



**Social Mobility
Commission**

Low income pupils' progress at secondary school

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About the Commission

The Social Mobility Commission is an advisory, non-departmental public body established under the Life Chances Act 2010 as modified by the Welfare Reform and Work Act 2016. It has a duty to assess progress in improving social mobility in the United Kingdom and to promote social mobility in England. It currently consists of four commissioners and is supported by a small secretariat.

The Commission board currently comprises:

- Alan Milburn (Chair)
- Baroness Gillian Shephard (Deputy Chair)
- Paul Gregg, Professor of Economic and Social Policy, University of Bath
- David Johnston, Chief Executive of the Social Mobility Foundation

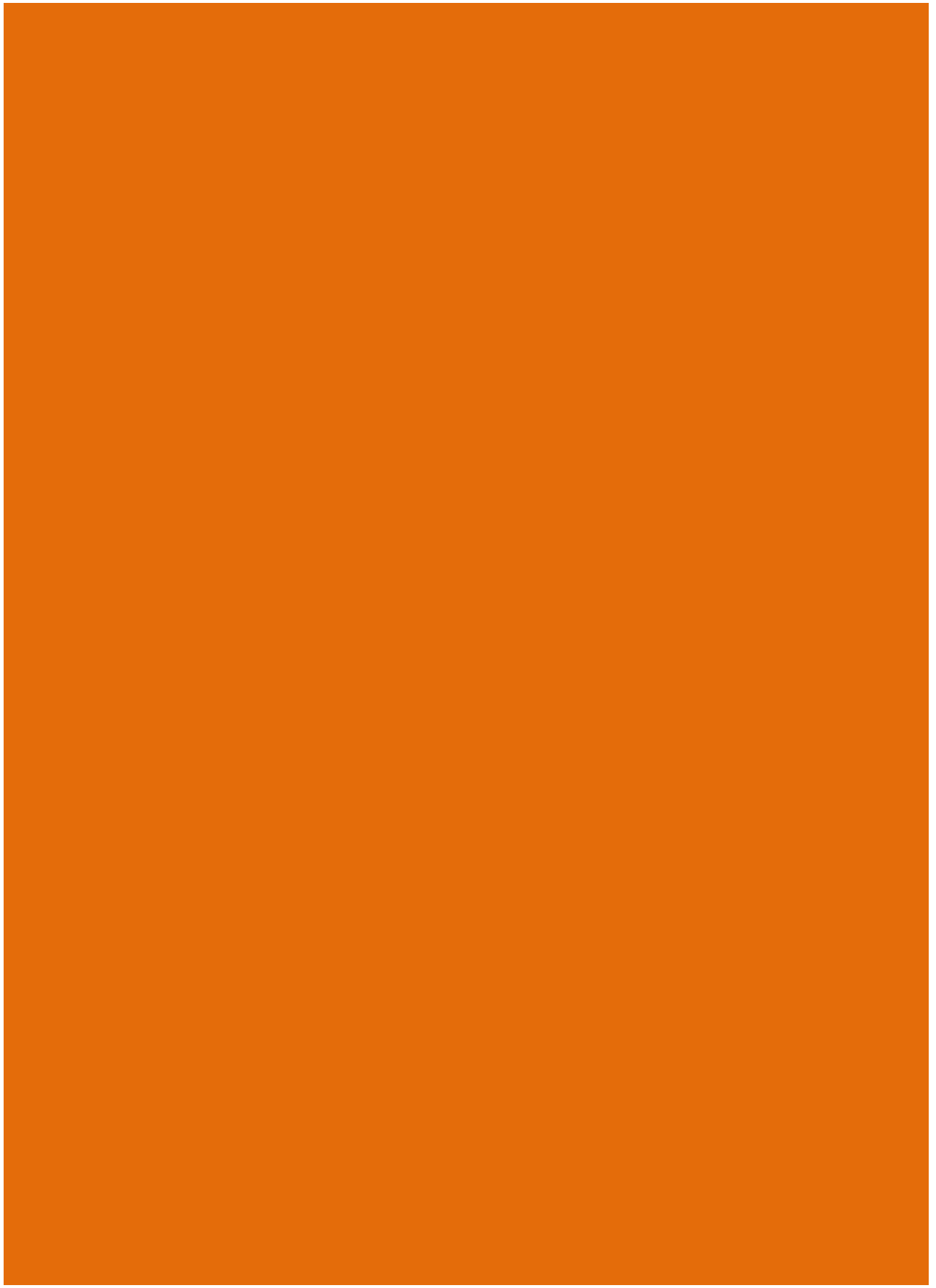
The functions of the Commission include:

- monitoring progress on improving social mobility
- providing published advice to ministers on matters relating to social mobility
- undertaking social mobility advocacy

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Executive Summary

One of the great injustices of the British education system is that pupils from low income backgrounds are less likely to make good progress at secondary school compared to better off peers. The gap between low income pupils' attainment at the end of primary school and the end of secondary school has widened; since 2012 low income pupils have been making less progress year on year compared to their more affluent peers. Even when low income pupils out-perform their more advantaged peers at primary school, they are often overtaken during the next phase of their education. The implications of low income pupils' poorer progress are most visible as children finish secondary school; when they are often left without the qualifications that might create opportunities for them later in life.

As teachers, school leaders and policy makers, we hope that schools can be engines of social change. However, the stalled progress of pupils from lower income families - especially the most vulnerable; those with SEND or mental health issues, or who are looked after – suggests too few lives are being transformed at a system level. Indeed, in some cases schools may be actively (though unintentionally) perpetuating the injustices that they hope to challenge.

This report sheds light on the barriers to progress that low income pupils face at secondary school. Part One reveals the magnitude of the gap in progress between low income pupils and their peers at GCSE, and highlights the differing nature of the 'progress gap' for pupils with different levels of attainment at the end of primary school. Using data from the National Pupil Database, it goes on to explore how a range of factors influence the progress gap.

Part Two of the report brings together findings from the existing literature to explore the range of causal factors that contribute to the progress gap at secondary school. Throughout the literature review, we draw on eight case studies of secondary schools where low income pupils make varying levels of progress to exemplify how the causal factors identified in the literature create barriers for pupils, as well as the steps schools have taken to reduce the progress gap. These case studies also ensure that we do not overlook any issues or factors not currently explored in the literature.

Key findings in the report include:

1. A secondary school drop off in progress for low income pupils

Low income pupils make less progress at secondary school than their peers. This is even true for low income pupils who made more progress than others at primary school. As a result, while at the end of primary school it may seem that education is producing transformative

results for some low income pupils, by the end of secondary school, much of that early promise has dropped away.

2. A strong “within school” effect

Most of the gap in progress between low income pupils and their peers stems from differences in achievement between pupils in the same school, rather than differences between schools. These differences are influenced by pupil level factors (such as behavioural and emotional needs, SEND, and ‘risky behaviours’), family level factors (such as variations in the level of parental engagement in a pupil’s schooling, or the quality of the Home Learning Environment (HLE)), and by variations in pupils’ experiences of secondary school itself (such as lower teacher expectations for low income pupils, or the impact of setting). Focusing on differences between schools (such as school type) is therefore a distraction.

