SELECTIVE COMPREHENSIVES 2017

Admissions to high-attaining non-selective schools for disadvantaged pupils

Carl Cullinane, Jude Hillary, Joana Andrade and Stephen McNamara March 2017





CONTENTS

Foreword	2
Executive Summary	3
Recommendations	4
Background	5
Methodology	7
The social composition of top comprehensive schools	9
Socio-economic disadvantage and pupil intake	9
Socio-economic disadvantage and school catchment areas	10
Characteristics of top comprehensives	12
School type	12
Religious faith	14
Mixed or single sex schools	15
Index of deprivation	15
Region	17
Selectivity and house prices	18
Discussion	19
Appendix: A further note on methodology	20
Endnotes	22

FOREWORD

There is little doubt that England has a significant number of highly successful schools - independent, grammars and comprehensives. Who gets admitted to these schools matters, because getting into a high attaining school can be the key to getting on in life. These students are more likely to go to a top university and succeed in getting into the best jobs. Yet the bottom line remains, your chances of gaining a place in those schools depends on your parents' income.

In 2005 and 2006, the Sutton Trust conducted ground-breaking work looking at the social composition of the top 200 comprehensives in England. We revealed a group of high attaining schools that were more socially exclusive than the typical comprehensive and unrepresentative of the neighbourhoods around them. In 2013, we extended our research to the top 500, and found a similar picture, with those schools having half the national average number of poorer pupils.

Since then, the secondary school landscape has changed significantly. 80 per cent of all secondary schools are now their own admissions authorities, as opposed to admissions coordinated by the local authority; the Pupil Premium allocates dedicated funding to schools based on their intake of disadvantaged pupils; and, under Theresa May's government, the issue of increasing academic selection is back on the table for the first time in fifty years. This year also sees new measures introduced to rank school achievement - with a focus on the 'value-added' a school provides, rather than its overall level of attainment.

That is why we have decided to look once more at the social composition of England's top comprehensives. Again, we have looked at the top 500 schools, which make up nearly one in six state-funded secondary schools. We have also compared schools using the traditional $5 \, A^*$ -C measure at GCSE, along with the newer Progress 8 measure, which measures a school's value added. This change to the ranking system opens up interesting questions on defining quality in the school system. However, it remains to be seen whether this leads to changes in what parents see as good schools, or which schools enable their students to get to the best universities.

The picture we reveal, on the day hundreds of thousands of children across the country find out which secondary school they will be attending this September, remains worrying. There has been too little change since our last report: our top 500 have a proportion of children eligible for free school meals scarcely more than half the national average. More importantly, they also take fewer disadvantaged children than live in their own catchment areas.

However, the averages don't always tell the whole story. Within that group, one in ten comprehensives and academies score in the top 500, yet have a larger proportion of poorer pupils than live within their catchment. Their success shows what can be done by others. Moreover, there are signs that the best schools are gradually becoming more accessible, with Free School Meal rates in the top schools edging upwards in each successive report since the Sutton Trust began to look at this issue.

Much work remains to be done to ensure fair access for all children to the best schools. While the schools in this study, by and large, are not using forms of overt selection, they are, in effect, exercising covert selection. There is a tension between fair admissions and setting catchment areas entirely defined by proximity to a school. This favours those that can afford houses near the school. This is why we want to see more school use of ballots - where a proportion of places is allocated randomly – or banding across the range of abilities to achieve a genuinely balanced intake. Schools should use ballots or banding alongside catchment areas.

This would enable less advantaged students to get into highly successful schools, ensuring a genuine comprehensive system.

Sir Peter Lampl

Chairman of the Sutton Trust and of the Education Endowment Foundation

- The top performing 500 comprehensive schools in England, based on GCSE attainment, continue to be highly socially selective, taking just 9.4% of pupils eligible for Free School Meals (FSM), just over half the rate of the average comprehensive (17.2%).
- About half of this gap is due to the location of high attaining schools in catchment areas
 with lower numbers of disadvantaged pupils, but the rest is due to social selection in
 admissions occurring even within those neighbourhoods. 85% of schools in the top 500
 admit fewer FSM pupils than live in their catchment area, with over a quarter having a
 gap of five percentage points or more.
- Socially selective schools which control their own admissions policies such as converter academies, faith schools and single sex schools are all over-represented in the top 500 schools. Faith schools are among the most socially selective group of top schools, more than three times as selective as non-faith schools, and make up 33.4% of the list.
 Converter academies admit the lowest rate of disadvantaged pupils of the main school types, and comprise 63% of the top schools, compared to just 40% of all secondaries.
- There are indications of improvement in the composition of top schools, with the average 9.4% FSM rate up from 7.6% in 2013. In that year, 57% of the best schools had FSM rates lower than six per cent, but the number below that mark has fallen to 39%.
- The best schools measured by the Department for Education's new 'Progress 8' measure have FSM rates much closer to the national average (15.2%), and are less socially selective, with a third of these schools actually admitting more FSM pupils than their catchment area. Converter academies are less prevalent in this group, with more sponsored academies, foundation schools and community schools.
- Living in the catchment area of a top comprehensive school is associated with a house price 'premium' of around 20%. A typical house in the catchment area of a top 500 school costs £45,700 more than the average house in the same local authority. The best schools measured using Progress 8 are associated with a much lower premium of 8.3%, or £18,200.

