Grammar schools: A brief summary of the arguments

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Is academic selection at 11 a beneficial practice or not? It seems a straightforward question, but the debate around answers is contentious. Before approaching it, two aspects of the issue need to be addressed: first, the notion of scale – academic selection has different effects for different groups at different levels of the education system – and second, what we mean by ‘beneficial’.

In the UK, questions over the benefits or otherwise of grammar schools operate at three main scales: the systemic, the institutional and the individual. Do grammar schools benefit schooling overall? Do grammar schools benefit those who attend grammar schools? Do grammar schools benefit certain groups within grammar schools?

In turn, ‘benefit’ is usually defined through two conceptual approaches: the moral and the instrumental. Under the first, one might ask: is it morally correct to separate children at 11, potentially expediting one group’s chances of success at the expense of another? Under the second: do those who attend grammar schools achieve higher results at GCSE than those who attend non-selective schools?

In this review, a brief overview of arguments for and against grammar schools is provided, framed by these three scales and two conceptual approaches. A broader discussion is then undertaken of previous work in the area, summarised at the end. This review is an update of the Sutton Trust’s previous report, Evidence on the Effects of Selective Educational Systems, to which it is indebted.

Arguments in favour of grammar schools

Moral justifications for grammar schools include that: selection already occurs at school by postcode, which is less fair than academic selection; the grammar system provides good schools for the poorest, to which they might not otherwise have access; grammar schools provide greater social mixing, because they offer an acceptable alternative to private schools for higher socio-economic classes; the education system benefits as a whole by possessing some excellent schools, because they set a positive example to others.

Instrumental justifications for grammar schools are more strictly dependent on the perceived academic merits of grammar schools, albeit often still couched in moral terms. Thus: different pupils with different abilities need different curricula; teaching is more effective across narrow, rather than broad ability ranges; the creation of an academic elite should be a priority for society, because such a group is needed to fill the most skilled jobs (scientists, doctors, engineers, etc.). And underpinning all of these: grammar schools achieve higher academic results than non-selective schools.
Arguments against grammar schools

Moral arguments against grammar schools are equally numerous and include: grammar schools are socially divisive, in that they disproportionately channel one group into career success at the expense of another (analysis has shown that grammar school students are overrepresented at the top of the professions, beyond what their academic attainment might explain); the creation of an academic elite should not be the main purpose of the education system, it should be helping the disadvantaged; on the basis of a single exam, young children are deemed successes or failures, with the latter potentially suffering lasting confidence penalties as a result.4

Instrumental arguments against grammar schools often concede that grammar schools appear to benefit grammar school pupils, but suggest that selection fails to benefit schooling overall. Thus: grammar schools, by ‘creaming’ the best talent away from the non-selective sector, create ‘sink schools’ in the same, performing more poorly than they would have been otherwise; selection tests are always inadequate, because chance is an inescapable factor and wealthier parents can afford preparatory tutors; achievement at 11 is not always a good predictor of later achievement, as different students mature at different rates; primary curricula are adversely affected, as year 6 children spend substantial time preparing for entrance exams.5

Analysing the instrumental discussion of grammar schools

As with any moral argument, moral debates around grammar schools cannot be resolved with a simple ‘yes’ or ‘no’. In addition, moral arguments around grammar schools are almost always informed by beliefs about how grammar schools affect pupil attainment. Instrumental arguments, at least in concept, would seem to lend themselves better to a definitive proof or disproof. This section provides an overview of literature that has attempted to answer the broad question: do grammar schools benefit academic attainment?

The majority of instrumental analysis focuses on the institutional level. While these often look at schools across the whole country, the purpose of their analysis is to determine whether selective or non-selective schools perform better, not always to determine, necessarily, whether one or other of these systems performs better overall. (Of course, this is primarily because the counterfactual is unavailable, although some analyses have explored what they deem appropriate ‘natural experiments’ and others have made international comparison. The example of Northern Ireland is discussed below.)6

In most instrumental analyses, value-added and progress measures are focused upon, as you might expect. The raw attainment levels between grammar schools and non-selective schools are sizeable, of course, so the principal way to assess the performance of grammar schools vis-à-vis non-selective schools is by how much they improve the attainment of their students. Because students, by definition, enter with different average levels of prior attainment, ‘borderline’ students are often considered in such analyses – in other words, students across the two school types whose prior performance is as close as possible.

