust, which analysed the contextual admissions practises of universities, found little evidence in the grades with which students from different backgrounds entered university – in other words, a lack of success in admitting students for contextual reasons.⁵²

However, some previous studies were unable to account for the discrepancies in admissions rates between students from different backgrounds, other than through speculation. A study which looked purely at admissions to the University of Oxford found a positive association between that cultural capital (and in particular cultural knowledge) of students and their likeliness of gaining an offer, controlling for prior attainment and other factors.⁵³

Another body of work aims to examine the admissions process from within the system, using in-depth interviews and observations of admissions meetings within universities. This work tends to reveal an admissions system which is fluid and reliant on contextualisation of applicants, which, as a result, can lead to inconsistency and a lack of transparency.

Such a study was carried out with access to Oxford University in 2005. In-depth interviews were carried out with admissions tutors, college and university officials, and admissions meetings were observed at the university. The study attempted to reconcile the statistical evidence highlighted above, and comprised 20 interviews with admissions tutors, three interviews with university and college officials and observations of eight admissions meetings. A key finding arose from this research, which was that university admissions tutors' decision making is not formulaic. Rather, it is a fluid process, in which a wealth of information is considered about each applicant, including contextual information.

For example, the Oxford tutors typically took into account the school that the student had attended. However, this was used to contextualise the application; if a pupil with good grades had attended a “bad school” then their chances of obtaining an interview were higher than a pupil with similar grades who had attended a “good school” (and who was therefore seen as having not achieved much).⁵⁴

Understanding the school context could also lead to offer requirements being lowered for some candidates. “We feel free to make a lower offer to someone who has potential but who got a B in a subject from [for example] a school in South London and we feel has not been taught well.”

⁴⁹ Boliver, Vikki. (2013) "How fair is access to more prestigious UK universities?." *The British journal of sociology* 64.2: 344-364.

⁵⁰ Zimdars, Anna. (2010). “Fairness and Undergraduate Admission: A Qualitative Exploration of Admissions Choices at the University of Oxford.” *Oxford Review of Education* 36 (3): 207–323.

⁵¹ See Footnotes 47 and Zimdars, A., Sullivan, A. and Heath, A., (2009). Elite higher education admissions in the arts and sciences: is cultural capital the key?. *Sociology*, 43(4), pp.648-666.

⁵² Boliver, V., Crawford, C., Powell, M and Craige, W. (2017), ‘Admissions in Context’, The Sutton Trust, London.

⁵³ See Footnote 51.

⁵⁴ See Footnote 50.

Similarly, Zimdars reported, with regards to social class “If anything, respondents exhibited a preference for giving a chance to working-class students.” What is key, however, is the finding that “Tutors enjoy room for discretion which means that admissions decisions are not formulaic.”

In a broader reaching study, senior managers with responsibility for admissions at all higher education institutions and further education colleges providing higher education that are members of the UCAS database (a total of 309 institutions) were surveyed in February and March 2008. Ten case studies were also selected among survey institutions. Similar to previous findings, this survey found evidence of contextualisation, with tutors having the opportunity to adjust offer levels according to the background of the student. This, however, led to a lack of transparency in the system. As one admissions tutor described “It’s important to remember that published offer levels are a guide and are very much a marketing tactic in some areas. They don’t necessarily represent the level at which someone needs to be achieving to do well on the programme, bearing in mind all of the additional support available to our students. We’ve got a good record of taking people in from a wide range of backgrounds and for them doing very well once they’re here. The tutors have got the opportunity to adjust offer levels accordingly”.

Interestingly, whilst most institutions agreed there should be a mix of students at their college, not all believed that they should attempt to engineer a mix through contextual admissions. This resulted in a degree of inconsistency in how contextual admissions were used: some institutions preferred not to contextualise at all, but instead “go blind” for what they perceived as equity reasons. They would then use context to support students after admission. Meanwhile other universities preferred to contextualise at the offer stage. Overall, only 41% of respondents (and over half of higher educational institution respondents) indicated that an applicant’s educational context (the type and nature of school or college attended was specified in the question) should be considered in admissions decision making. The use of contextual factors was found to be more prevalent among Russell Group universities, although there was still significant variation across and within these institutions.⁵⁵

The authors theorised that contextualisation may be less prevalent among recruiting institutions since they already have quite a wide mix of students. They also hypothesised, however, that a desire for more transparency and consistency in the system coming from the Schwartz review, may be at odds with contextualisation. However, a recent Sutton Trust report showed that a “substantial number of universities give little or no information to applicants about how they use contextual data and which factors they consider. This lack of transparency is a barrier to access, as potentially eligible students – often those with fewer networks and least access to information – may be unaware that they could benefit.”⁵⁶ In other words, contextualised admissions can and should go hand in hand with greater transparency, and indeed greater communication by universities in how they are using these offers is needed so that disadvantaged pupils can take advantage of them.

There was also inconsistency in what universities looked at when assessing applicants. While two-thirds of respondents from Russell Group universities used other sources of information, such as predicted and previous academic achievement and unit grade data, in addition to application forms to inform decision making, only a fifth of respondents from Million+ institutions indicated that they did so. Other studies have pointed to an even greater range of indicators being used by universities to assess candidates. Lasselie described the use of contextual information on students’ school performance (in particular whether the proportion of students in that school gaining at least four A grades in their Highers is above or below the national average) as being used to contextualise their applications of applicants to St Andrews University.⁵⁷ Analysis showed that for students with comparable Scottish Higher attainment, students coming from below average schools typically perform better at university than those from above average schools, meaning lower offers could be made to these students.