- 1. More schools, particularly in urban areas, should take the opportunity where they are responsible for their own admissions to introduce random allocation (ballots) or banding to ensure that a wider mix of pupils has access to the most academically successful comprehensives. Reducing the emphasis on geographical proximity will allow fairer access to the best schools and limit socially divisive incentives for house buying and gaming the system. Ballots can ensure a wider mix of pupils have the possibility of attending the best schools, and banding can help to secure school intakes reflecting a wide range of ability. With school accountability measurement changing to a 'value added' approach, this reduces the incentives for admissions policies biased towards high prior attainment, and provides an opportunity for a change of emphasis in this regard.
- 2. Banding is most effective when a co-operative agreement can be reached between schools in an area. Local co-ordination could be achieved through a local admissions forum, or brokered through the local authority. Groups of schools should thus be encouraged to develop a shared approach to admissions.
- 3. Ballots can be used in conjunction with catchment areas to improve the diversity of intake. One way of using random allocation, while making sure that those who live very close to schools are not unduly disadvantaged, could be to introduce both 'inner' and 'outer' catchment areas. However, using either banding or ballots in isolation may be more effective than using both in combination.
- 4. Information availability and willingness to go the extra mile often has significant effects on access to better schools. The Government should find ways working with community groups, consumer agencies and businesses that are successful in working class communities to make it easier for all parents to access a range of information to facilitate informed choice-making over their children's education. This is particularly important with the implementation of the new accountability measures and imminent changes to GCSE grading.
- 5. It is particularly important that parents are aware not just of the school choices available, but of their rights to free transport to a choice of three schools within six miles of their home (or up to 15 miles for faith schools) if their child is eligible for Free School Meals.
- 6. Faith Schools need to look at their recruitment of disadvantaged pupils. The government has mooted lifting the restrictions on the proportion of pupils new faith schools can select on the basis of religious faith (currently 50%). As our report demonstrates, faith schools are already among the most socially selective of schools, and lifting this restriction is likely to make them even more unrepresentative of their local areas, reducing the number of good school places available to pupils across the socio-economic spectrum. The admissions process for faith schools should instead be opened up so that their admissions are fairer and begin to reflect their local population, while maintaining their ethos.

The best schools in England fall into three main groups: independent schools which only a small proportion of families can afford to attend, selecting based on a combination of ability and capacity to pay high fees; England's remaining 163 grammar schools, which are geographically unevenly spread, but officially select through ability on the 11 plus test; and the group of top performing comprehensive state schools, which, at least in theory, are open to all (subject to certain conditions of geographical proximity or religious faith). However, as a series of previous Sutton Trust reports has demonstrated, this ideal of openness regardless of parental income or family background is far from the case in reality. England's top comprehensive schools are, in practice, often highly socially selective, admitting much lower proportions of pupils from disadvantaged backgrounds than the average, and even than the profile of children in their immediate locality.

In 2006, the Sutton Trust published a report focusing on comprehensive schools, examining the extent to which pupils eligible for Free School Meals (FSM) attend these top-performing state schools.¹ It found that children eligible for Free School Meals were significantly underrepresented in the top 200 comprehensive schools, with only six per cent eligible for free school meals compared to 12 per cent in their neighbourhoods and 14 per cent nationally. This report had a significant impact, influencing the 2006 Education and Inspections Act and a range of policy developments such as a strengthened school admissions code.

The school landscape has continued to evolve since 2006. Of particular interest in this context are the increasing numbers of (non-selective) secondary schools which are their own admissions authorities, including converter and sponsored academies. 2011 also saw the introduction of the Pupil Premium, with schools receiving dedicated funding dependent on their numbers of disadvantaged pupils. In light of these developments, the Sutton Trust revisited the topic in 2013 to explore whether these developments had an impact on social selection.² That report compared the social composition of the top 500 comprehensives with their local councils, finding that 95 per cent took fewer pupils on free school meals than their locality. It also found that almost two-thirds of the top 500 comprehensives had gaps of five or more percentage points between their free school meal rate and that of their local council. The research also revealed that schools with their own admissions policies were over-represented in the top 500 compared to the same types of schools nationally. However, there were also positive indications that the rate of disadvantaged pupils at the very top schools had increased since 2006.

There have been further significant policy and landscape changes in the last few years. There are now almost 2,000 non-selective secondary academies and free schools, which are their own admissions authorities, twice the number in June 2013. Including voluntary aided and foundation schools, 80 per cent of comprehensives are their own admissions authorities, up from 60 per cent at the time of the last report.

