

The Impact of Selective Secondary Education on Progression to Higher Education

By Iain Mansfield



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About the author

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He has also worked in the Foreign and Commonwealth Office, the Department for International Development and the Department for Business, Innovation and Skills, where he held a variety of roles in international trade, competition and consumer policy. In 2014 he was the winner of the Institute for Economic Affairs' £100,000 'Brexit' prize, awarded for the best policy blueprint for the UK should it leave the EU – and is also the author of the fantasy novel *Imperial Visions* and quiz book *The Twelve Quizzes of Christmas*.

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Executive Summary

Overview

The paper considers the impact of selective secondary education on progression to higher education, with a particular focus on progression to highly selective higher education and to Oxbridge. Although further data is required to fully assess all scenarios, the findings suggest that grammar schools can increase the likelihood of progression for pupils from some traditionally disadvantaged groups, including pupils in the most disadvantaged two quintiles of social disadvantage and pupils with Black and Minority Ethnic backgrounds (BME) – the latter of which are more than five times as likely to progress to Oxbridge if they live in a selective area than in a non-selective area. The paper also explores attitudes to grammar schools across different socio-economic classes.

Accordingly, it appears that grammar schools may have the potential to contribute to social mobility by enabling better access to elite higher education. This has been overlooked by former research focusing narrowly on eligibility for Free School Meals as the sole measure of disadvantage and should be explored further in future studies to examine wider and more varied measures of disadvantage.

Background

There are 163 grammar schools in England, located in just 36, or 24 per cent, of Local Authority Areas. Grammar schools admit a socially diverse range of pupils, with 45 per cent of pupils

coming from households below the median-income, though – like the highest performing non-selective schools – they admit a disproportionately low number of pupils eligible for Free School Meals. The most comprehensive study, conducted by the Sutton Trust, found grammar schools increased the academic results of pupils attending grammar schools while having no negative impact upon the academic results of other schools.

Only two specialist Maths schools currently exist in England, run by King's College London and Exeter University. Both schools have an annual intake of under 70 pupils, with 33 per cent of pupils coming from the two most socially disadvantaged quintiles. Both schools are rated Outstanding with a high value-added score.

Results

The paper considers the performance of selective areas against non-selective areas in terms of progression to higher education. This approach takes into account the performance of both grammar and secondary modern schools in selective areas, as well as the chances of pupils from different backgrounds securing admittance to grammar schools.

When considering progression to higher education as a whole, selective areas perform only marginally better than non-selective areas. However, selective areas perform significantly better than non-selective areas at enabling progression to highly-selective universities, a differential that increases further with regards to progression to Oxbridge. Though

further data are needed to validate these findings fully, initial analysis indicates selective areas outperform non-selective areas in these respects across all five quintiles of disadvantage at statistically significant levels.

In particular, a pupil from the most disadvantaged POLAR quintile is more than twice as likely to progress to Oxbridge if they live in a selective area rather than a non-selective area. BME pupils are more than five times as likely to progress to Oxbridge if they live in a selective area. Astonishingly, England's 163 grammar schools send more than 30 per cent more BME students to Cambridge than all 1,849 non-selective schools combined.¹ While some, often advantaged, pupils can do well under a non-selective system, it is clear that for many disadvantaged pupils, grammar schools do provide a ladder of opportunity.

Access to highly-selective universities, and to Oxbridge, is strongly associated with progression to highly-skilled employment, higher earnings and access to the highest level of professional opportunities. With 45 per cent of grammar school pupils coming from households with below median income, grammar schools therefore play a significant role in supporting social mobility, providing children from the lower half of the income spectrum with similar access to highly-selective higher education that is otherwise only achieved by the independent sector.

While the small sample size involved makes rigorous analysis difficult, both existing Maths schools also appear to be fulfilling their mission, supporting rates of access to study Science,

Technology, Engineering and Mathematics (STEM) subjects at highly-selective universities, including Oxbridge, that are considerably above those achieved by the broader state or even independent sector. As with grammar schools, these higher rates of access are seen across all social categories.

Public attitudes

This paper shows polls consistently prove public opinion supports the expansion of grammar schools. This is at odds with the consensus among educational experts. While grammar schools offer a number of trade-offs, it appears likely that this homogeneity of opinion may have resulted in a degree of unconscious bias driving the research agenda.

In particular, the narrowing of consideration of social mobility to focus only on those eligible for Free School Meals has resulted in most discussion considering the top 85 per cent of the population as a single group, ignoring the very large differences between pupils from the 20th and 80th percentiles. Pupils from households below the median income have been particularly overlooked, given that 45 per cent of pupils at grammar schools come from this background.

Recommendations

- The Government should expand the Selective School Expansion Fund to allow grammar school branch sites in disadvantaged areas where this is supported by the relevant local authority for that area and expand the number of Maths schools to ten by 2022.

- Non-selective schools should look to improve their efforts at enabling progression of high-ability pupils to highly-selective universities and Oxbridge, working with grammar schools where appropriate.
- The Department for Education should commission research explicitly considering the impact of selective schooling on the social mobility of children from households below median income.

1. Outline

This paper considers the impact of selective secondary education on progression to higher education, in particular on progression to highly-selective higher education providers, including Oxbridge.

The models of selection considered are grammar schools, a traditional means of selective education still used in 163 schools across England, and the more recent innovation of specialist Maths schools, currently represented by the Maths schools run in association with King's College London and the University of Exeter.

In considering the impact of grammar schools, the paper will look at the progression of pupils in both grammar and secondary modern schools. The paper does not consider the impact of selection in private education, save as an occasional point of comparison, as academic selection in the private sector is highly mixed with other forms of selection and is, in any case, outside the immediate scope of current Government policy. The term comprehensive school is used to refer to all non-selective schools, regardless of their academy, free school, faith school or other such status.²

The paper explicitly looks at the impact of selection across the spectrum of disadvantage, to consider whether selective schooling has similar or differential levels of impact on different subsets of pupils. Much previous discussion about disadvantage in this area has focused narrowly upon pupils on Free School Meals (Free School Meals) or POLAR Quintile

1. However, looking only at this subgroups can lead to a limited analysis and conclusions, eliding as it does the widely differing set of advantages and experiences of a pupil on the 35th income percentile with parents who have never been to university, and a pupil on the 80th income percentile with parents who are academics or teachers.³ Accordingly, this paper will actively explore how the impact of selection varies across the advantaged / disadvantage spectrum, with a particular focus upon students from families on less than median income, those who are the first in their family to go to university and BME pupils. The paper will also consider public attitudes to selective schooling and, where data is available, how and why these vary by measures of disadvantage.

Finally, the paper recognises current Government policy favours the expansion of both forms of selective school considered in this paper, via the opening of new Maths schools and the expansion of existing grammar schools under the £50 million Selective Schools Expansion Fund.⁴

A note on data

Different forms of data are used by different actors within the education system. In particular, Department for Education data on schools primarily considers disadvantage using income measures, such as eligibility for Free School Meals or the proportion of households below median income. Universities in England, on the other hand, typically use the POLAR Quintile measure of disadvantage, which uses progression to higher education by specific geographical location as a proxy for

disadvantage. With the data available, it is not possible to reconcile these measures.