But such contextualising is not always publicised consistently, or at all. Research has found significant variations in the extent, and how, accepted qualifications were publicised. For example, while most

⁵⁵ Adnett, N., McCaig, C., Slack, K. and Bowers-Brown, T. (2011) ‘Achieving ‘Transparency, Consistency and Fairness’ in English Higher Education Admissions: Progress since Schwartz?’, *Higher Education Quarterly*, 65(1): 12-33.

⁵⁶ See Footnote 52.

⁵⁷ Lasselie, L., McDougall-Bagnall, J., & Smith, I. (2014). School grades, school context and university degree performance: Evidence from an Elite Scottish Institution. *Oxford Review of Education*, 40(3), 293-314.

institutions indicated that they accepted most level 3 qualification types (such as BTEC qualifications rather than just A-levels), they did not always publicise this information on their websites, prospectus or UCAS Entry Profiles.⁵⁸ This is in line with a recent report on contextual admissions by the Sutton Trust, which highlighted that whilst the majority of top universities used contextual information, “A substantial number provided no information to applicants about how indicators would be used, with some others indicating only that such applications would be given additional consideration, without further details.”⁵⁹

These pieces of research chime with that contained in the UCAS consultation. Here, UCAS points out that “Our research and experience tells us that HEIs rely on a variety of statistical and empirical evidence when deciding on their admissions policies relating to predicted grades.” UCAS reports that some institutions take GCSEs and AS grades into account as predictors of final grades, whilst others don’t, whilst some institutions put less weight on predicted grades, since they are aware of the failings of the system. Again, some use a whole basket of indicators about students in making their decisions, combining information from personal statements and references to add to their estimations of accuracy. UCAS also reports that when making offers, “HEIs will be factoring in the extent to which desirable applicants are receiving offers from competitors as well as discounting for under-achievement of predicted grades.”⁶⁰

Whilst one could argue that a holistic applications process, based on contextual information, previous prior attainment, personal statements, school performance and references may be desirable since it presents a fuller picture of the candidate, a key issue may be that the process is not applied in the same way across the board, so that students – particularly those who are less savvy – may simply not understand how their applications might be assessed and which are the most important elements. This lack of transparency and consistency could result in them not applying to universities or courses where they might have been accepted.

⁵⁸ See Footnote 55.

⁵⁹ See Footnote 52.

⁶⁰ See Footnote 11.

6. Conclusions

Whilst there have been substantial improvements in university participation among students from disadvantaged backgrounds in recent years, students from more advantaged backgrounds are still significantly more likely to apply to, and attend, selective universities than comparable students from disadvantaged backgrounds. Given the substantial returns to degrees in the labour market, this has important implications for disadvantaged students' future earnings and employment prospects, and hence for equity and social mobility.

The admissions process may itself be a barrier to entry for more disadvantaged students. Whilst the UK's highly centralised admissions process is an advantage over other systems such as that in place in the US, the process is still highly complex, time consuming, and requires young people to make potentially life-changing decisions far in advance of university entry, based on predicted rather than actual A-level exam grades.

Literature from the US and the UK examining the application process reveals that many of the elements of the process may put students from poorer backgrounds at a disadvantage, and lead them to make sub-optimal choices, and to end up at institutions that are less selective than they could attend based on their grades.

The evidence implies that disadvantaged students lack the information, advice and guidance around the many parameters involved in choosing their universities. They have also been shown to be less well prepared than their counterparts when researching universities. Moreover, the UK's unique applications system means that students must make their university choices based on their predicted grades, rather than their actual exam results. Empirical research reveals that high attaining disadvantaged students are more likely to have their grades under-predicted than their richer counterparts. All of these factors could result in disadvantaged students applying to universities which are less selective than their credentials would permit.

The requirement to submit a personal statement alongside the application may act as a further entry barrier. Those from disadvantaged backgrounds are less likely to be supported in preparing these essays, and their statements tend to contain more errors than their counterparts at private schools. But they are also able to provide fewer examples of the types of work and life experiences that many colleges and universities value, and which they may use to decide between applicants.

This is further compounded by an underlying lack of transparency in the admissions process as a whole. Universities differ in their approaches to admissions. They have different approaches to the use of contextual admissions and apply different criteria when analysing personal statements. This leads to an admissions process that lacks transparency and consistency, and means that less savvy students, who may attend schools which themselves lack information about university admissions practises, are less likely to understand "the rules of the game".

Providing information, advice and guidance at critical stages can help students to make better choices. But this must go beyond typical "passive" information sources such as websites. Effective information should be customised to the student, timely and interactive. A more transparent and consistent system could also go a long way to levelling the playing field.

About the report

Dr Gill Wyness is a Senior Lecturer at the UCL Institute of Education and a Research Associate at the Centre for Economic Performance at LSE. Her research focuses on socio-economic differences in higher education participation and outcomes. She is particularly interested in higher education finance, and the impact it has on university participation and attainment.

The Sutton Trust
9th Floor
Millbank Tower
21-24 Millbank
London, SW1P 4QP

T: 020 7802 1660

F: 020 7802 1661

E: info@suttontrust.com

W: www.suttontrust.com

Twitter: [@suttontrust](https://twitter.com/suttontrust)