3. Parental, family and out-of-school factors are influential

Low income pupils are likely to have a home life that is less conducive towards progress at secondary school than that enjoyed by more affluent pupils. They are less likely to experience a high quality Home Learning Environment with effective homework routines, material resources for home learning such as books and laptops, and academically enriching cultural and sporting activities. Their parents are also less likely to engage with school, either through active information seeking and intervention in their child’s progress, or in terms of setting high expectations for pupils’ achievement in school. These factors have greater importance at secondary school than primary school because:

- pupils’ achievement begins to depend more on independent study;
- primary school pupils are less likely to be influenced by factors outside of home or school;
- parents are less likely to be able to engage with a more complex curriculum.

There is some evidence, however, that parents from some ethnic minorities have higher levels of engagement with school or schoolwork. This may help explain the relatively faster progress made by pupils in those groups.

4. A positive urban effect, especially for pupils in London, with weaker progress for rural low income pupils

Low income pupils in schools located in cities make more progress relative to their more affluent peers than those in rural areas. Nonetheless, the gap is still far from being closed in urban areas. This may partly be because the diverse labour market opportunities in cities compared to rural areas influence pupils’ and their parents’ expectations of the opportunities education can create. It may also be partly influenced by there being more low income pupils from ethnic minorities in urban areas, particularly those of recent migrants, whose parents are often more engaged with education as set out above.

5. The progress gap is largest in schools with average levels of pupil disadvantage.

The gap between low income pupils and their peers is smaller in schools where the proportions of pupils eligible for FSM are highest and lowest. The gap is larger in schools with average levels of pupil disadvantage. There are a number of reasons for this: in schools with high levels of disadvantage many pupils who are not eligible for Free School Meals are likely to be close to the threshold for FSM eligibility. They are therefore more similar to their eligible peers than in other schools. These schools are also likely to benefit from high levels of Pupil Premium funding allowing them to operate differently compared to schools with a more 'middling' intake. Such schools can also develop particular expertise in teaching pupils from low income backgrounds. These schools are also more likely to be in urban areas and therefore to benefit from the urban effect outlined above. Low income pupils in schools with low levels of disadvantage are likely to benefit from small but positive peer group effects.

6. Ethnic minority pupils make better than average progress at secondary school

Low income ethnic minority pupils make more progress at secondary school compared to more affluent pupils than low income White British pupils. Low income Black African, Chinese, Indian, Other, Pakistani/Bangladeshi and White Other pupils make progress that is above, or in line with the national average for all pupils. This may be partly because low income ethnic minority parents provide effective support for progress at home, particularly those who have migrated to the UK.

While the magnitude of the gap in progress at secondary school between low income pupils and their peers reveals a breakdown in the promise of education as a driver of social mobility, decisions and actions taken by schools can have a profound impact on outcomes.

- **School culture is important:** low income pupils are most likely to make progress in secondary schools that focus on low income pupils' progress, both in terms of setting and sharing high expectations for pupils;
- **Data is a valuable tool:** successful schools use it to track progress and intervene swiftly and flexibly when pupils do not make progress;
- **Being able to recruit the right teachers is a driver of success:** teachers need to be both pedagogically skilled, and to believe that low income pupils are capable of making as much progress as others;
- **The teaching of pupils with SEND needs to be excellent:** High quality teaching of pupils with SEND is fundamental. Because a relatively large proportion of low income pupils are identified with SEND, schools need to ensure that teachers are skilled in supporting their progress in the classroom, and that specialist provision is available when needed. There is also likely to be a benefit for non-SEND low-prior attainers if they are taught by teachers skilled in supporting pupils with SEND.

- **Decisions about pupil grouping and resourcing have a profound impact:** Low income pupils are less likely to make good progress in schools where they are grouped by ability from an early age, and where resources are focussed on Key Stage 4 instead of younger pupils. This is particularly important when pupils are transitioning from primary to secondary school.

Worryingly, budget cuts are making it increasingly difficult for schools to intervene effectively and to keep low income pupils on track. Head teachers in case study schools in this report gave tangible examples of how dwindling budgets were compromising the quality of support they were able to offer low income pupils. With health and social care funding streams also under pressure, schools are facing alarming reductions in external support, particularly for those with mental health disorders or SEND.

In this context, we outline a number of recommendations for policy makers, system leaders (such as Regional School Commissioners, local authorities, Multi-Academy Trusts and Teaching School Alliances) as well as leaders and teachers in secondary schools.

Ministers have made a welcome commitment to creating schools that work for everyone. As such, it is time to recognise that the secondary school system still does not work for low income pupils, and that urgent action is needed to break down the barriers that prevent low income pupils from making the same progress as others at secondary school.

Methodology

Part One

Quantitative analysis for the National Pupil Database was undertaken to explore six key questions:

1. What is the magnitude of the national gap in progress between FSM and non-FSM pupils on a range of GCSE outcomes including:
 - i) Pupils' 'Attainment 8' subjects;
 - ii) Best 8 GCSE subjects;
 - iii) Maths;
 - iv) English?
2. How does the magnitude of the national FSM gap in progress differ for pupils with different Key Stage 2 attainment?
3. To what extent do these differences by prior attainment reflect differences in the demographic profile of the non-FSM comparison group?
4. How much of the FSM gap in progress arises from differences between pupils within the same school, versus pupils studying at different schools?
5. How does the FSM gap in progress differ in relation to a range of factors, including:
 - i) Region;
 - ii) Governance of school;
 - iii) School type (selective, 11-16 versus 11-18);
 - iv) Characteristics of school location (urban/rural);
 - v) Social deprivation of school intake overall;
 - vi) Ofsted grading?
6. How does the FSM gap differ by gender and by the major ethnic groups?

Analysis was based on measures of KS2-to-KS4 progress that take into account a pupil's prior attainment at KS2. This means that the calculations are based on raw data that shows how well pupils progressed between KS2 and KS4 relative to other pupils with the same KS2 attainment.

The qualifications included in the Attainment 8/Progress 8 measure are those that meet the Wolf Review criteria. A pupil's best qualifications are used rather than their first qualifications, meaning that retakes are included. Where needed, KS2 mean overall fine grade¹ is used as the KS2 attainment measure. Attainment 8 and Best 8 are measured using pupil average grades i.e. the scores are divided by 10.

¹ KS2 mean overall fine grade is a pupil's average score across both maths and English (including reading and writing) statutory assessment tests (SATs) taken at the end of primary school.

All Year 11 pupils on roll in a mainstream school in England during the Spring 2015 Pupil Census are included in this analysis (490,411 pupils). This includes pupils whose KS2 and KS4 attainment measures are missing or recorded as zero, unless otherwise stated. All schools in England with a Year 11 group in 2014/15 are included in the analysis, except for special schools, independent schools, pupil referral units and "other type" schools. "Other type" schools include British Overseas schools and schools for service children.

Part Two

The second section of the report is based on a systematic review of the existing literature relating to differences in progress at secondary school between pupils from more and less socio-economically disadvantaged backgrounds. The report draws on 61 pieces of academic and grey literature published in the last decade. Literature was identified using combinations of the following search terms:

- Progress;
- Disadv;
- School;
- Educ;
- Prior attain;
- Home learning;
- School quality;
- Key stage 3/Key stage 4;
- GCSE;
- Transition;
- Factors to progress;
- Barriers to progress.

Over 2,000 pieces of literature were screened for relevance based on abstracts, resulting in a final set of 61 research studies that were most closely related to the progress problem. We constrained our search to literature published since 2006, but some older literature was included in the review if it was cited and deemed relevant. Key factors were identified and used to structure this section of the report.

The literature review is supplemented by case studies of eight secondary schools with different levels of prior attainment and pupil progress.