The government has also introduced a raft of assessment changes, including the adoption of Professor Alison Wolf's recommendations from her review of vocational education.³ The government also introduced a new first entry policy, where a school only receives credit in official figures for a pupil's first attempt at a qualification. And from 2016, a new set of attainment measures, Progress 8 and Attainment 8, replaced the Department for Education's

previous 5 A* to C including English and Maths (5A*CEM) measure as the new headline performance measures for secondary schools, moving from an absolute threshold measure of attainment, to one based on the 'value added' by a school, compared to pupils' prior attainment on entry.⁴

This new report considers whether these developments have had an impact on social selection and sorting in comprehensive schools. It also looks at what impact using new headline measures has on the composition of the top 500 comprehensives, and considers the implications of the new accountability system for comprehensive recruitment in the future.

Secondary school admissions: Key points

- Most secondary schools are now responsible for their own admissions, but must do so
 within the rules of the School Admissions Code, as with those still maintained by local
 authorities.
- The most recent Code was published in 2014, and determines which factors schools are allowed to take into account in their admissions criteria when places are oversubscribed, while requiring that the allocation of school places is 'fair, clear and objective'.⁵
- Highest priority must be given to 'looked after children', including those who had been previously looked after.
- Permitted distances from the school must be clearly and precisely set out, and
 catchment areas must be designed so that they are 'reasonable'. Parents outside a
 catchment area are not prevented from expressing a preference for a school.
- Schools designated as having a religious character may take account of the religious background or activities of a child. New academies and free schools must reserve 50% of places for non-faith applicants.
- When oversubscribed, arrangements should not disadvantage children from a particular social or racial group, or those with a disability or special educational needs.
- Schools are allowed to select up to 10% of pupils on the basis of aptitude for sport, the performing or visual arts, languages, or in some cases information technology and design.
- Schools may designate a 'feeder' primary or middle school and give priority to pupils who have attended the feeder school.
- Since 2012, schools may give priority to disadvantaged children eligible for the Pupil Premium.
- Banding, where pupils sit a test and places are allocated equally between 'bands' of ability; and ballots, where places are allocated on the basis of a random lottery, are both allowed, and increasingly used by schools seeking to ensure the widest access and fairest procedures for entry.
- Local authorities are required to provide free school transport where a) a child's nearest school is greater than three miles away, or there is no safe walking route, or b) for children eligible for free school meals attending any school between 2 to 6 miles away, or 15 miles if on the basis of religious belief.⁶

The data in this report has been sourced from public Department for Education figures, in combination with the National Pupil Database, gathered and analysed for the Sutton Trust by the National Foundation for Educational Research.⁷

In 2016, the Department for Education implemented a new secondary school accountability system. The previous system was based on the proportion of pupils achieving at least 5 A* to C grades in Key Stage 4 level qualifications including English and mathematics. This was replaced by two new headline measures, Progress 8 and Attainment 8, with schools also judged on their performance in English and Maths.⁸ As this major reform has created a break in the time series, this report compares the make-up and social composition of the top 500 comprehensive schools based on both 5A*CEM and Progress 8. The construction of these lists is outlined in more detail in the Appendix at the end of this report.

As the first set of Progress 8 performance tables were just released in January 2017, and published tables through the period assessed in this study were based on the old measure, the 5A*CEM table will be the primary focus of this report. As indicated in Figure 1, there are substantial differences in the make-up of the two lists, with only 270 schools making the top 500 in both categories. Differences in the composition of the two lists are explored below, and are illustrative of the differences between a threshold measure and a progress measure.



Figure 1. Breakdown of top 500 schools, based on the 5A*CEM and Progress 8 measures

In order to assess the social composition of comprehensive schools, the number of pupils eligible for Free School Meals is once again used. However, to assess robustly the extent to which schools are not catering for less well-off pupils, one needs to compare the profile of the pupils admitted to the school with those who *could* have been admitted. To do this we create school catchment areas, based on detailed data across three years of admissions, looking at where schools have recruited from. We thus create a flexible and realistic picture of where

schools actually draw their pupils from, rather than using administrative boundaries or distance-based methods. While schools often recruit from outside what could be considered their main catchment neighbourhood, the catchment areas we have created comprise over 80% of pupils attending each school, rising to almost 85% excluding London, which is more fluid due to its population density.

To measure the social selectivity of a school, we then measure the proportion of FSM eligible pupils admitted in year 7 over three years between 2014 and 2016, and compare with the proportion of FSM eligible pupils in those years in the school's catchment area. We have further details on the methodology in the Appendix.

Socio-economic disadvantage and pupil intake

Table 1: Free School Meal Uptake at the top 500 schools

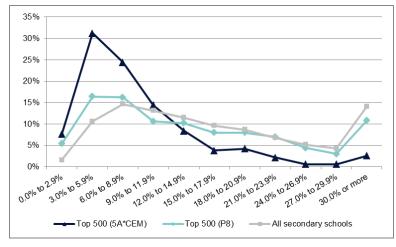
	Top 500 Comprehensives (5 A*CEM)	Top 500 Comprehensives (Progress 8)	All Secondary Schools
Average school FSM 9.4%		15.2%	17.2%

There are wide variations in the social composition of the top 500 schools based on the two measures, as shown in Table 1. There is a marked difference in the proportion of pupils from poorer backgrounds attending the top 500 comprehensives compared to the national average when based on the 5A*CEM measure, with FSM rates just over half of the national average in comprehensive schools. This is consistent with the Sutton Trust's last report in 2013, although the gap has narrowed slightly from 8.9 per cent in 2013 to 7.8 per cent in 2016.