One of the main data sources for the analysis of grammar school effects is the 1958 National Child Development Study (NCDS).7 The study follows the lives of over 17,000 people born in England, Scotland and Wales in that year, collecting information on educational development, economic circumstance and employment, amongst other areas.8 Steedman, in one of the first analyses of the NCDS, found that once prior attainment and social background were controlled for, there was no difference between selective and non-selective students’ progress; a conclusion reiterated three years later.9 Other analysis of the same dataset has found similar results.10
have no positive effect on the progress of their pupils, once such factors are considered, is the conclusion of other select research, using alternative approaches.\textsuperscript{11}

However, while no consensus exists, the majority of work on attainment and grammar schools suggests that they have a positive, albeit marginal effect on at least some of their students’ performance, with very few suggesting the reverse for any sub-groups. For borderline and equivalent pupils, Schagen and Schagen, Prais, Atkinson et al., Levacic and Marsh, and Clark suggest that grammar school students appear to perform better, across differing measures.\textsuperscript{12} Each of these analyses is different, with particular methodological imperatives. Other work, looking at the system level, has found that superior results are found in Local Authorities with a higher proportion of grammar schools.\textsuperscript{13}

Northern Ireland has also been highlighted by proponents of grammar schools on instrumental grounds. In Northern Ireland, 60% of students transferring to secondary education enter non-grammar schools, 40% grammar schools.\textsuperscript{14} Policy recommendations since 2008 have stated that priority should be given to FSM pupils, and in the last five years the proportion of such students at grammars has risen from 5.6\% to 11.8\%.\textsuperscript{15} Across this period, the proportion of pupils receiving five or more GCSEs [A*-C], including English and maths, has increased from 60.1\% in 2010/11 to 67.0\% in 2014/15.\textsuperscript{16} In 2014/15, 38.7\% of FSM pupils achieved the same measure. These are higher figures than in England.

However, the Northern Ireland Assembly research service has stated that, “the high results among the top performers in Northern Ireland mask a long tail of underachievement.”\textsuperscript{17} And there are concerns about the demographics of this tail. According to the OECD, who also suggest that the proportion and performance of high attainers in Northern Ireland is in keeping with the OECD average, “There are clear structural challenges to equity at the post-primary level, with a high concentration of less socially and economically advantaged students in the non-selective post-primary schools [which perform more poorly].” In 2014/15, 95\% of students received five or more GCSEs [A*-C], including English and maths, in grammar schools, falling to 46.8\% in non-grammars.\textsuperscript{18} Purvis et al. suggest that while academic selection in Northern Ireland may not cause social division, it does contribute to the same.\textsuperscript{19}

For Ofsted, the data is unequivocal (although it is unclear if controls have been applied for the socio-economic status of pupils and other factors, as above). Ofsted state that, “Students in grammar schools are attaining higher grades and making considerably more progress compared to similar students in other schools”.\textsuperscript{20} “The value added data”, they continue, “also indicate that pupils in grammar schools make considerably more progress than pupils with similar starting points across all other schools.”\textsuperscript{21} By way of explanation, Ofsted speculate that,

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competition between students may be driving up performance; the students may also contribute to the learning environment; an orderly classroom created by students looking to learn is likely to reduce poor behaviour and maximise learning opportunities; teaching may also be more effective; teachers recruited to grammar schools need to be of sufficiently high calibre to ensure instruction meets the needs of a very able intake and grammar schools are likely to attract more good teachers because of the teaching environment and finally, high attaining students in grammar schools could also receive more support from home or additional tuition.\textsuperscript{22}
\end{quote}