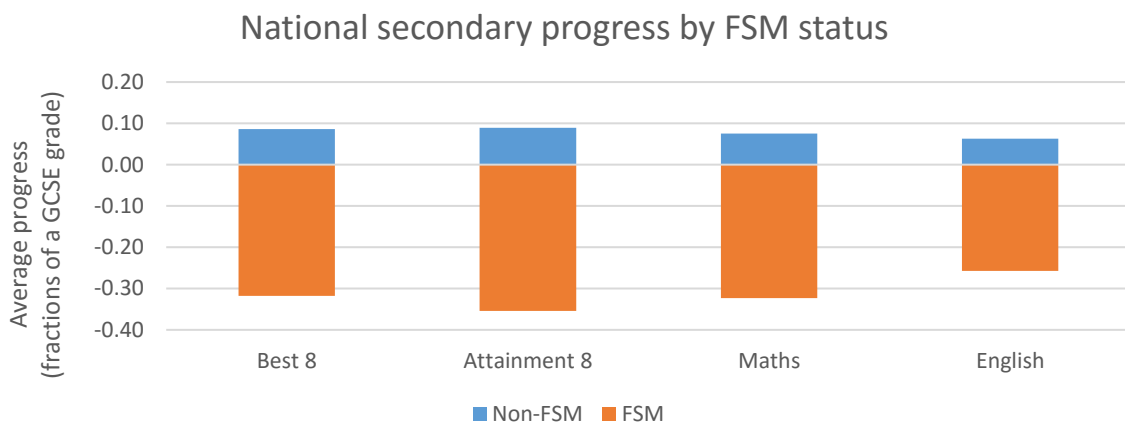
	Low APS	Mid APS	High APS
Low Progress	School One, School Two	School Six	School Seven
High Progress	School Three, School Four, School Five		School Eight

The case studies consisted of telephone interviews with a member of Senior Leadership Team in each school. Interviews were semi-structured using a script that explored the barriers and enablers of pupil progress in each school; the steps being taken to facilitate low income pupils' progress; and the challenges schools faced in doing so.

Part One: Progress at secondary school by disadvantaged pupils

The national picture

Compared to all pupils with similar prior attainment at KS2, FSM pupils make between 0.26 and 0.35 of a GCSE grade less progress depending on which subjects are considered. Meanwhile non-FSM pupils make between 0.06 and 0.09 of a GCSE grade more progress. The largest gap relates to the Attainment 8 subjects, where differences in progress between non-FSM and FSM pupils add up to almost half a GCSE grade (0.44) on average. The progress-gap in Maths is slightly larger than in English.



The FSM progress gap is largely due to differences in how well FSM and non-FSM pupils do *within* each school. If there was no within-school FSM gap (i.e. if all FSM pupils achieved the same Attainment 8 scores as the non-FSM pupils in their school), the national progress gap in Attainment 8 subjects would reduce from 0.44 to 0.05 of a GCSE grade. This means that around 88% of the FSM gap in Attainment 8 is due to within-school differences, and only a small proportion (12%) of the FSM gap in progress is due to variation between schools.

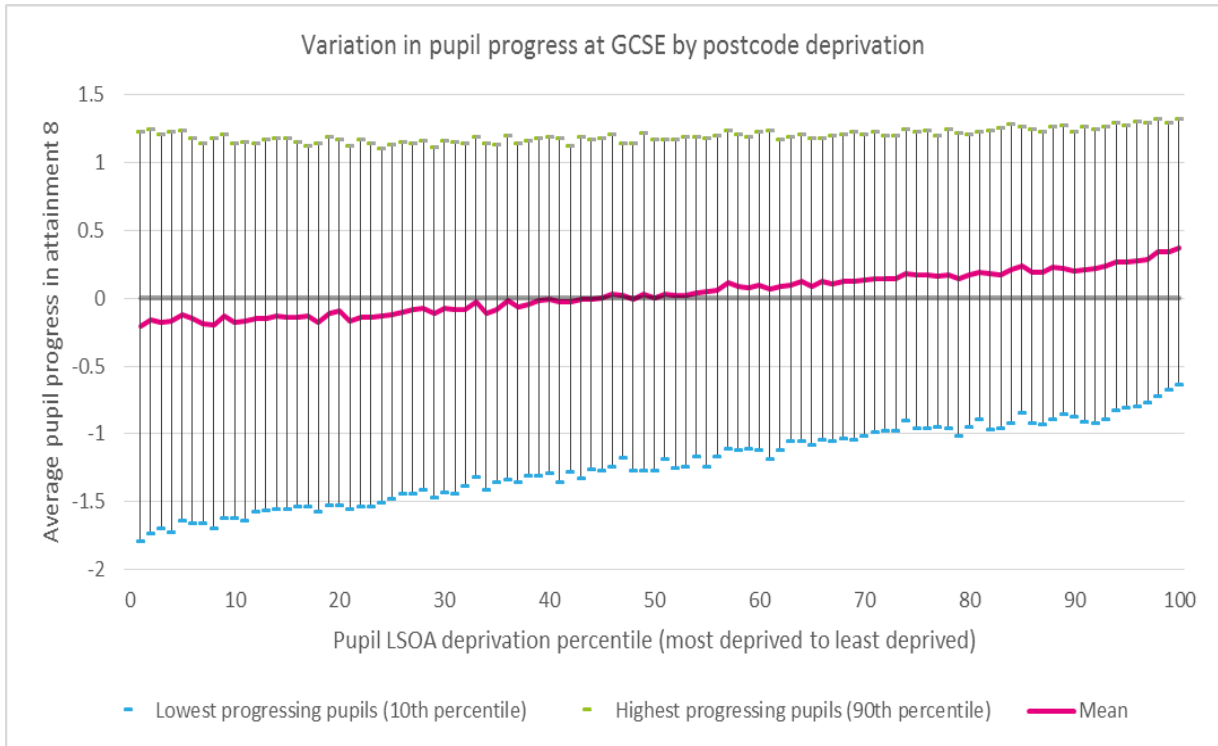
The reasons for the substantial within school differences are explored in Part Two. One possible explanation is that there are considerable differences in the treatment of FSM and non-FSM pupils within the same school, for example through setting, curriculum options and teacher allocation. Another possible explanation is that there are considerable differences in the home environments of FSM and non-FSM pupils in the same school.

KS2-KS4 value-added progress measure	FSM average progress	Non-FSM average progress	Gap	% of gap due to between school differences	% of gap due to within school differences
Attainment 8 subjects: <i>actual</i>	-0.35	0.09	-0.44		
Attainment 8 subjects: <i>if no within school differences</i>	0.04	0.09	-0.05	12%	88%
Best 8 subjects: <i>actual</i>	-0.32	0.09	-0.40		
Best 8 subjects: <i>if no within school differences</i>	0.02	0.09	-0.07	17%	83%
Maths: <i>actual</i>	-0.32	0.08	-0.40		
Maths: <i>if no within school differences</i>	0.03	0.08	-0.04	11%	89%
English: <i>actual</i>	-0.26	0.06	-0.32		
English: <i>if no within school differences</i>	0.05	0.06	-0.02	5%	95%