However, the FSM gap narrows substantially to only a two percentage point difference for the top 500 based on the Progress 8 measure. This reflects the nature of Progress 8, which takes account of the prior attainment of pupils before they reach secondary school and assesses how they grow and improve. This rewards schools with more disadvantaged intakes which improve their pupils' achievement substantially. Conversely, 5A*CEM is a pure threshold measure, which favours schools which attract higher prior attainment pupils.

Of the top 500, 39% of schools (194 schools) have low FSM rates of below six per cent, compared to 12% of all schools. This difference in social composition is illustrated in Figure 2, with a significant bias towards the low end of the spectrum. Despite this disparity in FSM rates between schools in the top 500 and nationally, the latest data nonetheless shows a substantial reduction from 2013 when 57% of schools in the top 500 had FSM rates lower than six per cent.

Figure 2: Spread of secondary schools by FSM uptake



For an additional comparison, we also looked at the top 500 schools based on English Baccalaureate attainment. The English Baccalaureate (EBacc) performance measures were introduced in 2010 to capture pupils' performance across a range of subjects. Data is collected nationally on the percentage of pupils in each school who have achieved a grade C or better in English, mathematics, history or geography, the sciences and a language. The FSM rate for these schools was also substantially lower than the national average, at 11.3%, though this is a significant increase from the 7.2% figure in 2013, indicating progress with the take-up of the EBacc amongst a wider variety of schools. The rate for the top 500 comprehensives based on EBacc is also now a little higher than the corresponding figure for 5A*CEM, reversing the pattern in the previous report.

Table 2: FSM uptake at top 500 performing schools on English Baccalaureate

	Top 500 Comprehensives (EBacc)	All Secondary Schools
Average school FSM rate	11.3%	17.2%

Socio-economic disadvantage and school catchment areas

While top schools, on any measure, tend to have substantially lower rates of FSM eligibility than nationally, is this merely a reflection of their locality? Table 3 demonstrates that the best schools on 5A*CEM tend to be located in areas with lower FSM rates (12.8% compared to 17.5% for all schools), but this only accounts for only about half of the discrepancy between the FSM rates of the best schools and the average school. The best schools are located in less disadvantaged areas than average, but they are also socially selective even within those neighbourhoods.

Table 3: FSM rates in school catchment areas

	Top 500 Comprehensives (5 A*CEM)	Top 500 Comprehensives (Progress 8)	All Secondary Schools
Average FSM rate in school catchment	12.8%	17.0%	17.5%

Again, by comparison, the FSM rate for top 500 comprehensive school catchment areas based on the Progress 8 measure is very different. In fact it is only marginally lower than the national average, with the best schools on Progress 8 recruiting from neighbourhoods that look typical for secondary schools overall.

However, the average may be disguising large differences in both directions, so it is important to look at the spread of differences (Table 4). 85 per cent of schools in the top 500 comprehensives take a lower proportion of their FSM pupils than their school catchment areas. Over a quarter of these have gaps of five percentage points or more, which can be said to be unrepresentative of their school catchment area. This compares to about 13 per cent of other schools not in the top

500 nationally. Less than 15 per cent of schools in the top 500 took a higher proportion of FSM pupils than their catchment area.

Table 4: Spread of top 500 comprehensives by difference between school and catchment area FSM rate (5A*CEM)

FSM gap	Number of top 500	% of top 500	Number all secondary schools	% all secondary schools
Positive gap	74	14.8%	1378	44.2%
>0% to 4.9%	292	58.4%	1279	41.0%
5% to 9.9%	96	19.2%	365	11.7%
10% to 14.9%	29	5.8%	75	2.4%
15% to 19.9%	6	1.2%	15	0.5%
20% to 24.9%	2	0.4%	6	0.2%
25% or more	1	0.2%	1	0.0%

As this report is using detailed admissions data to create the neighbourhood comparisons, it is worth noting that these figures are not directly comparable to the 2013 report, which compared schools to their local council. However, applying the same method to the new data shows an average gap of 6 percentage points between top school FSM rates and their local authority (9.3% v 15.3%). This, consistent with the story above, is an improvement from the 7.6 percentage point gap in 2013 (7.6% v 15.2%). 50 schools in the top 500 now have a 'positive gap' compared to their local authority, twice as many as the 25 seen in 2013.