This paper is explicit about which measure of disadvantage is being used in each case; however, due to these differences it is not always possible to present consistent measures of disadvantage for all scenarios.

2. Characteristics of selective education in schools

Grammar Schools

i. Definition and location

Grammar schools are state-funded secondary schools that select entrants by academic ability. To gain entry to the schools, pupils are required to pass an exam known as the 11+. The 11+ was traditionally designed to identify the top 25 per cent by ability.⁵ However, in practice, the intake of grammar schools varies greatly by school and area, as different schools and counties have different admissions policies. Some, for example, simply take the pupils with the highest score on the test, regardless of location, whereas others will – of those pupils who pass the test – then use other characteristics to determine entry, such as proximity to the school or whether a sibling is already attending.

There are 163 grammar schools in England, educating approximately 167,000 pupils, compared to 3.2 million in the state-funded secondary system as a whole.⁶ Grammar schools are not evenly located around the country and are located only in 36 out of the 151 (24 per cent) Local Authority Areas.⁷ Some counties, such as Lincolnshire and Kent, have a significant number of grammar schools, whereas other counties have only a small number in what is otherwise a comprehensive system.

‘Secondary modern’ is the term traditionally given to schools in an area with grammar schools that took the students that did not pass the 11+ exam to attend a grammar school. There

is no good definition of a secondary modern and many schools which would, historically, have been considered secondary moderns do not currently refer to themselves by that name. For the purposes of this paper, secondary modern schools will be considered to be the schools referred to as 'non-selective schools in highly-selective areas' in Department for Education statistics.

Figure 1: Location of Grammar Schools in England⁸



ii. Social make-up and academic performance

Grammar schools have a socially diverse range of pupils, with 45 per cent coming from families with income levels below the median income for families with children, meaning that almost half the pupils at grammar schools come from the less advantaged half of the population, as measured by income. Median income refers to 'median household equivalised income' as defined in the Department for Education publication 'Analysing Family Circumstances: A Technical Consultation Document', which was constructed considering the median household income of all pupils covered by the National Pupil Database.⁹

This is in stark contradiction to the perception that grammar schools are only for the elite. It is true, however, that the most disadvantaged pupils – those on Free School Meals – are under-represented, making up only 3 per cent of pupils at grammar schools, compared to 8.9 per cent of the population in wholly selective areas.¹⁰ This under-representation is similar to that which occurs in top-performing comprehensive schools. For comparison, only 9.4 per cent of pupils are eligible for Free School Meals in the 500 top-performing comprehensives, comparable to 15 per cent of the population in England, in both cases a deficit of just over five percentage points compared to the potential contributing population.

Grammar schools, therefore, like other high-performing state schools, contain an under-representative proportion of the most disadvantaged pupils, while having a similar proportion to the country as a whole of pupils who are from below median income but not formally disadvantaged, a segment that has

been referred to by the Department for Education as 'ordinary working families'.¹¹

On traditional academic measures, grammar schools perform well. 80 per cent of grammar schools are rated Outstanding by Ofsted, compared to 20 per cent of all schools. In 2015, 96.7 per cent of pupils at grammar schools gained five or more A*-C passes at GCSE including English and Mathematics, compared to 56.7 per cent at comprehensives.

This is not simply due to intake: grammar schools have consistently performed strongly on 'value add' measures. The first such league tables, in 2003, showed that grammar schools were three times more effective than comprehensives at adding value, while more recent research from the Education Policy Institute shows pupils who attend grammar schools score 1/3 of a grade higher in each of eight GCSEs, compared to similar pupils in comprehensives.¹² The difference is particularly pronounced for the most disadvantaged pupils, who score half a grade higher in each of eight GCSEs, virtually eliminating the gap between disadvantaged and non-disadvantaged pupils among those who attend grammar schools.¹³

iii. Impact on other schools

Various studies have considered the impact of grammar schools on non-selective schools, with mixed results. Many such studies compare average results – for example attainment or value add – for schools in selective areas with schools in non-selective areas, such as the recent study by the Education Policy Institute, which found a small negative impact of 0.1 GCSE grade in each

of eight GCSEs for pupils in non-selective schools. However, such comparisons are limited as they equate correlation with causation: they do not fully take account of potential differences in the population between selective and non-selective areas, nor the ways in which patterns of pupil attendance at schools may vary between areas with different levels of selectivity.

The largest and most sophisticated study to consider this issue in recent years was carried out by the Sutton Trust in 2008. It is an exhaustive statistical analysis of pupils in the state sector in England, which made use of (then) new statistical methods that compared the characteristics of pupils with other children in the same electoral wards.¹⁴ The paper found:

The impact on the academic results of non-grammar state schools due to the 'creaming off' of pupils to grammar schools is negligible. Grammars have a widespread, low-level, impact on pupil enrolments across the sector. A relatively small number of non-selective schools do see a significant proportion of pupils 'lost' to nearby grammars, but this does not lead to lower academic achievement.

The finding is particularly compelling given the Sutton Trust's deep-rooted and long-standing commitment to opposing grammar schools.

While it is not possible to draw definitive conclusions, the evidence suggests that grammar schools have either no impact or at worst a minimal impact on academic attainment at non-selective schools.

Current government policy

It is currently unlawful to open new grammar schools in England. Despite a proposal to end this ban in the 2017 Conservative manifesto, following the result of the general election this policy was not withdrawn, with the Government stating that the ban will remain in place.¹⁵

The Government has announced instead the Selective School Expansion Fund, allocating £50 million to support the expansion of fully-selective and partially-selective schools. The results for the first round of bids for the Fund were announced in December 2018.¹⁶ This is potentially the first tranche of a total of £200 million allocated for this purpose in the November 2016 Autumn Statement.

To access funding, a school must submit a Fair Access and Partnership Plan, setting out how the school has and will increase access for disadvantaged pupils and how they will work in partnership with other schools to raise standards in the local area. The Department for Education has also agreed a Memorandum of Understanding with the Grammar School Heads Association (GSHA), setting out how the two organisations will work together to support these aims.¹⁷

Maths Schools

i. Definition and location

Unlike grammar schools, specialist Maths schools are a recent addition to the UK educational landscape. Inspired in their

conception by the Kolmogorov Physics and Mathematics School in Moscow, established in 1965 by Andrey Kolmogorov, the Department for Education describes a Maths school as being 'a specialist school for the most mathematically able 16- to 19-year-olds' that will 'help to prepare students for success in Mathematics-related disciplines at top universities and then pursue mathematically intensive careers', run by 'the UK's most selective Mathematics universities.'¹⁸

Though selective, Maths schools are very different in conception from grammar schools. They select at a different age and are significantly more selective, taking 'the most able' in one specialist subject, in contrast to grammar schools which traditionally took the top 25 per cent selected for general ability (though in practice this varied considerably). Comparisons have been made with specialist schools in the performing arts, such as Chetham's School of Music, with suggestions that higher-level Mathematics requires a particularly specific form of thinking and is sufficiently vital to a modern technological society that this form of specialist education for those of higher ability can be transformative.