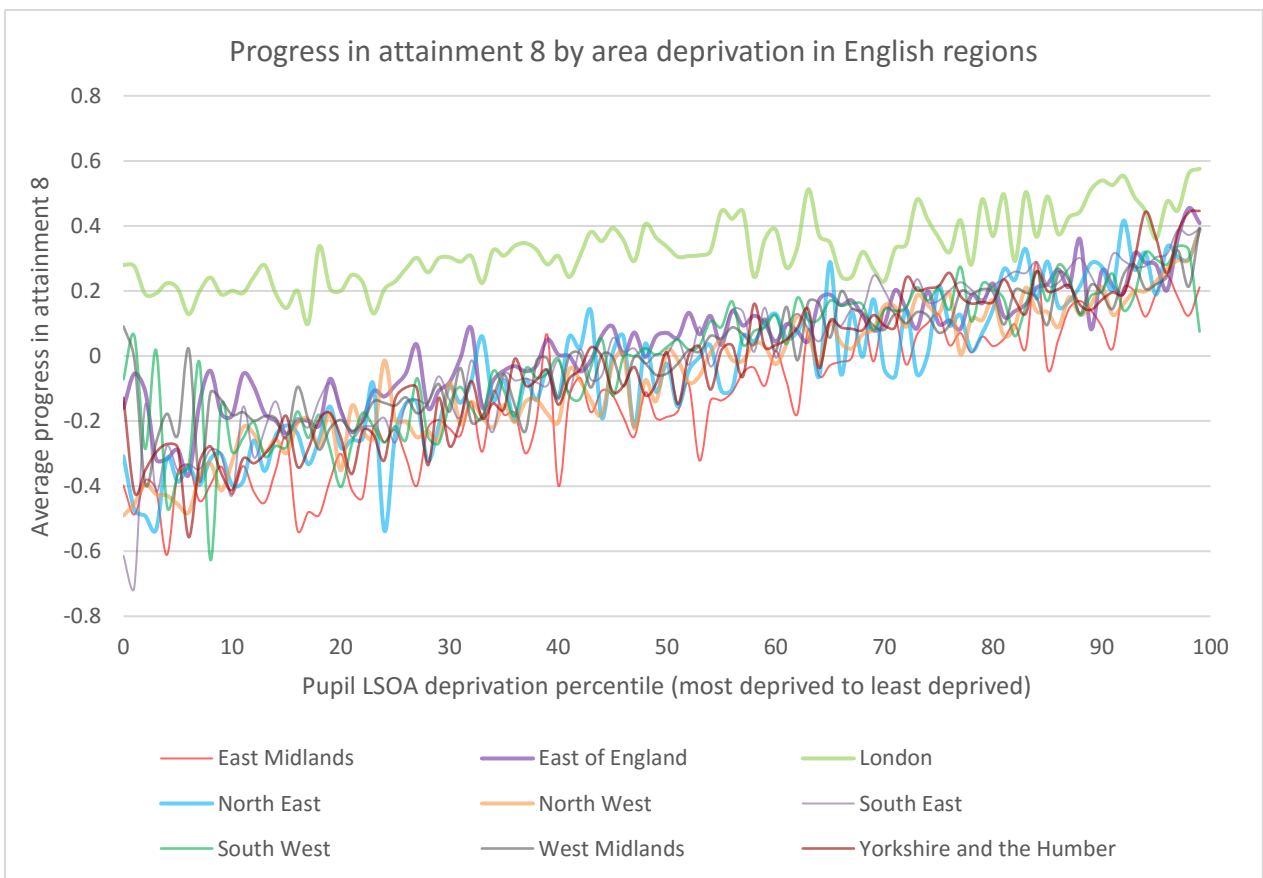
The link between disadvantaged pupils' characteristics and their progress

Regardless of what school they attend, the type of area pupils live in and its deprivation level impacts upon their progress and attainment.

Pupils making the most progress (the 90th percentile, shown by the green bars) make broadly the same amount of progress regardless of their home area's deprivation level. However, pupils making the least progress (the 10th percentile, shown by the blue bars) make less progress in more deprived areas. As such, the variation between pupils' progress is much wider in more deprived areas. Pupils also make more progress, on average, in less deprived areas (shown by the pink line). The variation between pupils' progress (i.e. between those making least and most progress) is also much wider in more disadvantaged areas.

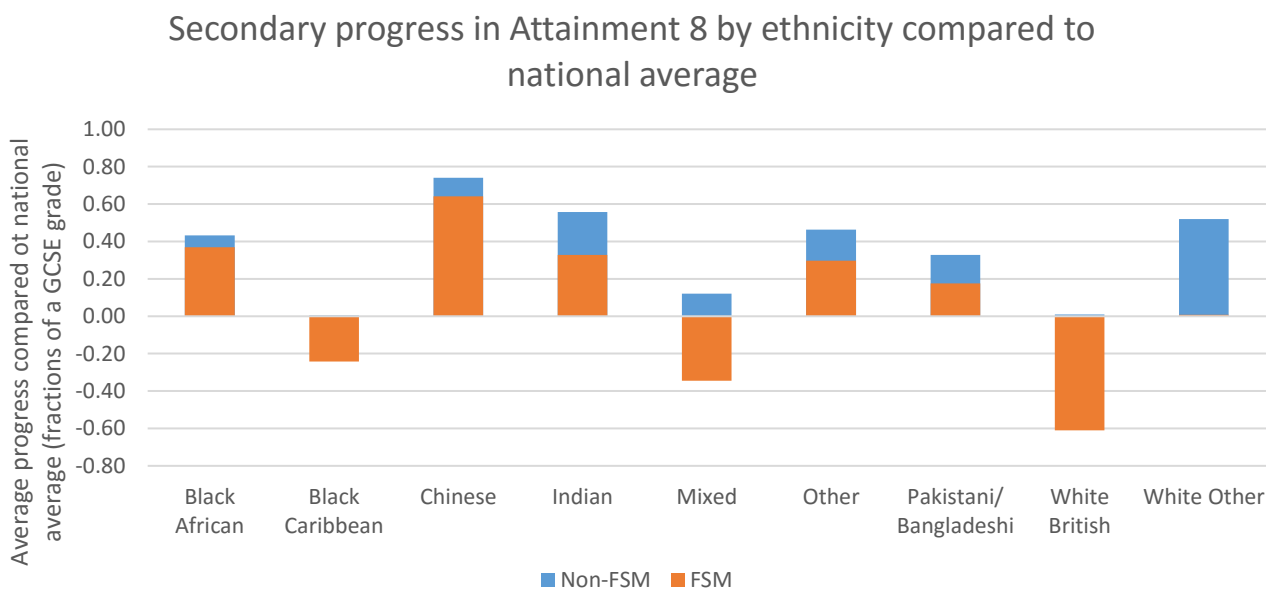
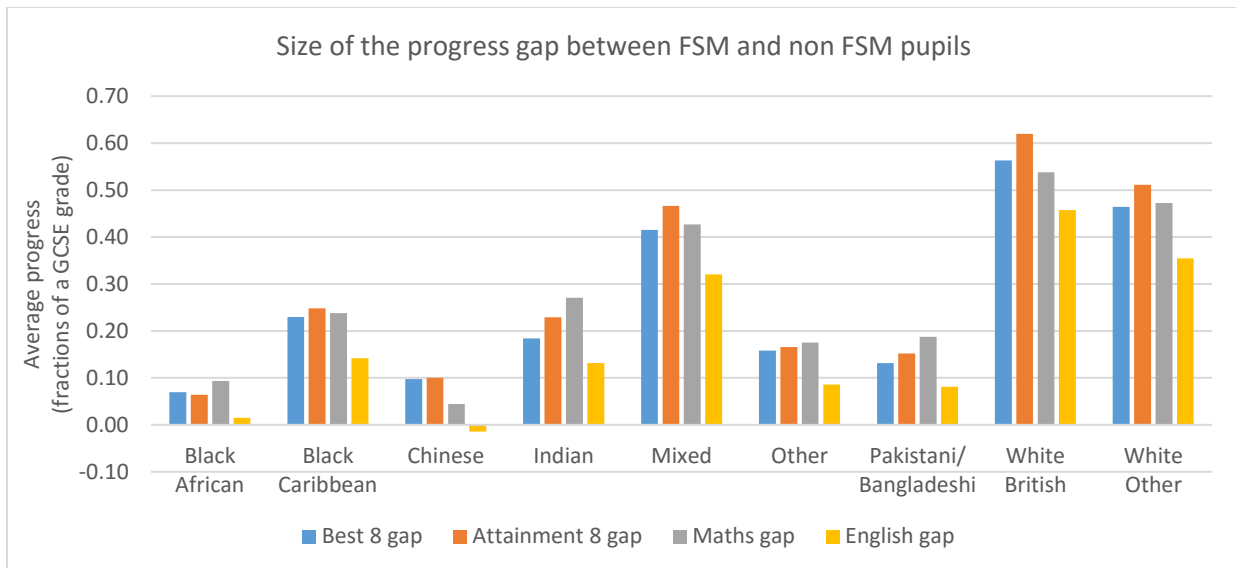