At the same time, Ofsted note that such benefits do not extend to all. “In 2014 there were no lower attaining students on entry in all but two grammar schools. Nearly all were high attainers and the eligible free school meal cohort was well below the national level at just under 3\%.”\textsuperscript{23}
Little analysis has considered the achievement of disadvantaged pupils in grammar schools, specifically. One exception is Coe et al., who found that, “pupils eligible for FSM appear to suffer marginally less educational disadvantage if they attend grammar schools. The difference is equivalent to about one-eighth of a GCSE grade; although this is statistically significant, it is certainly not large.”24 Another is the Education Policy Institute, who placed the figure recently at around half a grade higher in each of eight GCSEs.25 However, “It also seems possible that FSM pupils in grammar schools may typically be quite different from FSM pupils as a whole in ways that are not well measured, so we should be cautious about interpreting this as a strong endorsement of grammar schools.”26 The tiny proportion of disadvantaged pupils attending grammar schools—a trend which is unlikely to be completely explained by the correlation between disadvantage and poor primary attainment—means that this small benefit is available to very few, leading to the moral arguments around selective education.

**Analysing the moral discussion of grammar schools**

If grammar schools create a high-functioning academic elite, but depress the results for others, is this to the benefit of society or not? In an educational system of academic streaming, are grammar schools a logical extension of such policy, or an overextension? If grammar schools ‘cream’ the highest-achieving pupils from non-selective schools, do the latter fall farther than the former ascend, with a net loss to society, or does selective education ensure that all students are provided with teaching that best suits them? Much of the academic work on selective education, as one might expect, has focused on the instrumental cases for and against grammar schools, but implicit in many of these are moral judgements about the desirability of the grammar school system.

According to Burgess, Dickson and Macmillan, in a historical analysis of grammar schools, selective education systems lead to greater wage inequality in the wider economy.27 Explaining how grammar schools contribute to this, the authors suggest that, “the main mechanism generating greater inequality is the sorting of the more effective teachers to the highest ability students.”28 In other words, grammar schools improve the outcomes for their students at the institutional level, but the inequalities precipitated by the system as a whole are substantial.

As mentioned, pupils from lower-income backgrounds who attend grammar schools often exhibit less educational disadvantage than those who do not. But using this as evidence to support the moral case of grammars is undermined by the access challenges of this same group, who constitute less of the grammar school intake than one would expect, even controlling for socio-economic background and prior attainment.29

For Ofsted, confirmed by other analyses, high-ability students from low-income families are less likely to attend grammars than high-ability students from high-income families.30 A 2013 report supported by the Sutton Trust, *Entry into Grammar Schools*, also found that there were sharp differences between grammar school entrants by their IDACI quintile (an area-based indicator of child deprivation). While 14% of those attending a non-selective state school in a selective local authority came from the poorest IDACI quintile, this fell to just 4% for grammars. The pattern is reversed at the top: about 17% of those attending a non-selective state school come from the richest IDACI quintile, which increases to 34% of those attending grammars.31 Such patterns remain true, “even if we allow for the fact that FSM children have lower levels of prior attainment. In other words, amongst high achievers, those who are eligible for FSM or who live in poorer neighbourhoods are significantly less likely to go to a grammar school.”32

Inequalities run across other lines, too. “The proportion of pupils from non-White backgrounds going to grammar schools is higher than in other schools”, state Cribb et al. But, “These are largely pupils
from Asian and Chinese backgrounds... grammar schools have lower proportions of Black pupils than other schools. Recent analysis by the Education Policy Institute has supported this – some 8.2% of pupils in grammar schools are Indian, for example, despite constituting just 2.9% of pupils in all state-funded secondary schools. By contrast, black Caribbean pupils represent 0.4% of the grammar school cohort, but 1.3% of students in state-funded secondary schools overall.

In the Sutton Trust’s recent report, Poor Grammar: Entry into Grammar Schools for Disadvantaged Pupils in England, the reasons for socio-economic inequalities were explored through interviews with grammar school representatives. They included: the distance a pupil lives from a grammar school (with the costs of travelling large distances potentially more problematic for poorer children), educational aspirations (perceived as lower in disadvantaged families), perceptions of grammar schools (deemed elitist by some potential applicants and their families), the role of primary schools (which play a crucial role in successful applications) and the general admissions process (with entrance exams and catchment areas potentially benefitting the wealthy, for obvious reasons).