Alexandre Borovic, a Mathematics professor at the University of Manchester who himself attended a specialist Maths school, has written:

Alumni of high level specialist Mathematics schools are 'birds of feather' because they have been initiated into this mode of communication at the most susceptible age, as teenagers, at the peak of intensity of their socialisation / shaping group identity stream of self-actualisation.¹⁹

Given the high degree of selectivity involved, it can be seen that Maths schools are more limited in where they can be established, requiring an urban or densely-populated area in proximity to a university that is capable of producing sufficient numbers of exceptional mathematicians to make such a school viable. This, together with the fact that they select at 16 rather than 11, mean that they will have a wholly different relationship with, and impact upon, the wider school system than grammar schools. Indeed, Dominic Cummings, Special Adviser to the Secretary of State for Education during the time of the policy's development, has explicitly stated that:

*The arguments for Kolmogorov schools do not translate to arguments for selection in general ... the arguments for such Maths schools are clear but should not be confused with the wider arguments over selection that involve complicated trade-offs.*²⁰

Currently, only two specialist Maths schools exist, both established in September 2014, and run by King's College London and by the University of Exeter.

ii. Social make-up and academic performance

With only two Maths schools currently in existence, any analysis is necessarily specific to those schools. The data below are based on the 2016 and 2017 cohorts.

For the King's College London Mathematics School:

- 32 per cent of students were from the most disadvantaged two quintiles (as measured by ACORN); and
- 8 per cent of students were eligible for Free School Meals.²¹

For the Exeter Mathematics School:

- 33 per cent of students were from the most disadvantaged two quintiles (as measured by POLAR); and
- data on Free School Meals were not available.²²

It can be seen that both schools recruit a significant number of pupils from disadvantaged backgrounds. In both, approximately one-third of pupils are from the most disadvantaged two-fifths of society. While this is less than the population as a whole, absolute parity would not be expected given the significant differences in educational outcomes that have been established by the age of 16 – and the fact that full-time education is not compulsory after the age of 16. Both schools clearly draw on students from a wide range of backgrounds.

Both Maths schools are currently rated Outstanding by Ofsted. In 2018, at KCL Mathematics School, 88 per cent of all grades were A* or A, while at Exeter Mathematics School the equivalent figure is 63 per cent. With regards to value add, at King's students achieve a grade better, on average, than would be expected based on their achievement at GCSE. At Exeter, they achieve over half a grade higher per subject and a whole grade higher in Mathematics.

iii. Current government policy

The 2017 Conservative manifesto called for 'A specialist Maths school to be opened in every major city in England.'²³ Maths schools receive an extra £350,000 a year to support their particular mission.

Current government policy is to expand the number of Maths schools and ministers have committed £18 million to enable the establishment of such schools.²⁴ In March 2018, the Department for Education published a guide and announced it was open for applications from universities seeking to open new Maths schools. At the time of writing, the results of that call had not been announced.

3. Progression to higher education from selective schools

Grammar Schools

i. The data

In this section, highly-selective higher education is taken to mean 'Top third of Higher Education Institutions', as defined by the Department for Education's Student Destinations After Key Stage 5 (2016) data release.²⁵ This is considered a more reliable measure of highly-selective higher education than using the Russell Group – given the self-selecting nature of the Russell Group, some highly-selective and high-quality institutions such as Lancaster or St. Andrews are outside the Russell Group.²⁶

Headline measures for grammar schools on progression to higher education are:

- 74 per cent to higher education;
- 53 per cent to highly-selective higher education; and
- 4 per cent to Oxbridge.²⁷

This compares to figures for all state schools of 60 per cent, 26 per cent and 1 per cent; for all schools and colleges of 52 per cent, 21 per cent and 1 per cent; and to independent schools of 62 per cent, 48 per cent and 5 per cent (see Table 1, below). The headline message is that grammar schools are the only type of mainstream state school that delivers similar higher education progression to that achieved by the independent sector, slightly outperforming the latter on overall progression

and progression to highly-selective higher education, and marginally underperforming on progression to Oxbridge.

Table 1: Destinations of KS5 Pupils by School Type

School Type	Cohort size	Higher education	Highly-selective higher education	Oxbridge
Grammar	23,135	74	53	4
Secondary Modern ²⁸	11,955	48	13	0
Comprehensive ²⁹	147,785	59	23	1
All State Schools	182,880	60	26	1
Independent Schools	37,115	62	48	5
Maths Schools	120	95	68*	17
All Schools and Colleges	403,370	52	21	1

*To Russell Group

This does not, however, present a full picture of the facts, for grammar schools do not operate in isolation, but as part of a system. Grammar schools select on ability; one would expect them to have higher progression to higher education than the average state school. Furthermore, while state schools in selective and non-selective areas might be expected to send the same proportion of students to Oxbridge or highly-selective higher education, in non-selective areas these would be spread over all schools, whereas in selective areas, they would be almost entirely located in grammar schools, due to prior selection at age 11.

To accurately assess the performance of grammar schools at preparing students for higher education, we need to consider the performance of the system as a whole. In the analysis below, we therefore consider the performance of areas, rather than individual schools, and compare the progression of students from selective areas (looking at students in both grammar schools and secondary moderns combined), compared to the progression of students from non-selective areas in comprehensive schools.

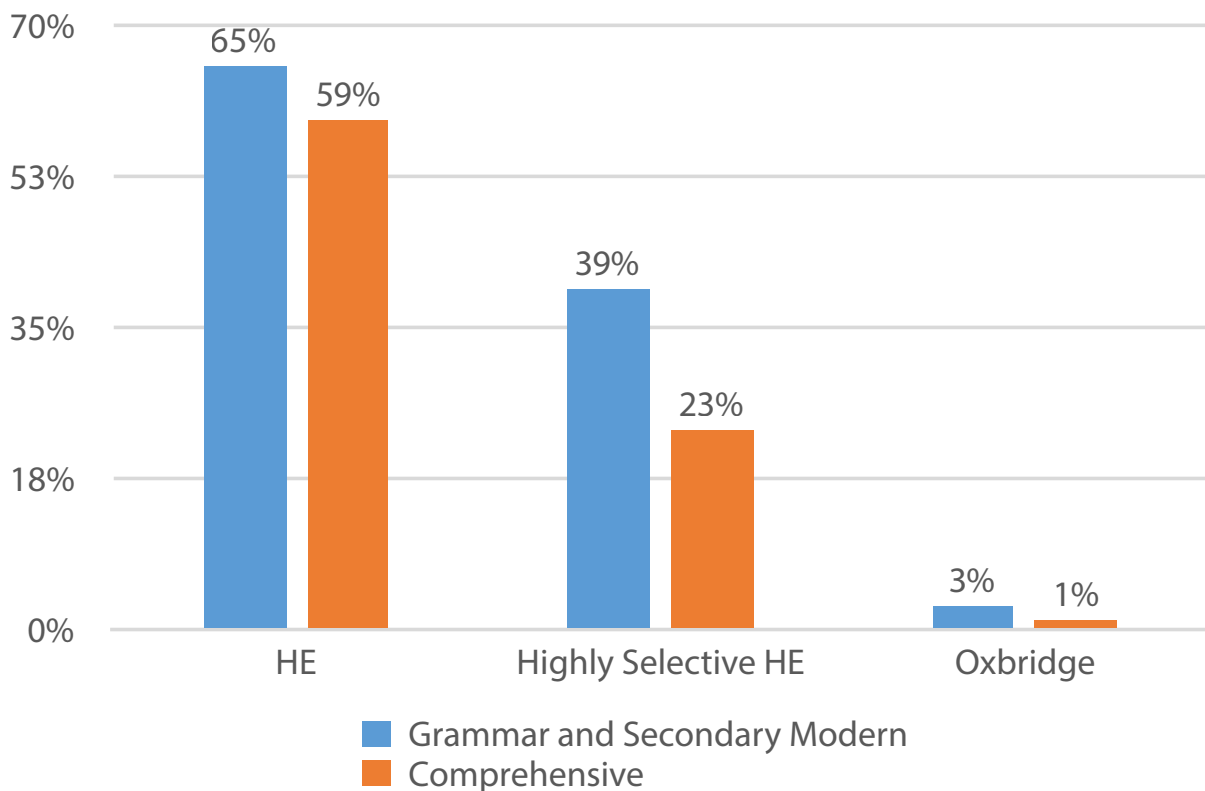
Table 2: Progression to higher education from selective and non-selective school