CHARACTERISTICS OF TOP COMPREHENSIVES

School Type

Table 5: Top 500 schools and FSM uptake by school type and admissions authority

Table 5. Top 500 Schools and TSM aptake by School type and admissions authority						
	On 5 A*CEM basis		On Progress 8 basis		All secondary schools	
	Percentage of top 500 comprehensives	Average school FSM rate for top 500 comprehensives	Percentage of top 500 comprehensives	Average school FSM rate for top 500 comprehensives	Percentage of all secondary schools	Average school FSM rate for all secondary schools
Own Admissions Autho	prities					
Voluntary aided schools	15%	10%	12%	13%	9%	16%
Foundation schools	3%	10%	6%	19%	9%	19%
City Technology Colleges	0.4%	5%	0.4%	5%	0.1%	5%
Sponsor-led academies	7%	19%	15%	27%	19%	26%
Converter academies	63%	8%	52%	11%	40%	13%
Free schools	0.8%	8%	1%	13%	4%	18%
Total	89%	9%	86%	15%	80%	17%
LA Controlled Admissi	ons					
Community schools	10%	9%	13%	18%	18%	18%
Voluntary controlled schools	0.2%	5%	1%	17%	1%	12%
Total	11%	9%	14%	18%	20%	17%
Grand Total	100%	9%	100%	15%	100%	17%

Table 5 reveals a number of interesting patterns when comparing the make-up of the top 500 comprehensives (5A*CEM) to all English secondary schools. Comparing the top 500 comprehensives which are their own admissions authorities – mainly academies and faith-based voluntary aided schools – to schools where admissions are still Local Authority (LA) maintained, both have an average FSM rate of nine per cent. This is nearly half of the corresponding average FSM rate for all secondary schools. This is broadly consistent with the findings from the 2013 report, although the average FSM rates for both the top 500 comprehensives and all secondary schools were slightly lower. The main changes since 2013 are in the composition of the top 500, with the proportion of converter academies rising from 37% to 63%, and most other categories down, in particular voluntary aided schools and foundation schools. Sponsored academies are up slightly from 5% to 7%, but the FSM intake of the best sponsored academies has increased from 13% to 19%. FSM intakes have generally increased slightly across the board.

Looking within admissions categories, all of the school types in both the own-admissions and local authority maintained categories have lower FSM rates in the top 500 comprehensives

(5A*CEM) compared to all secondaries. Converter academies, which account for 63 per cent of the schools, have a much higher representation in the top 500 compared to their proportion in the whole secondary population (40 per cent). They also have the lowest FSM rate among the main school types at eight per cent. This is five percentage points less than the average FSM rate for all converter academies in the secondary school population as a whole.

Sponsor-led academies make up 19 per cent of all secondary schools in scope, which makes them the second largest type of school. However, these are under-represented in the top 500 (5A*CEM), accounting for only seven per cent of this group. Interestingly, while the average FSM rate for sponsor-led academies in the top 500 is the highest of all the school types in scope, even this is still seven percentage points less than the corresponding rate of 26 per cent for all secondary sponsor-led academies.

The main difference for the best Progress 8 schools is that sponsor-led academies are more prevalent, making up 15 per cent, twice as many as in the 5A*CEM list. The average FSM rate for sponsor-led academies in the top 500 (Progress 8) is 27 per cent, which is part of the reason why the gap to the national average has considerably narrowed under this measure. However, the gaps in the average FSM rate for other main school types are also much closer to their comparative rates for all secondary schools. This is indicative of the 5A*CEM list containing a substantial group of schools in highly privileged neighbourhoods with high levels of social selectivity contributing towards their levels of attainment. Conversely there is a group of schools in the top Progress 8 group, but not in the 5A*CEM group which are located in more disadvantaged areas, with much lower levels of social selectivity, and intakes that look closely like the average school, yet they are performing excellently at driving the progress of their pupils.

The social selectivity of different school types is explored in Figure 3. Free Schools are the most socially selective compared to their catchment area, though there are just a handful in the top 500 schools. Community Schools (1.4% gap) and Foundation Schools (1.6% gap) are the least socially selective.

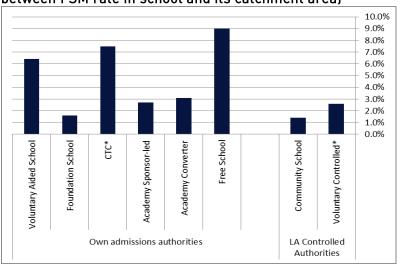


Figure 3: Social selectivity of top 500 schools (5A*CEM) by school type (% difference between FSM rate in school and its catchment area)

Notes: *= two or fewer schools in list

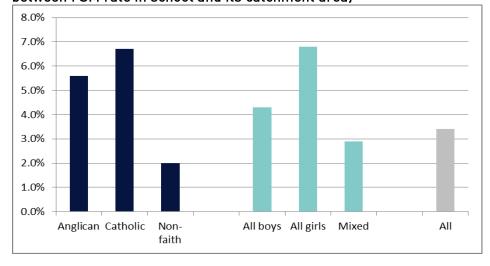
Table 6: Top 500 schools and FSM uptake by religious status

School type	% of top 500	Average school FSM rate top 500	% all secondary schools	Average school FSM rate all secondary schools
Faith school	33.4%	9.1%	19.7%	16.0%
Non-Faith School	66.6%	9.5%	80.3%	17.5%

Historically, faith schools were usually voluntary aided or voluntary controlled schools. However, an increasing number of academies now have a religious affiliation. Faith schools have also been traditionally associated with stronger academic performance. Indeed, around a third of the top 500 schools (5A*CEM) are faith-based, compared with a fifth of all secondary schools, so they are substantially over-represented. However, they do somewhat less well in the list of best schools for progress, in line with recent research in the area. While faith schools in the top 500 have only marginally lower average FSM intakes than those with no religious affiliation, if you compare faith schools with their catchment area, a much different picture emerges (Figure 4).