The relationship between area deprivation and progress exists in all regions but is considerably weaker in London as the flatter line in the graph below reveals.



Ethnicity

The FSM gap in secondary progress varies substantially across ethnic groups. The largest gaps are seen for the White British group, with an FSM gap of 0.62 of a GCSE in Attainment 8 subjects. In contrast, the Black African and Chinese groups, in particular, have FSM gaps of 0.1 of a GCSE grade at most. For all ethnicities, gaps are larger in Maths than in English.



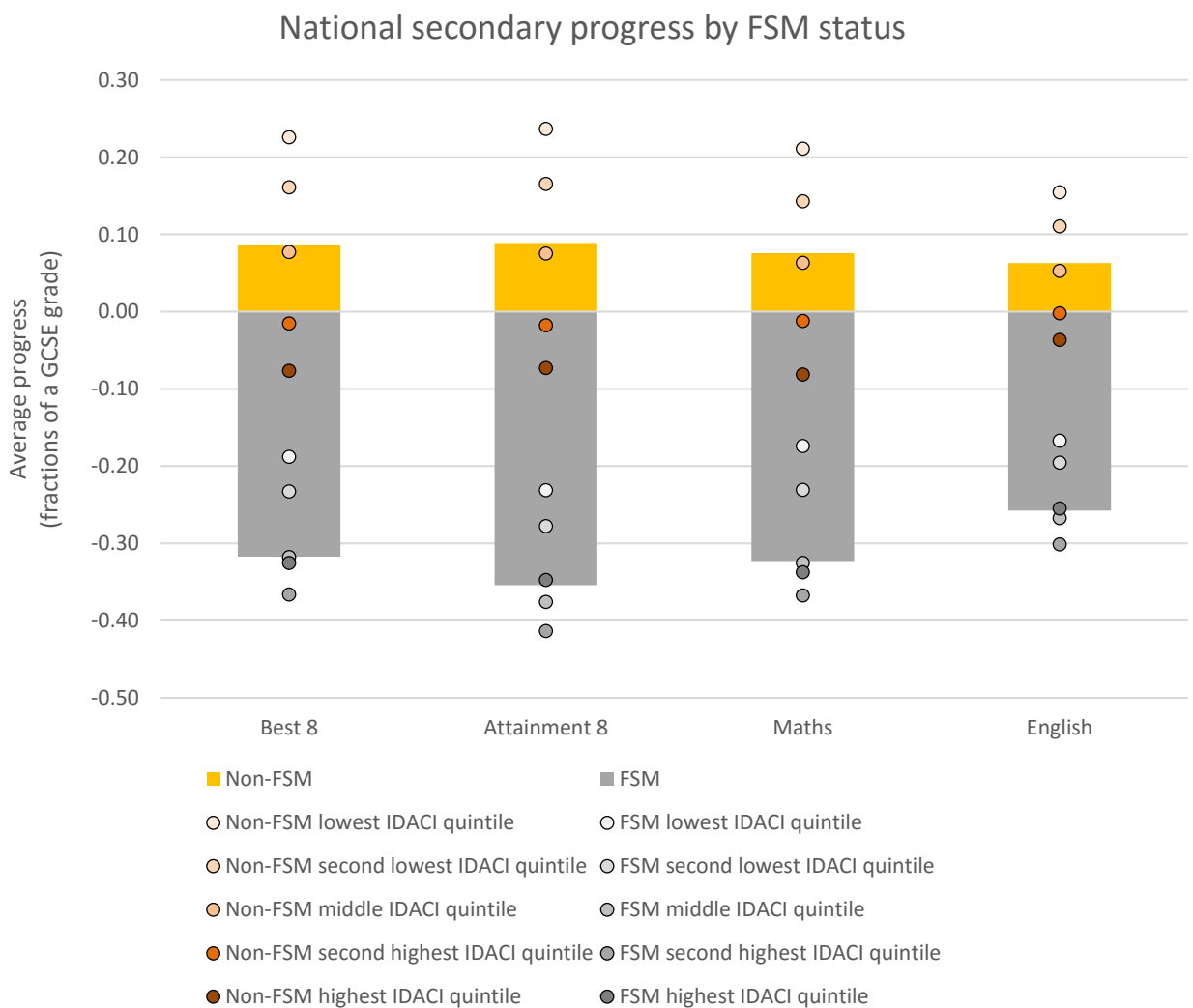
Low income Black African, Chinese, Indian, Other, Pakistani/Bangladeshi and White Other pupils make progress that is above, or in line with the national average for all pupils. It is worth noting however that the socio-economic characteristics of FSM and non-FSM pupils from different ethnic groups differ considerably. In other words, non-FSM White British pupils tend to be far more affluent than non-FSM pupils from other groups making socio-economic disparities particularly wide within some ethnic groups (Shaw et al. 2016a).

Gender

The FSM gap in secondary progress is very slightly larger for females than for males across all four measures, but this gender gap is too small to be of note. However FSM boys make less progress than FSM girls, the reasons for which are discussed in Part Two of the report.