System	Cohort size	Per cent to higher education	Per cent to highly-selective higher education	Per cent to Oxbridge
Grammar Schools and Secondary Moderns	35,090	65	39	3
Comprehensives	147,785	59	23	1
Ratio	N/A	1.1	1.7	2.6
Z Score³⁰	N/A	21.1	62.7	24.2
P-Value	N/A	< 0.00001	< 0.00001	< 0.00001

Table 2 and Figure 2 show how the two systems perform for differing degrees of higher education selectivity. For access to higher education, the two systems are broadly comparable, with selective areas having only a slight edge. As selectivity increases, selective areas begin to steadily outperform non-selective areas, with pupils more than 50 per cent again as likely to progress to highly-selective universities as the

comprehensive system, and sending three times as many pupils to Oxbridge. All variations are statistically significant, with $p < 0.00001$ in each case, which means the probability is less than 1 in 100,000 that these results are due to chance.

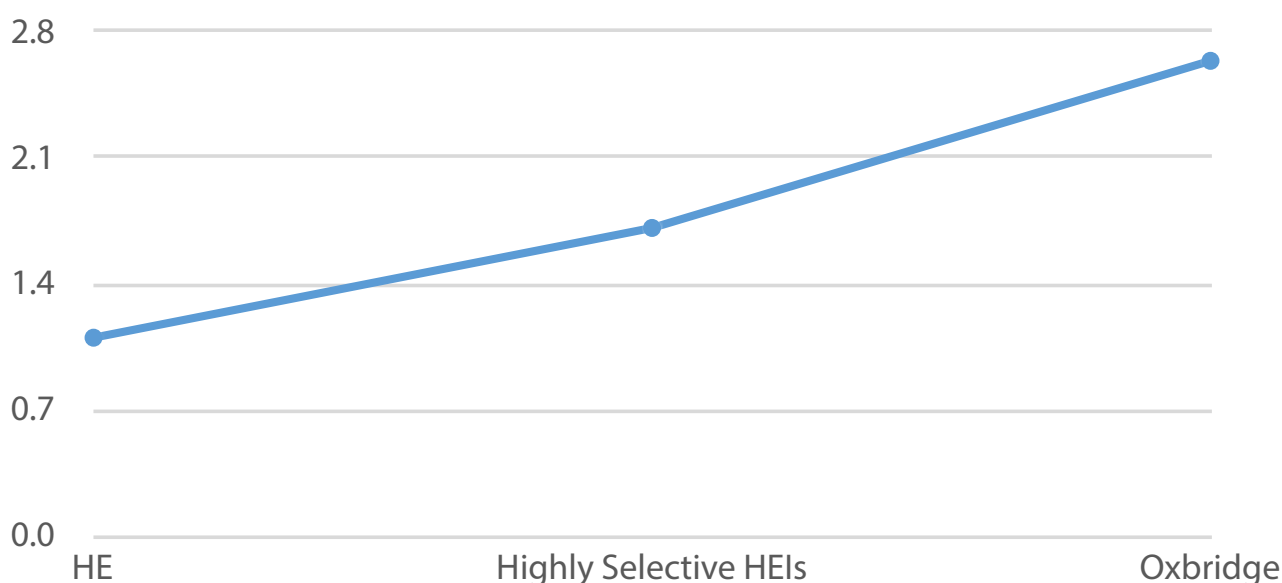
Figure 2: Progression to HE from selective and non-selective schools



This trend is displayed more clearly in Figure 3.

A reasonable interpretation of this is that comprehensive schools, catering as they do for a broad range of abilities, teach at a level which enables pupils with the potential to do so to progress to higher education but perform less well at extending highly academically able students to the standards required to progress to highly-selective higher education and (especially) to Oxbridge.

Figure 3: Relative performance of selective and non-selective systems



Clearly there will be exceptions to this, with some non-selective state schools catering well for the needs of high-ability students, but statistically speaking, the non-selective system sends significantly fewer pupils (proportionately) to such destinations than the selective system.

ii. Impact on social mobility

Unfortunately, the Department for Education was not willing to release data on the above statistics that would allow analysis by measures of disadvantage, such as POLAR Quintile, Free School Meals or income. However, we know from data presented earlier in this paper that:

- 45 per cent of pupils at grammar schools are from families with below median incomes;

- only 3 per cent of pupils at grammar schools are from families eligible for Free School Meals; and
- for pupils who attend grammar schools, the attainment gap between disadvantaged students and others is all but eliminated – 4.3 per cent compared to a national gap of 27.8 per cent.

The positive impact on social mobility caused by the significantly higher progression to highly-selective higher education is therefore likely to be considerable, particularly for pupils below the median income but not on Free School Meals. In non-selective areas, the vast majority of pupils who cannot afford private school – the bottom 92 per cent – face a significantly lower chance of progressing to highly-selective higher education or to Oxbridge than their counterparts with access to a grammar school.³¹ For pupils from lower income families the chance is reduced further, due to the large national attainment gap that exists in comprehensive schools.

Consider, by contrast, a high-ability pupil from a family below the median income. The pupil has a good chance of getting into grammar school (45 per cent of pupils at grammar schools coming from such backgrounds, as against the 'expected' 50 per cent). Once there, they will face almost no attainment gap. And, at the end of their time there, they have the same chance of progressing to highly-selective higher education and to Oxbridge as their highly advantaged counterparts at private schools. The grammar school / secondary modern's system's ability to (almost) level the playing field between students from below-median-income and those from the top 8 per cent who attend independent schools

stands in stark contrast to the differential levels of progression produced by the comprehensive system.

iii. Progression to Oxbridge

All data in the analysis below, unless otherwise stated, rely on data provided by the University of Cambridge for entrants in 2015, 2016 and 2017. The full data are provided at Annex One. Data for the University of Oxford is not available as Oxford's internal classification of schools uses 'academy' as a category in a case where a school is an academy, regardless of whether the academy operates a selective or non-selective admissions system. With 86 per cent of grammar schools and 67 per cent of other state schools being classed as academies, this renders an analysis by selectivity impossible.³² However, given the strong similarities in admissions patterns on matters such as state / private school background, POLAR and ethnicity between the two universities, it is likely the analysis below is broadly applicable to Oxford as well as Cambridge.³³

iv. Results

With 76 per cent of Local Authority Areas having no grammar schools, one might expect at least three-quarters of state-school Cambridge entrants to come from non-selective schools – perhaps more, given that many of the Local Authority Areas with grammar schools have only one or two in the whole county. This is not the case. Over the three years considered, 1,752 entrants (45%) came from the 163 grammar schools, compared to just 2,155 (55%) from the 1,849 non-selective schools.