The result of these inequalities has been termed ‘creaming’ – the process whereby grammar schools recruit many of the brightest students in a given area. “Overall,” according to Coe et al., “the pattern we found is of widespread, low-level creaming [across the country].” It has been estimated that this affects, “10 per cent to 12 per cent who attend other schools where the average prior attainment of the pupils is reduced.” However, Coe et al. also found that the most selective schools were not grammars, but the putatively non-selective – “Our finding suggests that even within the different neighbourhoods that exist, somehow the most socially advantaged children are finding their way to different schools from the more disadvantaged. This sorting cannot be explained by residential segregation.”

More recent research, by Education Datalab, suggests that the existence of grammar schools in selective areas (aggregating across Kent, Medway, Buckinghamshire and Lincolnshire – four of the most selective areas in the country) creates ‘winners and losers’ – “Children who attend grammar schools make more progress than they otherwise would, while children who attend non-selective schools in selective areas [secondary moderns] make less progress than they otherwise would.”

In an effort to boost the intake of disadvantaged students into grammar schools, Poor Grammar has noted that one possible solution is “for all high achieving primary school students to sit the grammar school entrance exam. This would reduce”, the report states, “the impact of parental background on the likelihood of applying to a grammar school.” As this suggests, a key aspect of increasing the proportion of disadvantaged students into grammar schools is to closely examine application rates to the same. If lower application rates are prohibiting disadvantaged students from entering grammar schools, the socio-economic divide that grammar schools exhibit (and the moral arguments that stem from this) will continue.

What can we say about the effects of grammar schools?

Research on the effect of grammar schools is clearly methodologically difficult – the data available is limited and educational attainment is affected by many factors, which limit statistical models. In attempting to fully gauge the effect of a school’s progress on a student, one must know about their home study environment, the support that is being and can be provided by their parents, the quality and quantity of tutoring that they may be receiving, and so forth. There are also factors outside of the researcher’s control, which nonetheless may affect findings. For example, the ‘ceiling effect’ potentially depresses grammar school achievement. At A-level, grammar school students are more likely to achieve A* than students at non-selective schools, but their actual score is subsumed within
the A* band. If it were not, it is possible that the improvement of grammar school students might be larger.41

Nevertheless, as Coe et al. have stated, “the majority of studies seem to find that pupils who attend grammar schools do better than equally able pupils in comprehensives.” And if only the more methodologically rigorous studies are considered, “then this majority in favour of grammar schools becomes unanimous.” This is true across national datasets and the NCDS.42 Thus, at an institutional level, the evidence is fairly consistent – “despite the great variety of results we have found there is a reasonably consistent pattern to the overall conclusion: attending a grammar school may be associated with a small advantage in achievement, probably between zero and three-quarters of a GCSE grade per subject taken.”43

However, “More equivocal in the literature is the matter of whether selective systems as a whole [i.e. grammar plus secondary modern] perform better than comprehensive systems.” Moreover, “Consensus seems even harder to reach on the further question of precisely which subgroups [if any] benefit from grammar school attendance.”44 For Coe et al., who did attempt to answer this question, “pupils eligible for FSM appear to suffer marginally less educational disadvantage if they attend grammar schools”, with the differential appearing to be about one-eighth of a GCSE grade.45 In terms of the three scales discussed throughout this report, therefore, the institutional level case for grammar schools is strong, but it is weaker for the system as a whole and for identifying the differing effects by student group.

With regard to policy implications, perhaps the strongest is that, according to the evidence, there is certainly no case for the abolition of existing grammar schools. And while creaming certainly operates, there is no particular evidence that this has an adverse effect on the system overall. At the same time, there is no particular evidence that grammar schools have a beneficial effect overall either and certain analyses, such as Burgess, Dickson and Macmillan, suggest that, in the long run, selective education contributes to, rather than ameliorates, income inequality.46 Moreover, many of the findings here are based on the existing or past arrangement of grammars – were a fully selective system to be imposed, the outcomes, especially for disadvantaged students as a whole, would be largely unknown, and even the limited advantages indicated here may not hold.

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Endnotes


3 Coe et al. (2008) p. iii.


5 Coe et al. (2008) p. iii.


10 Steedman (1980); Steedman (1983).

11 Kerchoff et al. (1996).