Deprivation of home neighbourhood

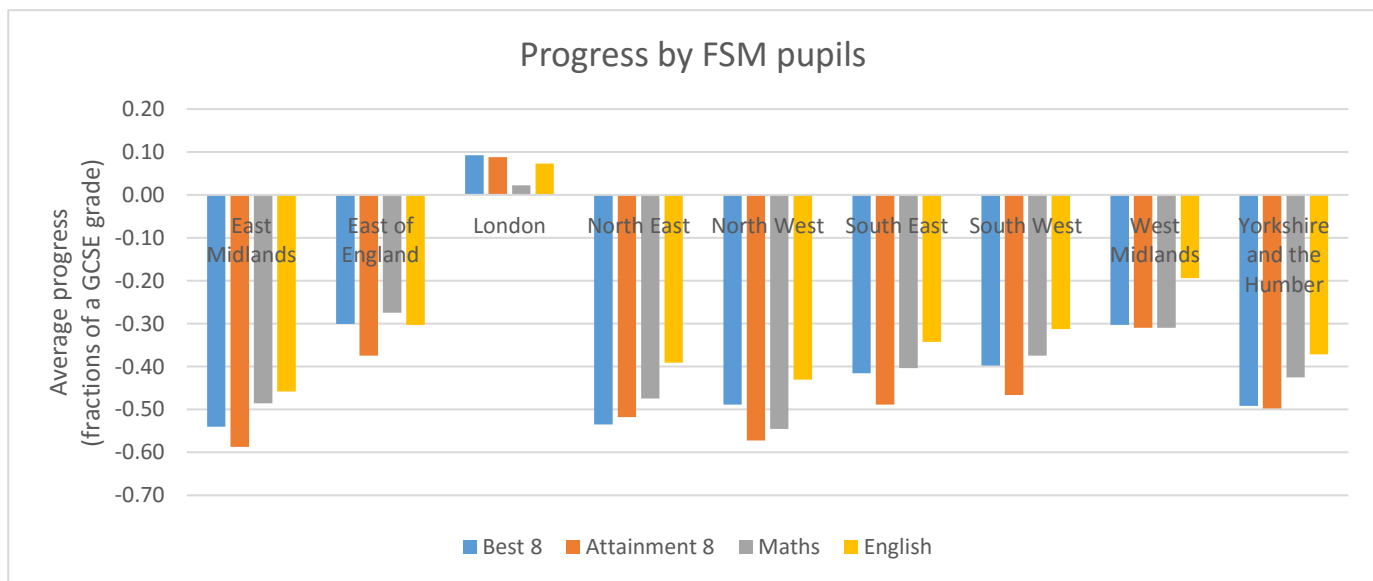
Pupils living in deprived areas tend to make less progress than those living in less deprived areas, and this is true of both FSM and non-FSM pupils. However, the effect of FSM eligibility significantly outweighs the effect of area deprivation: even non-FSM pupils who live in the most deprived areas make more progress on average than FSM pupils who live in the least deprived areas.



The link between school location and progress by disadvantaged pupils

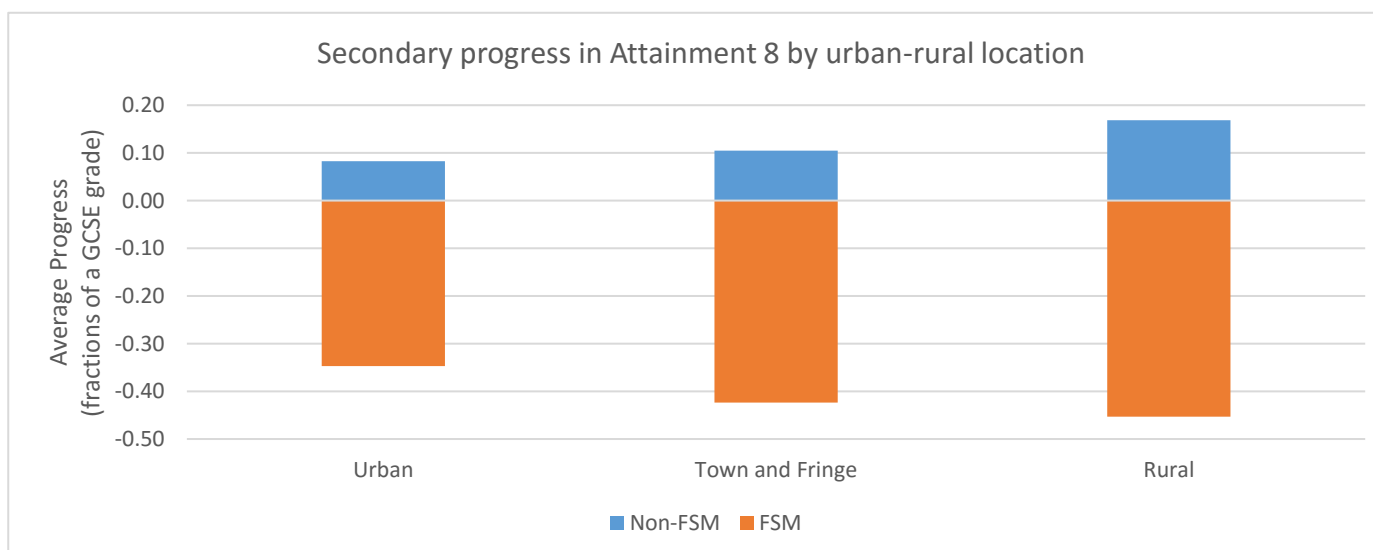
Region

Low income pupils make less progress than national average in all regions apart from London. FSM pupils make particularly low progress in the East Midlands, North West and North East, but the gap in progress between FSM and non-FSM pupils is largest in the South East. FSM pupils make less progress in Maths than English in all regions except for the East of England.



Area type

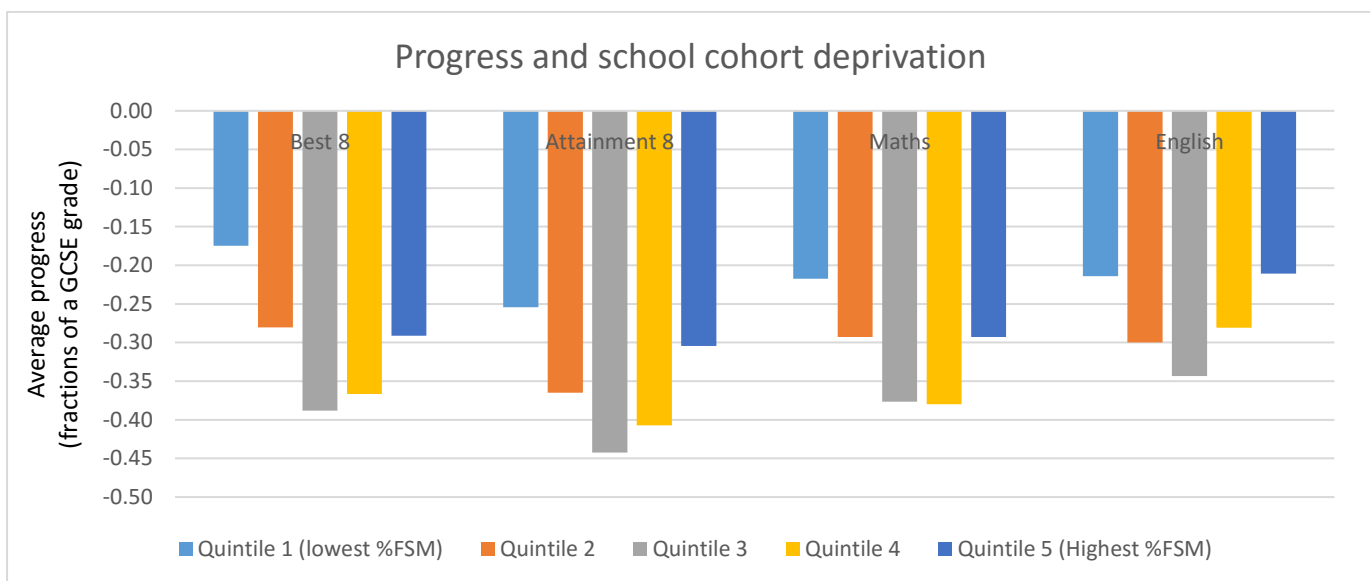
FSM gaps in secondary progress are largest in rural areas and lowest in urban areas. This is because FSM pupils make less progress in rural than urban areas, whereas non-FSM pupils make more progress in rural areas (and in town and fringe areas) compared to urban areas.