Similar results apply across socio-economic classes and other measures of disadvantage. More than one-third of state-school entrants in POLAR quintile 1 came from grammar schools, as did more than one-third from POLAR quintile 2.

Astonishingly, 163 grammar schools sent over 30 per cent more BME entrants to Cambridge (486) than the nearly 2,000 non-selective schools combined (362). With more than three-quarters of the country having no grammar schools, these figures represent a shocking indictment of the comprehensive system.

v. Relative chance of attending

To fully assess the importance of these numbers, it is necessary to go below the headline data and look at the underlying populations. As before, we will consider the performance of selective and non-selective areas, considering the combined population of grammar and secondary modern schools on the one hand against the population of comprehensive schools on the other.

To consider the relative chance of a person attending Cambridge, we must consider the total number that progress to Cambridge against the total number in the underlying population. One advantage of this method is that it incorporates within it the relative chance of different categories of pupils having different likelihoods of getting into a grammar school. Grammar schools can only demonstrate positive performance for a category if

pupils from that category both successfully secure places at the grammar school and then progress to Cambridge. The formula is:

$$\text{Ratio of progression} = \left(\frac{\text{No Entrants Grammar}}{\text{Pop Grammar} + \text{Pop Sec Mod}} / \frac{\text{No Entrants Comp}}{\text{Pop Comp}} \right)$$

The results are shown in Table 3. Numbers greater than 1 indicate that a person from that category is more likely to progress to Cambridge if they live in a selective area; numbers lower than 1 indicate the opposite.

Table 3: Ratio of progression to Cambridge between selective system and comprehensive system

Category	Ratio of progression to Cambridge between selective areas and non-selective areas	Z Score³⁴	P Value
Total	3.4	28.9	< 0.00001
POLAR3 q1	2.3	4.0	0.000063
POLAR3 q2	2.3	5.7	< 0.00001
POLAR3 q3	3.1	9.6	< 0.00001
POLAR3 q4	3.8	15.2	< 0.00001
POLAR3 q5	3.7	21.4	< 0.00001
White	3.0	22.8	< 0.00001
BME	5.7	17.8	< 0.00001
Black	3.1	3.9	0.000096

It can be seen that having grammar schools in an area causes all categories of pupils to be significantly more likely to progress to Cambridge. In every case the difference between the rates of progression is statistically significant, with – even in the

category with the lowest Z score (a measure of how far away the result is from the 'expected' value if there was no difference between the two areas) – the probability of the results being due to chance is less than 1 in 10,000.

The differential is less for the most disadvantaged two quintiles than for the top two quintiles – perhaps because grammar schools take fewer pupils eligible for Free School Meals – but even someone from the most disadvantaged two quintiles is more than twice as likely to progress to Cambridge if they live in a selective area compared to if they live in a non-selective area. For some historically disadvantaged groups, in particular BME students, the relative chance is higher than the average, indicating that the presence of grammar schools is particularly beneficial to such groups.

vi. What is the counterfactual?

The question must be considered: what is the counterfactual? If the students were not attending grammar schools, might they still be just as academically successful?

Fortunately for the sake of analysis, because more than three-quarters of local authority areas do not have grammar schools, there is an existing 'control group'. It is for this reason that the analysis above did not simply compare grammar schools and comprehensives, but instead compared selective areas with non-selective areas – thereby taking into account factors such as the likelihood of students with different characteristics being admitted to grammar schools, as well as the progression from schools to different types of higher education.

We should expect the same underlying distribution of potential and ability in selective areas as in non-selective areas. Non-selective areas therefore answer our question as to the counterfactual – provided that for both areas, we consider all schools in that area, as the analysis does. The results show progression to highly selective higher education and to Oxbridge is lower when grammar schools are absent.

One potential confounder is the presence of independent schools, which have not been considered in our analysis. It is possible that there are some pupils who, in selective areas, attend grammar schools but who, were they to be in a non-selective area, would attend an independent school. This would result in the set of pupils in selective and non-selective areas not being so directly comparable, resulting in an apparent overperformance of selective areas.

Such an impact, however, would be primarily confined to the top quintiles of pupils: given that only 8 per cent of pupils attend independent schools, one would not expect this impact to be significant for the most disadvantaged two quintiles. Indeed, if we look at Table 4, one can see that the ratio is larger for the most advantaged two quintiles than for the two least advantaged quintiles, potentially indicating that this effect may be occurring.³⁵ However, even for the lowest quintile, where this confounder will have a minimal impact, pupils are more than twice as likely to progress to Cambridge from a selective area as a non-selective area.

vii. Conclusion

Taken as a whole, the selective system of grammar schools offers only marginal advantages compared to the non-selective system on progression to higher education as a whole, but the differential increases significantly when one considers progression to highly-selective higher education or, even more so, to Oxbridge, both which are strongly associated with progression to highly-skilled employment, higher earnings and access to the highest level of professional opportunities.³⁶ With 45 per cent of grammar school pupils coming from households with below median income, grammar schools therefore play a significant role in supporting social mobility, providing children from the lower half of the income spectrum with the same access to highly-selective higher education that is otherwise only achieved by the independent sector.

In particular with regards to access to Oxbridge, it is clear that the comprehensive system is systematically failing to support the highest ability pupils to achieve their potential. This holds true across all categories of pupils, with even pupils in the lowest POLAR quintile more than twice as likely to progress to Cambridge if they have access to a grammar school. While some pupils clearly do succeed under a comprehensive system – and some individual comprehensive schools do perform outstandingly – at a system-wide level, for some categories of historically disadvantaged pupils, such as BME pupils, grammar schools represent a lifeline of opportunity.

Maths schools

i. The data

As with academic attainment, a statistical treatment is not possible, given the limited number of pupils involved – the four cohorts (two at each school) together total fewer than 250 pupils. Nevertheless, headline measures can be considered.

Across both schools:

- 95 per cent of pupils progress to university;
- 68 per cent of pupils progress to a Russell Group university; and
- 17 per cent of pupils progress to Oxbridge.³⁷

Results do not differ noticeably between the two schools. These figures compare very favourably to national figures of 60 per cent, 26 per cent and 1 per cent for all pupils in English state schools, 74 per cent, 53 per cent and 4 per cent for pupils at grammar schools or 62 per cent, 48 per cent and 5 per cent for pupils at independent schools.³⁸

Considering disadvantaged students, figures were not significantly different from the whole population for progression to higher education as a whole. Considering progression to selective education, for students from the most disadvantaged two quintiles at each school:

- 58 per cent progressed to a Russell Group university
- 12 per cent progressed to Oxbridge.³⁹

Figures for Free School Meals pupils were only available from the KCL Maths School; however, of these, 80 per cent progressed to Russell Group universities and 10 per cent to Oxbridge.⁴⁰

Across both forms of disadvantage, progression to Russell Group universities and to Oxbridge is slightly lower than the average progression rates from the school. However, students from disadvantaged groups nevertheless progress to the Russell Group and to Oxbridge at much greater rates from Maths schools than from all other types of school.