Faith schools are among the most socially selective category of top school, more than three times as socially selective compared to their catchment area than non-faith schools, with an average 6% FSM gap, compared to 2%. Of the faith schools in the top 500, three fifths are Roman Catholic, with slightly less than a third Anglican. While Anglican schools nationally are significantly less socially selective than Catholic schools, within the best schools, they have similar gaps (5.7% for Anglican and 6.7% for Catholic). As they recruit a significant proportion of pupils on a religious basis, they typically draw substantially from outside their neighbourhood catchment areas, particularly in the case of Catholic schools.

Figure 4: Social selectivity of top 500 schools (5A*CEM) by school type (% difference between FSM rate in school and its catchment area)



Mixed or single sex schools

Table 7: Top 500 schools and FSM uptake by sex selection

School type	% of top 500	Average school FSM rate top 500	% all secondary schools	Average school FSM rate all secondary schools
Mixed	82.6%	9.0%	92.0%	17.2%
Single-sex	17.4%	10.9%	8.0%	17.0%

Schools within the top 500 comprehensives are less likely to be co-educational than schools nationally. Single-sex schools are more than twice as likely to be included in the list, comprising 17 per cent of the top 500 schools, compared to the whole secondary school population where they make up just eight per cent of the stock.

There are large gaps in average FSM rates for both single-sex and mixed schools in the top 500 comprehensives (5A*CEM) compared to all schools, with the gap being slightly larger for mixed schools. This is consistent with findings from the previous 2013 report. Single sex schools in the top 500 have a 10.9 per cent average FSM intake, compared with just nine per cent for mixed.

Girls' schools make up twice the number of boys' schools in the top 500, and are also significantly more socially selective, more than twice the level of mixed schools (gaps of 6.8% compared to 2.9%). Boys' schools have an average gap of 4.3%.

Index of deprivation

Table 8: Top 500 schools and FSM uptake by deprivation score of school

FSM gap	% of top 500	Average FSM rate for top 500	% of all secondary schools	Average FSM rate all secondary schools
Quintile 1 (least deprived)	45.2%	5.2%	20%	6.3%
Quintile 2	23.2%	8.1%	20%	10.4%
Quintile 3	15.2%	10.6%	20%	14.9%
Quintile 4	10.2%	16.7%	20%	21.2%
Quintile 5 (most deprived)	6.2%	29%	20%	33.2%

While thus far we have used Free School Meal eligibility as a measure of the social make-up of a school, this doesn't capture the full range of the socio-economic spectrum. The Income Deprivation Affecting Children Index (IDACI) can also be used to estimate the socio-economic make up of an area, based on levels of income deprivation. ¹¹ Each school is given a rating based on the IDACI scores of their pupil intake, and divided into five quintiles indicating their overall levels of deprivation. This measure too reinforces the story established above. Table 8 shows the distribution of the top 500 comprehensives across IDACI quintile, with quintile 1 comprising schools with the lowest 20 per cent of school IDACI ratings (least deprived) and quintile 5 containing schools with the highest 20 per cent of scores (most deprived). This shows that nearly half of the schools in the top 500 are in the least deprived quintile, whereas only six per cent are in the most deprived quintile of intakes. This demonstrates a particular concentration of top performing schools with pupil intakes at the very top of the socio-economic spectrum. The average FSM rates for the top 500 comprehensives by quintile are also typically lower than the corresponding rates for all secondary schools, with a wider gap for the bottom three quintiles compared to the top.

The distribution of the top 500 comprehensives when based on the Progress 8 measure is more even and broadly in line with that of all secondary schools. Some 27 per cent of the top 500 are in quintile 1, which is much lower than for the 5A*CEM comparator group. The average FSM rates across quintiles are also lower than those for all secondaries, albeit the gap is narrower.

<u>Region</u>

Table 9: Top 500 schools and FSM uptake by region

Region	% of top 500	Average school FSM rate top 500	% all secondary schools	Average school FSM rate all secondary schools
East Midlands	6.2%	7.4%	8.5%	15.8%
East of England	14.0%	6.2%	12.1%	12.9%
London	21.0%	15.6%	14.2%	23.2%
North East	5.4%	11.2%	5.8%	19.7%
North West	14.2%	8.1%	13.6%	19.5%
South East	14.6%	5.8%	13.9%	12.4%
South West	8.8%	7.5%	9.8%	13.7%
West Midlands	7.6%	9.5%	12.5%	19.0%
Yorkshire and the Humber	8.2%	9.4%	9.6%	18.3%

London is, by a margin, the best represented region in both lists of the Top 500 schools, with almost a quarter of its comprehensives in the 5A*CEM list, and staggeringly, over a third of its schools in the best Progress 8 list. This is reflective of a group of London schools with high FSM intakes and strong performance on progressing their pupils, and further evidence of the impact of reforms in the capital's schools. The East Midlands, and particularly the West Midlands, are under-represented among the best schools. However, social selectivity also varies regionally, with London schools among the most selective, with an average 4.4% FSM gap between school intake and their catchment (partly due to their high FSM rates in catchment areas, and higher mobility across catchments). The North East and North West see the highest levels of social selectivity, with FSM gaps of 4.9% and 4.3% respectively.