The link between a school's cohort's characteristics and progress by disadvantaged pupils

Cohort disadvantage

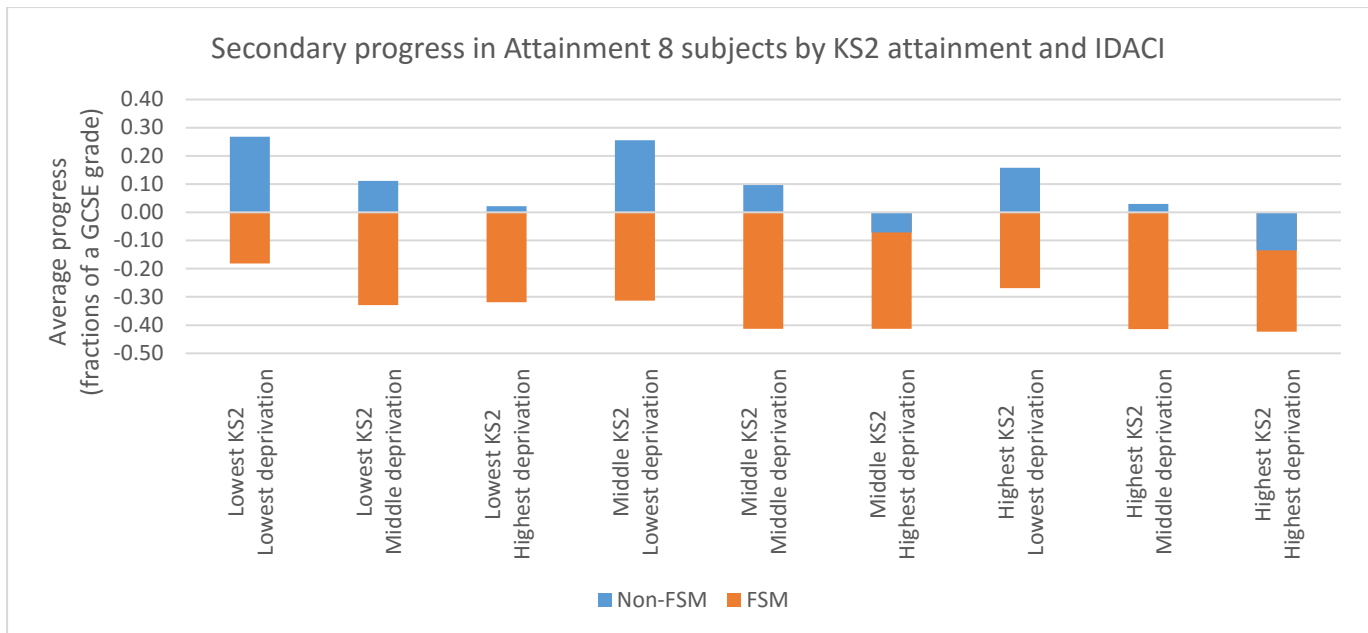
FSM pupils tend to make the most progress in schools that have particularly high or low proportions of pupils eligible for Free School Meals (quintile 1 and quintile 5 schools), rather than schools that are in the middle-ground. In other words, FSM pupils do best in schools where very few or very many pupils come from low-income families. Nonetheless, even in these schools, FSM pupils still make less progress compared to other pupils with similar KS2 scores.



The gap between FSM pupils and their more advantaged peers is smallest in schools with a high proportion of FSM pupils, however this is partly because non-FSM pupils in these schools also make less progress than their peers in other schools with similar KS2 scores.

Cohort deprivation

Links between cohort deprivation and progress hold regardless of pupils' individual prior attainment. In other words, pupils of all abilities make more progress in schools in less deprived areas whilst in schools in areas with high levels of deprivation, both non-FSM and FSM learners' progress is hampered - perhaps because the non-FSM pupils are also more likely to be from low income families. Nonetheless, although FSM pupils of all abilities make more progress in schools in less deprived areas, they still make substantially less progress than their non-FSM peers with similar levels of prior attainment, and even FSM pupils with the highest prior attainment attending schools in the least deprived areas have lower progress than the national average for all pupils.



How much progress FSM pupils make is also linked to the overall school intake's prior attainment. FSM pupils make below average progress across all combinations of school intake, prior attainment and deprivation level. However, their progress is least poor in schools where the intake has low prior attainment and the deprivation rate is lowest. Their progress is poorest in schools where the cohort has high prior attainment and where the deprivation rate is also high.

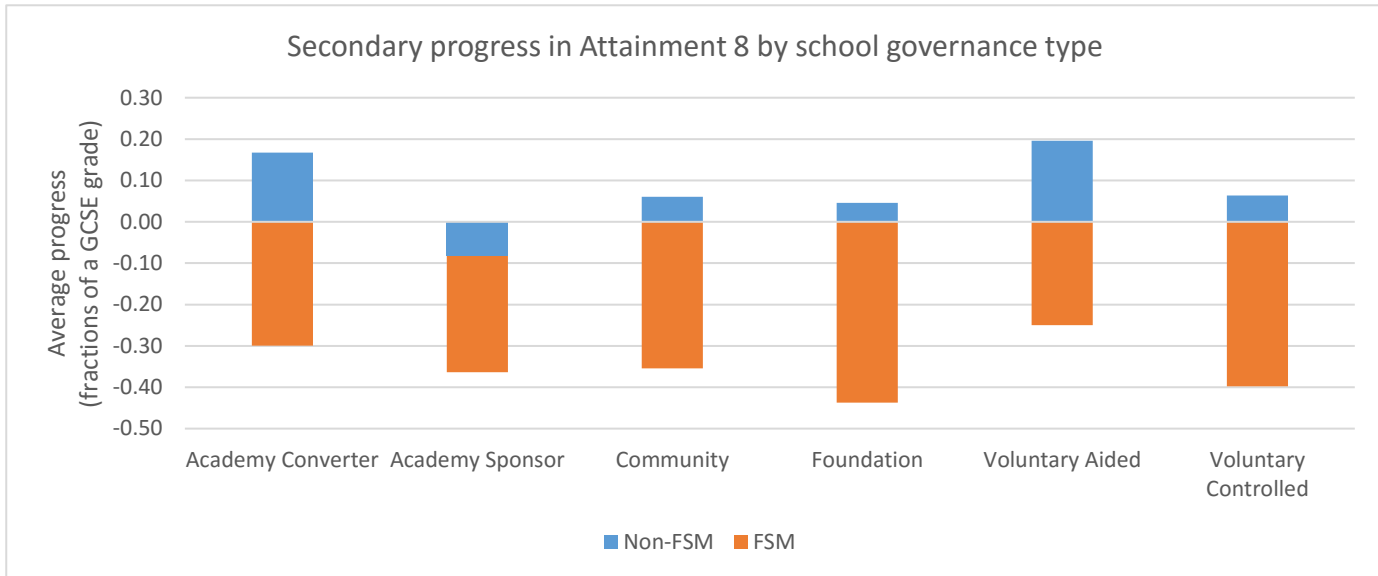
The link between a school's characteristics and progress by disadvantaged pupils

School quality

Regardless of their pupil composition, pupil progress is highest in outstanding schools. The schools in which FSM pupils make the most progress are those that are both outstanding and which have a high proportion of FSM pupils.