By subject, 51 per cent of pupils progressed to study Maths and 44 per cent to study a STEM-related subject.⁴¹

ii. Conclusion

It is difficult to construct a counterfactual for these results. Given the high degree of selectivity, specialism and additional funding, one would expect progression to higher education, and to highly-selective universities, to be high.

Nevertheless, the results clearly bear out that the schools are succeeding in their mission, with pupils going on to study Maths and STEM subjects at Oxbridge and highly-selective universities at a much higher rate than from schools as a whole, and also perform better than grammar schools or independent schools (as one might expect, given the higher degree of academic selection). The schools also succeed in their subject aims, with over 90 per cent of pupils going on to study either Maths or STEM subjects. Finally, the schools draw a significant

section of their intake from the two most disadvantaged quintiles of disadvantage, and those in the lower two quintiles also see dramatically enhanced progression compared to the general population, indicating that the schools are successfully supporting exceptional pupils in Maths across a broad range of the population in the two places in which they operate.

4. Attitudes towards grammar schools

Views on grammar schools are unusually polarised. Consistently opposed to grammar schools are the majority of educationalists, including academics working in education, teachers' unions and educational charities, such as the Sutton Trust and the Education Policy Institute. However, polls of the public as a whole consistently show support for the concept, though the level of support varies depending on how the question is asked.⁴²

One of the most interesting surveys was carried out by YouGov in February 2015, which split the sample in half, asking the same question to both, but in two ways.⁴³ One half was asked:

Would you support or oppose re-introducing grammar schools across the whole of Great Britain?

The other half was asked the question in a way that explicitly reminded respondents that a grammar school system would involve 75 per cent of students going to secondary modern schools:

Would you support or oppose re-introducing the selective education system across the whole of Great Britain, where children take an exam at 11, with the top quarter of children going to grammar schools and the other three-quarters going to secondary modern schools?

For the first question, 53 per cent supported bringing back grammar schools with 20 per cent opposed. For the second,

the results were narrower, with only 46 per cent supporting bringing back grammar schools and 34 per cent opposed. Noticeably, while support fell when people had the full policy implications explained, there remained a decisive majority for bringing back a selective system of grammar schools and secondary moderns, with over one-third again more people supporting the proposition than opposing it.

Polls that seek views about specific policy questions also consistently show support for the retention and /or expansion of grammar schools. When asked whether they approve of allowing an existing grammar school to open a new school on a different location, 51 per cent approved, 18 per cent disapproved and 30 per cent didn't know.⁴⁴ Similarly, a poll on the Conservative Government's plan to open new grammar schools showed 38 per cent supported compared to 23 per cent opposed; this rose to 48 per cent in favour and only 17 per cent opposed if it were done in a way that 'ensured more people from poorer backgrounds can go to top-performing schools'.⁴⁵

Finally, these views extend, relatively consistently, across different socio-economic groups, though they vary by factors such as level of education, age and political affiliation.⁴⁶ Given that a consistent criticism of grammar schools by educationalists is that they are bad for the less well-off, it is perhaps surprising that a poll found that, among C2DE voters (manual workers and non-workers), more than twice as many people supported the Government's proposals to bring back grammar schools than opposed them.⁴⁷ Research for the National Social Attitudes Survey, which found one of

the narrowest margins of approval (53 per cent versus 47 per cent of those who answered the question) for bringing back grammar schools, found that support for selection was higher among those that had A-Levels but no degree than among either graduates or those with only GCSEs.⁴⁸

Can we explain the differences?

Why then, are educational experts so out of sync with the population as a whole? Grammar schools have positive and negative effects, including enhanced access to higher education and a dramatic narrowing of the class attainment gap for those that attend them, balanced by disadvantages such as a low attendance by those on Free School Meals. This trade-off is reflected in the views of the population as a whole, with both supporters and opponents, but not among educational experts. There is an obvious comparison to Brexit, where an evenly split population was unreflected by an overwhelmingly Remain 'establishment' and it may suggest a different axis of values – perhaps aligned as much with the 'open versus closed' or 'somewhere versus anywhere' axis, than with traditional right versus left politics.

Firstly, it is worth noting that educational experts are, by their nature, overwhelmingly from a very narrow segment of society: university educated and from the top two, if not the top, quintile in terms of POLAR or income. They are also likely to be unrepresentative politically: it is estimated that at the last election only 7 per cent of academics voted Conservative compared to 54 per cent who voted Labour.⁴⁹ None of this is to suggest that the views of experts are not genuinely

held; however, such discrepancies should make us alert to unconscious bias, just as we would, rightly, be cautious in the case of an all-white panel propounding upon how to improve the life chances of a BME community.⁵⁰

In considering the literature on grammar schools, there appear to be three main areas in which unconscious bias has historically operated.

- 1. Choice over what is looked at:** The negative aspects of grammar schools, such as the proportion of pupils on Free School Meals who are admitted, are overwhelmingly more studied than the positives. There are, for example, very few recent studies of the impact of selective schools on progression to higher education, despite some of the headline data having been in the public domain.
- 2. Groups considered:** The decision to focus almost exclusively on pupils on Free School Meals, as opposed to broader categories of disadvantage – such as pupils from below median-income households, first-in-family to attend higher education or most disadvantaged two POLAR quintiles – represents an unconscionable narrowing of the debate, particularly given that 45 per cent of grammar school students come from below median-income households. A system that takes the children of manual labourers and unskilled workers and supports them in reaching highly-selective higher education, and therefore to highly-skilled and professional jobs, is making a tremendous contribution to social mobility, even if questions are rightly asked about the proportion of the most disadvantaged pupils who

attend. These trade-offs should be discussed and set against each other, not – as they have been – largely ignored.

3. Failure to engage with opposing evidence: The Sutton Trust should be commended for producing a detailed study with findings diametrically opposed to its own policy stance, with a clear and unambiguous finding that grammar schools improve the academic performance of those that attend them while having no negative impact on pupils who attend other schools. This study is almost entirely ignored by educational experts who oppose grammar schools: rather than engaging with it, either to update their views or to critically examine and perhaps disagree with its methodology, it is instead airbrushed out of the debate. Similarly, many narratives continue to refer to grammar schools as only benefiting advantaged students, despite 45 per cent of pupils coming from households with below median income.

The focus of the grammar school debate solely on their performance for those on Free School Meals is perhaps the most concerning. While this group is of course of interest, it should not be the only group of interest. By considering the top 85 per cent of society as a single bloc, educational experts unconsciously elide the differences between themselves – highly educated, top quintile individuals – and the significantly less advantaged pupils from households below the median.

Members of the top quintile in society – measured either by income or by POLAR – will typically benefit from at least one, and quite possibly all three, of the following advantages:

- living in an area with higher performing non-grammar state schools;
- the ability to personally support their children's education through their own academic abilities, up to A-Level and beyond; and
- the ability to afford private school or personal tuition, if needed.

By contrast, the typical child from a family earning below the median income but not on Free School Meals may well have none of these advantages. Though their parents may care just as much about their children's education, they are far more dependent on their local school. For them, access to a grammar school may be the only reliable way to transform their children's life chances. With 45 per cent of pupils at grammar schools coming from below median income households, it is therefore unsurprising that support for grammar schools is widespread among such communities.