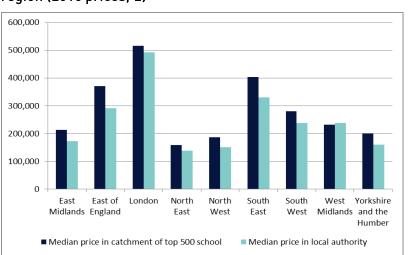


Figure 5: Median house prices in top 500 school catchment areas and local authorities, by region (2016 prices, £)

The social selectivity of a school can be conceived as a combination of multiple factors: baseline levels of social inequality in society and its geographic distribution, governmental and school-level decision making on admission policies, and parental decision making on which schools to apply for. One way of tracking the behaviour of parents within the constraints of the school admissions system is through their decisions of where to live. In surveys, substantial proportions of parents regularly indicate willingness to buy or rent a property based on a school catchment area.¹² This is borne out in their behaviour, with a widespread international literature demonstrating a link between school quality and house prices.¹³ This relationship is well established, with consequent negative effects for the social composition of schools perceived to be of the highest quality.

This is reflected in our findings, with the catchment area of a top 500 school attracting a premium of around 20% (£45,700 in 2016 prices) compared to house prices elsewhere in the same local authority. This varies by region, as can be seen in Figure 5, with the East of England and Yorkshire and the Humber showing the largest gaps. House prices depend on many things, including the quality of local housing stock, the type of housing on the market and overall levels of demand, as well as local amenities. School quality is only one of many factors (including potentially overlapping primary school catchment areas), but the results here are illustrative.

One question that arises in the literature is what aspect of school quality parents are willing to pay for - whether it is the 'value added' a school provides, or the absolute level of test scores at a school, which may reflect the composition of pupils as much as the quality of teaching or facilities. ¹⁴ The shift in headline school performance tables from the absolute 5A*CEM measure, to the value-added measure of Progress 8 will provide a potentially interesting natural experiment in this regard. Currently, the best Progress 8 schools also attract a premium, 8.4% (£18,200), but this is substantially lower than the schools with highest attainment. It remains to be seen whether the change in headline performance measures will have an effect on parental behaviour and conceptions of what makes the 'best' schools.

While there are positive signs of increased numbers of disadvantaged pupils attending top schools since the Sutton Trust began looking at this issue over ten years ago, England's best performing schools remain significantly socially selective. They tend to be located in areas with lower deprivation than average, but they also tend to be socially selective even within these neighbourhoods. This is a complex consequence of government policy, school decision-making and parental behaviour. While better-off parents will seek to gain advantages where they can, school admissions policies can contribute to a more balanced and representative intake, including the use of ballots and banding procedures explored in detail by the Sutton Trust's Banding and Ballots (2014). 15

House buyers willing and able to pay a substantial premium to live in the catchment area of a top school are likely, over time, to lower the accessibility of the school to those from disadvantaged backgrounds. This undermines the nature of the comprehensive system, and introduces an element of de facto selection based on ability to pay. It has been argued that this de facto selection provides a good argument for expansion of the grammar school system. However, our research has consistently shown that grammars are even more socially, as well as academically selective, with extremely low Free School Meal rates of 2.5%. ¹⁶ Instead, a reduced emphasis on geographical proximity, along with the right admissions policies (backed by outreach and transport access), can reduce socially harmful property-based incentives, and open up access to the best state schools, rather than adding extra barriers.

The introduction of the Progress 8 measure is also significant. With school accountability measurement changing to a 'value added' approach, this reduces incentives towards school admissions policies biased towards intakes with high prior attainment, providing an opportunity for change. As we have seen, there are substantial differences in the profile of the top performing schools using the new measure and the traditional 5A*CEM measure, with the best Progress 8 schools having profiles of disadvantage much closer to the average comprehensive. Top Progress 8 schools are in fact half as socially selective as top 5A*CEM schools.

However, changes to the measurement of school performance should not lead to complacency that the problem of social selectivity has been solved. While good progress is crucial for pupils, particularly from disadvantaged backgrounds, it is their absolute levels of attainment which will open up opportunities for them at university and beyond. The 270 schools in our lists which excel in terms of both attainment and progress are thus crucial for social mobility. Those schools continue to be socially selective, with Free School Meal rates of 10.2% and an average 3.5% FSM gap compared to their catchment area. It is thus imperative that the government, and schools themselves, continue to reduce social bias at the top of the comprehensive admissions system and increase access for all.