5. Conclusions and recommendations

Conclusions

Both grammar schools and Maths schools deliver improvements in access to higher education. These improvements are seen across all POLAR quintiles.

The advantage compared to the non-selective system is only marginal on progression to higher education as a whole, but the differential is much bigger for progression to highly-selective higher education or, even more, to Oxbridge, both of which are strongly associated with progression to highly-skilled employment, higher earnings and access to the highest level of professional opportunities. With 45 per cent of grammar school pupils coming from households with below median-income, grammar schools therefore play a significant role in supporting social mobility, providing children from the lower half of the income spectrum the same access to highly-selective higher education that is otherwise only achieved by the independent sector.

In particular with regards to access to Oxbridge, it is clear that the comprehensive system is systematically failing to support the highest-ability pupils to achieve their potential. Despite 76 per cent of Local Authority Areas containing no grammar schools, and many others containing only one or two, nearly 2,000 comprehensive schools send only slightly more pupils to Oxbridge than the 163 grammar schools. This disparity has been highlighted in the recent Sutton Trust Report, *Access to Advantage*.⁵¹

This differential holds true across all examined categories of pupils, with pupils in even the lowest POLAR quintile more than twice as likely to progress to Cambridge if they live in a selective area. While some pupils clearly do succeed – and some schools do perform well – under a comprehensive system, at a system-wide level, for some categories of historically disadvantaged pupils, such as BME pupils, the impact of living in a selective area is transformative.

While the limited data available on Maths schools means a detailed statistical treatment is not possible, both existing Maths schools appear to be fulfilling their mission, supporting rates of access to study STEM subjects at highly-selective universities, including Oxbridge, that are considerably above those achieved by the broader state or even independent sector. As with grammar schools, these higher rates of access are seen across all social categories.

There are further improvements that could be made by grammar schools to improve the proportion of pupils attending eligible for Free School Meals. But with 45 per cent of their pupils below the median income, grammar schools should not be considered as serving only the advantaged – and their near elimination of the attainment gap means less socially advantaged pupils are significantly more likely to reach their full potential than comparable pupils in non-selective schools. Similarly, Maths schools take 33 per cent of their pupils from the most disadvantaged two quintiles. In consequence, both forms of selective schooling offer significant opportunities for

highly-selective universities looking to increase the number of less advantaged students they admit and should be prioritised accordingly in access activity.

With regards to increasing the proportion of pupils eligible for Free School Meals attending selective schools, it is important that this is not done at the expense of the 45 per cent of pupils from below median incomes.⁵² One of the simplest ways in which this could be done is by increasing the number of grammar schools, particularly if these were focused in disadvantaged areas. The most entrenched forms of social selection – selection by house-price and the very high (tutor-driven) test results driven by a wide catchment area – are driven by the current scarcity of selective schools. Both could be significantly reduced by locating selective schools in disadvantaged areas and granting places to all who pass the test on a distance-from-school basis.

Finally, the views of educational experts on selective schooling are significantly out of step with public opinion, which consistently supports the expansion of grammar schools. This prevalence of a single viewpoint, combined with social homogeneity, appears likely to have resulted in a degree of unconscious bias driving the research agenda. Particular manifestations of this include the way the debate on social mobility has been narrowed to focus on those eligible for Free School Meals and a failure to consider the contribution that grammar schools play on enabling social mobility among less advantaged groups who are proportionately represented at grammar schools, such as pupils below median income or BME pupils. There is also a failure to engage properly with evidence

that challenges the academic consensus, such as the landmark Sutton Trust report of 2008.

Overall, selective schooling, whether in the form of grammar schools or specialist Maths schools, dramatically increases the likelihood of students in the most disadvantaged two quintiles, or below the median income, progressing to highly-selective universities, including Oxbridge. The fact that there are areas where selective schools could improve further with regards to admissions does not change the fact that they currently provide an unrivalled ladder of opportunity to those in the less advantaged half of society, offering them a route to access that is simply not systematically available to them under a comprehensive system.

Recommendations

- 1. The Government should consider expanding the Selective School Expansion Fund to establish grammar school branch sites in disadvantaged areas where this is supported by the Local Authority in that area.** Priority should be given to existing Opportunity Areas and other cold spots for social mobility. Places at new branch sites should be offered on a strict geographical basis to those who pass the test, to ensure that places are taken up by academically able students from the disadvantaged area.
- 2. Care should be taken by existing grammar schools that efforts to increase the number of pupils eligible for Free School Meals do not simply displace other students from below median-income households.** Outreach measures

and a tightening of the geographical catchment area are likely to be more successful at achieving this compared to directly discriminatory approaches such as the use of quotas.

- 3. The Government should continue with its plan to establish a new Maths school in every city, with at least 10 established by 2022.** If necessary, the existing Maths School Fund should be used to offer financial incentives to universities to take part in such initiatives.
- 4. Highly-selective universities should consider how they can more effectively include grammar schools and Maths schools in their access initiatives.** With grammar schools taking 45 per cent of pupils from below median-income households and Maths schools taking 33 per cent of pupils from the most disadvantaged two quintiles, selective schools offer significant potential for highly-selective universities looking to increase their admission of pupils from less advantaged backgrounds.
- 5. The Department for Education should encourage non-selective schools to improve their efforts at enabling access to highly-selective universities and Oxbridge.** Where appropriate, this might include partnering with grammar school head teachers and staff to share lessons on how to stretch pupils academically and to raise the aspirations of pupils from less advantaged background.
- 6. The Department for Education should work to improve the consistency of data across the sector,** working with HESA and other bodies to ensure that consistent measures

of varying means of disadvantage are available to compare school-side and university-side data.

- 7. The Department for Education should commission research to assess the impact of grammar schools on the social mobility of pupils from below median-income households.** To reduce the potential of unconscious bias, the research team, or its advisory panel, should be explicitly required to include at least one supporter and at least one opponent of grammar schools.

Annex One: University of Cambridge Data Table

Entrants by Entry Year, Category and School Type[‡]

Entry Year*	Category	Comprehensive	Grammar	Independent
2015	POLAR3 q1	29	17	16
	POLAR3 q2	58	43	30
	POLAR3 q3	100	81	90
	POLAR3 q4	166	156	179
	POLAR3 q5	360	302	659
	White	591	431	759
	BME	116	165	207
	Black	12	12	11
	First generation to HE	499	439	688
2016	POLAR3 q1	25	16	15
	POLAR3 q2	80	39	27
	POLAR3 q3	83	71	88
	POLAR3 q4	169	139	179
	POLAR3 q5	351	316	644
	White	594	422	724
	BME	113	161	227
	Black	14	12	7
	First generation to HE	491	422	694
2017	POLAR3 q1	48	22	20
	POLAR3 q2	74	32	36
	POLAR3 q3	112	65	79
	POLAR3 q4	165	156	176
	POLAR3 q5	335	297	608
	White	605	412	713
	BME	133	160	197
	Black	23	12	10
	First generation to HE	524	430	649

‡ Entrants refers to unconditional firm offerholders who did *not* subsequently withdraw, and who *did* come into residence, according to application records.

* Entry Year refers to the year of proposed or actual admission, irrespective of UCAS Apply cycle. For example, entry year 2015 refers to those accepted to start their course at the University in October 2015, regardless of when they applied.

Endnotes

- 1 486 from grammar schools compared with 382 from non-selective schools for the three years considered (2015, 2016, 2017).
- 2 As defined by Department for Education statistics.
- 3 POLAR is a proxy measure of disadvantage that classifies local areas into five quintiles based on the proportion of the young population that participates in higher education.
- 4 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693836/How to apply to set up a Maths school for 16 to 19 year olds.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693836/How_to_apply_to_set_up_a_Maths_school_for_16_to_19_year_old.pdf); <https://www.gov.uk/government/publications/selective-schools-expansion-fund>
- 5 <https://www.goodschoolsguide.co.uk/advice-service/about/education-consultant-in-kent>
- 6 <https://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN01398>
- 7 House of Commons Briefing Paper, *Grammar School Statistics*, March 2017
- 8 Map taken from BBC News website at <https://www.bbc.co.uk/news/education-34538222>
- 9 *Analysing Family Circumstances Technical Consultation Document*, Department for Education, April 2017
- 10 *Ibid*; *Grammar Schools and Social Mobility*, Education Policy Institute, December 2016
- 11 *Analysing Family Circumstances Technical Consultation Document*, Department for Education, April 2017
- 12 <https://www.telegraph.co.uk/news/uknews/4185426/Grammar-schools-top-for-added-value.html>; *Grammar Schools and Social Mobility*, Education Policy Institute, December 2016
- 13 The gap between disadvantaged pupils and the rest in grammar schools is 4.3 per cent, compared with a national gap of 27.8 percentage points. *Ibid*.

- 14 *Social selectivity of state schools and the impact of grammars*, Sutton Trust, 2008
- 15 <https://www.parliament.uk/written-questions-answers-statements/written-question/commons/2017-06-21/128>
- 16 <https://www.gov.uk/government/publications/selective-schools-expansion-fund-successful-applications-2018-to-2019>
- 17 <https://www.gov.uk/government/publications/selective-schools-expansion-fund>
- 18 <https://www.kcl.ac.uk/Mathsschool/about/school.aspx#ad-image-0;>
<https://www.gov.uk/government/publications/how-to-open-a-maths-school>
- 19 <https://dominiccummings.com/2017/01/23/specialists-Maths-schools-some-facts/>
- 20 Ibid
- 21 Data provided by the King's College London Mathematics School. ACORN is an alternative measure of social disadvantage that, like POLAR, splits into five Quintiles. It is the measure of disadvantage used by the King's College London Mathematics School.
- 22 Data provided by the Exeter Mathematics School
- 23 *Conservative Manifesto*, 2017
- 24 *Schools that Work for Everyone, Consultation Response*, Department for Education, March 2018
- 25 National table NA2: Student destinations after key stage 5 (A levels or other level 3 qualifications) by institution type
- 26 High quality as measured, for example, by the Teaching Excellence and Student Outcomes Framework (TEF).
- 27 All figures in this section taken from *Destinations of KS4 and KS5 Pupils*, Department for Education, October 2017
- 28 'Non-selective school in highly selective area'
- 29 'Non-selective school in all other areas'

- 30 Calculated using $Z = \frac{p_1 - p_2}{\sqrt{(p(1-p))(\frac{1}{n_1} + \frac{1}{n_2})}}$
- 31 Based on figures in National table NA2: Student destinations after key stage 5 (A levels or other level 3 qualifications) by institution type
- 32 House of Commons Briefing Paper, *Grammar School Statistics*, March 2017
- 33 *How Different is Oxbridge*, HEPI, 2018
- 34 Calculated using $Z = \frac{p_1 - p_2}{\sqrt{(p(1-p))(\frac{1}{n_1} + \frac{1}{n_2})}}$
- 35 Though it is not possible from the data available to distinguish this from other factors, such as the fact that pupils from upper quintiles may be more likely to be admitted to grammar schools.
- 36 For example High Court judges, top business executives, senior civil servants and similar.
- 37 All data taken from figures supplied by King's College London Mathematics School and Exeter University Mathematics School. As explained above, 'Russell Group' is an imperfect proxy for a good or selective university, given the existence of high quality and highly-selective universities, such as Bath and St Andrews, outside the Russell Group. It nevertheless serves as an indication of selectivity and is the measure available from these schools.
- 38 Destinations of KS4 and KS5 pupils 2016, Department for Education
- 39 Bottom two quintiles as measured by POLAR at Exeter and ACORN at KCL.
- 40 It should be noted that the population size being considered here is 10 pupils.
- 41 If a pupil studied 'Maths and X' it is classed as Maths. If they study 'STEM and X' it is classed as STEM.
- 42 <http://ukpollingreport.co.uk/blog/archives/9492>
- 43 <http://www.prospectmagazine.co.uk/blogs/peter-kellner/should-we-bring-back-grammar-schools>
- 44 https://d25d2506sfb94s.cloudfront.net/cumulus_uploads/document/gxvihxoixc/SundayTimesResults_150515_Website.pdf

- 45 <http://www.bmgresearch.co.uk/public-behind-may-grammar-schools/>
- 46 <http://natcen.ac.uk/media/1442622/grammar-school-selective-education-report-final.pdf>
- 47 <http://natcen.ac.uk/media/1442622/grammar-school-selective-education-report-final.pdf>
- 48 Question asked: 'Are you in favour of or opposed to the expansion of Grammar schools and of separate schools for people who don't pass the entrance exam (previously known as Secondary Moderns)?' http://www.natcen.ac.uk/media/1442623/grammar-school-selective-education-report_tables.pdf
- 49 <https://www.timeshighereducation.com/news/general-election-2017-54-per-cent-backing-for-labour-in-poll>
- 50 <http://edrith.co.uk/have-had-enough-of-experts-an-attempt-to-find-common-ground/>
- 51 <https://www.suttontrust.com/research-paper/access-to-advantage-university-admissions/>
- 52 For example, analysis of the Scottish Government's approach to supporting increased access from the bottom two quintiles to HE suggests that, while successful, this has been almost exclusively to the detriment of the third quintile, with the most advantage maintaining their position. <https://adventuresinevidence.com/2017/02/01/displacing-the-privileged-vs-squeezing-the-middle-a-bit-more-evidence/>

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Most previous research on grammar schools has focused narrowly on eligibility for Free School Meals as a measure of disadvantage. But with 45% of pupils at grammar schools coming from families with below median incomes, a broader consideration of the impact of grammar schools on social mobility is necessary. The evidence suggests that grammar schools can increase the likelihood of progression to highly-selective higher education for pupils from some traditionally disadvantaged groups, including pupils in the most disadvantaged two quintiles of social disadvantage and pupils with Black and Minority Ethnic backgrounds (BME).

This report considers the impact of grammar schools on progression to higher education, considering various groups of pupils and focusing particularly on progression to highly-selective education and to Oxbridge. It considers both the chance of getting into a grammar school and the relative rates of progression, to compare the opportunities of pupils in selective and non-selective areas. It also assesses the impact of the new specialist Maths schools and explores attitudes to grammar school expansion across different socio-economic classes.

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