The top 500 rankings

The rankings of the top schools were produced using publicly available data from the Department for Education's (DfE) 'Compare School and College Performance' tool, along with the National Pupil Database. These were compiled on the following bases:

- The percentage of pupils with five GCSEs or equivalent at grades A*-C including English and maths (5A*CEM). From 2006 to 2015, this was the main basis on which school league tables were compiled.
- The school's Progress 8 score. This became the main headline measure used in the school league tables from 2016.

The report also briefly considers the differences using 'EBacc' performance measures.

When producing the ranks, there were a number of schools with tied data spanning the 500th position of the top 500. For schools on the top 500 5A*CEM list, schools with the same 5A*CEM value were ranked according to their Progress 8 score and then Attainment 8 score to decide which should be included in the top 500 scores. For the Progress 8 list, tied schools were ranked according to their Attainment 8 score, then if necessary by their 5A*CEM score.

For each of the rankings, we have excluded a small number of schools where there were either no pupils in the intake year for the school or where the catchment area could not be constructed.

Schools in scope

The types of secondary schools included within scope of this analysis are those with a comprehensive admissions policy. These comprise:

- Own admissions authorities: voluntary aided schools, foundation schools, city technology colleges, sponsor-led academies, converter academies, and free schools.
- Local authority controlled admissions: community schools and voluntary controlled schools.

Alternative provision and special schools have been excluded, as have grammar schools because they are selective. University Technical Colleges and studio schools are also excluded as these take pupils from 14 to 19. Independent schools are out of scope of this project.

School catchment areas

School catchment areas were created for schools in scope as part of the analysis. They were formed by combining lower layer super output areas (LSOAs) where at least five of its pupils across three intake cohorts attended the school. Pupil data from DfE's school census for the period 2014 to 2016 was obtained for this purpose.

For most schools which had a lower starting age of 11, year 7 pupil data was used. However, for a small number where the low starting age was 13 or 14, year 9 or year 10 intake data respectively was used.

For some school types such as free schools or schools that had merged or split, it was not possible to use a full three years of school intake data. Where it was only possible to use two years of data, the pupil number threshold for including an LSOA within school catchment area was reduced to 4 or more. Where it was only possible to use one year of data, the pupil number threshold was reduced to 3 or more.

Free school meals (FSM)

The DfE publish two measures of FSM. The first, which identifies any pupils who have been registered for FSM at any point in the last six years, is combined with other disadvantaged groups and used for targeting pupil premium funding.

The second FSM definition measures the proportion of pupils who are eligible for FSM at the time of the School Census. This is the measure that has been used in this analysis.

House prices

The housing price figures in the report were generated using publicly available Land Registry 'Price Paid' data for 2014-2016, a comprehensive data source for housing transactions.

This database was matched to school catchment areas and local authorities using LSOA, and the median house price calculated, weighted by the number of house sales and scaled to 2016 prices using the UK House Price Index.

⁵ DfE (2014b). *School Admissions Code*. Retrieved February 23, 2017 from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/389388/School_Admissions Code 2014 - 19 Dec.pdf

⁶ DfE note on free transport entitlement. Retrieved February 23, 2017 from: https://www.gov.uk/free-school-transport

 7 At NFER, Jude Hillary, Joana Andrade and Stephen McNamara all contributed to the analysis and writing of this report.

⁸ Progress 8 captures the progress a pupil makes from the end of primary school to the end of secondary school, while Attainment 8 measures the achievement of a pupil across 8 qualifications.

⁹ See also, Allen, R. (2016). *Changing the Subject*. London: Sutton Trust.

¹⁰ Andrews, J. and Johnes, R. (2016) Faith Schools, Pupil Performance and Social Selection. London: Education Policy Institute.

¹¹ Smithers, A. and Robinson, P. (2010) *Worlds Apart: Social Variation Among Schools*. London: Sutton Trust.

¹² The Guardian (2015). "One in four families move house to secure school place". Retrieved February 22, 2017 from: https://www.theguardian.com/education/2015/sep/02/one-in-four-families-move-house-to-secure-school-place-survey

¹³ Black, S. and Machin, S. (2011). "Housing Valuations of School Performance", in *Handbook of the Economics of Education, Volume 3.* Oxford: Elsevier.

¹⁴ Gibbons, S., Machin, S., and Silva, O. (2013). "Valuing school quality using boundary discontinuities", *Journal of Urban Economics*, 75, pp 15-28.

¹⁵ Noden, P., West, A., and Hund, A. (2014) *Banding and Ballots*. London: Sutton Trust.

¹⁶ Cullinane, C. (2016). *Gaps in Grammar*. London: Sutton Trust.

Cribb, J., Sibieta, L. and Vignoles, A. (2003). *Entry into Grammar Schools in England*. London: Sutton Trust.

¹ Sutton Trust (2006). *The Social Composition of Top Comprehensive Schools*. London: Sutton Trust.

² Sutton Trust (2013). *Selective Comprehensives*. London: Sutton Trust.

³ Wolf, A. (2011) Review of Vocational Education. London: DfE.

⁴ DfE (2014a). *Factsheet: Progress 8 Measure*. Retrieved February 23, 2017 from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/285990/P8_factsheet.pdf