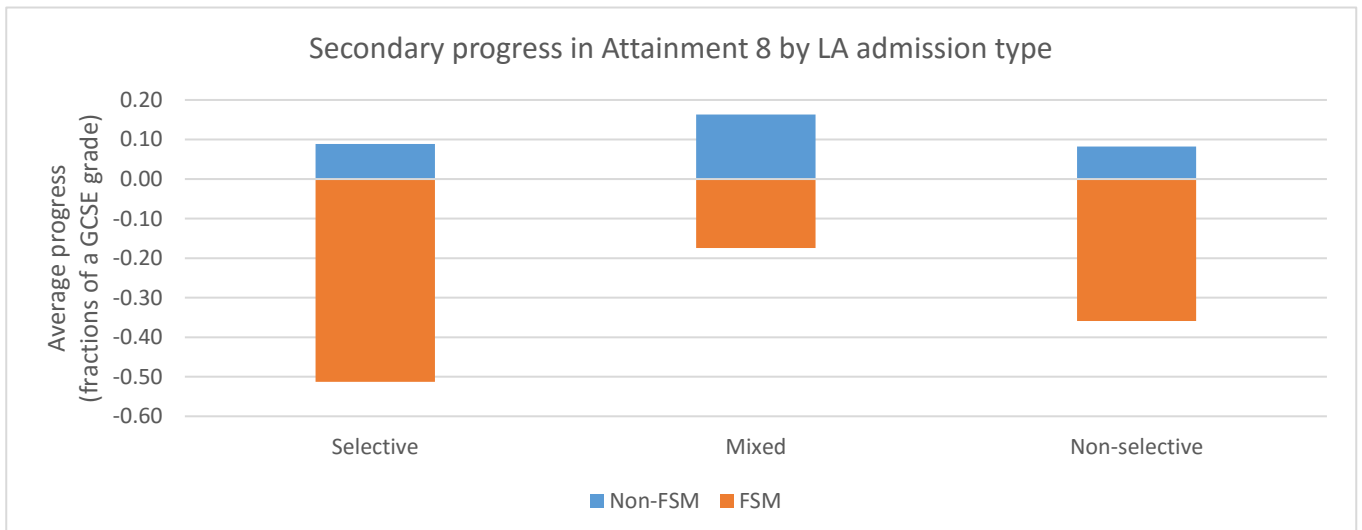
Progress in different school types

FSM pupils make the most progress in Voluntary Aided schools and the least in foundation schools. FSM gaps are notably smaller in Sponsored Academies than in other type of institutions, however, this is partly due to the fact that non-FSM pupils also make less progress (below that for all pupils) and it is not the case that disadvantaged pupils are making particularly high rates of progress in these schools.



Progress and school admissions

FSM pupils make the least progress in selective LAs and the most in 'mixed' LAs. The gap in progress is also smallest in these areas. However pupil characteristics differ between area types, with partially selective areas for example tending to be more affluent. This therefore affects the characteristics of the FSM (and non FSM pupils) in these areas' schools making comparisons difficult.



This trend is largely consistent when one looks specifically at the progress achieved by pupils who achieve in the top 40% at Key Stage 2: FSM gaps for all outcomes are smallest in mixed LAs, and non-FSM pupils also make most progress in these areas. FSM pupils with high prior attainment make the least progress in selective LAs, although non-FSM pupils tend to make more progress in selective and mixed areas than in non-selective areas.

Summary of Part One.

The national picture:

- Low income pupils eligible for FSM make less progress than pupils not eligible for FSM at secondary school. This is true regardless of the prior attainment of pupils, so high attainers at KS2 eligible for FSM make less progress than non-FSM pupils with the same KS2 attainment.
- Progress gaps between low income and higher income pupils are primarily driven by 'within school' differences, rather than variation in the performance of different schools.

The links between pupil and school characteristics and the gap in progress

- FSM pupils make least progress in rural areas and most in urban areas (especially London). The opposite is true for non-FSM pupils who make more progress in rural areas (as well as town and fringe areas) than they do in urban areas.
- Schools' intake influences rates of progress and the size of gaps. The progress gap between FSM and non-FSM pupils is widest in schools with average proportions of FSM pupils, and smallest in schools with the highest and lowest proportions of FSM. The same is true when considering the school cohort's neighbourhood deprivation. Cohort prior attainment also influences FSM pupils' progress with disadvantaged pupils progressing most in schools where the intake has low prior attainment. They make least progress in schools where the cohort has high prior attainment.
- Low income White British pupils make less progress at secondary school than low income ethnic minority pupils, some of whom make progress that is in line with, or above the national average for all pupils.

Reasons for these patterns are explored in Part Two.

Part two: explaining variations in progress gaps at secondary school

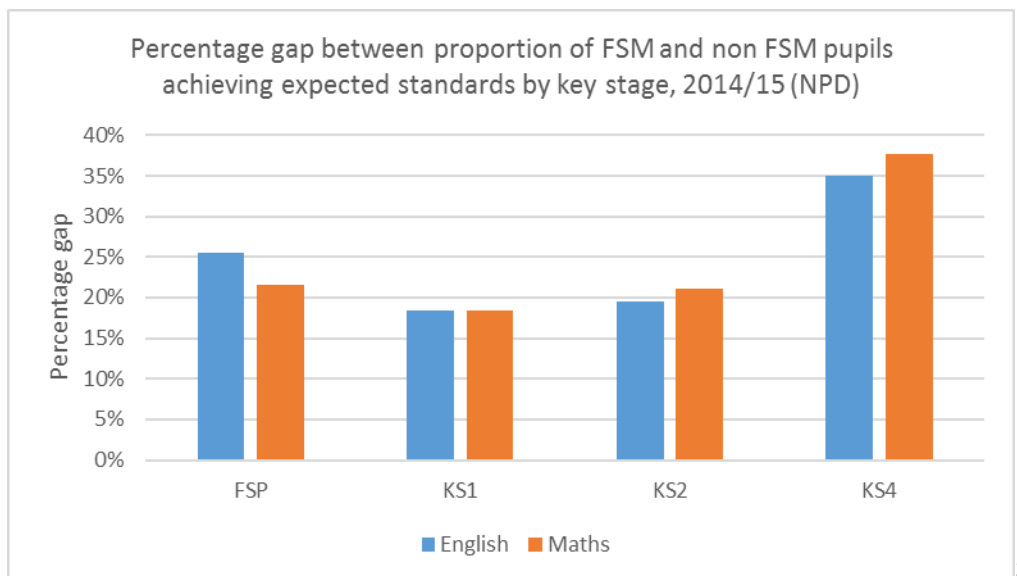
Introduction

2.1 Identifying the problem

Poverty drags down achievement

Pupils' progress at secondary school has life changing consequences for their future social mobility (Crawford et al. 2014). Attainment at GCSE has a profound impact on entry to Higher Education (ibid) and on later outcomes such as earning potential in the labour market (Blanden et al. 2015), but some pupils make far less progress than others between their Key Stage 2 tests and their GCSEs. As Figure 1 showed, these pupils tend to be those that come from low income backgrounds.

Differences in progress rates particularly hamper poorer pupils' life chances since gaps in attainment between pupils from high and low socio-economic status (SES) backgrounds exist from the start of school (Chowdry et al. 2010) but widen rather than closing over the course of pupils' education (The Sutton Trust 2010; Shaw et al. 2016a). Thus, the promise of education as a great equaliser remains unfulfilled.



Bell (2003) and Sammons et al. (2014) use a number of proxies for SES to show that pupils with low SES make less progress than others at secondary school. Worryingly, Shaw et al. (2016a) show that the gap has widened since 2012 with pupils from all ethnic groups (apart

² Additional analysis of NPD data taken from Shaw et al. 2016a

from those from Bangladeshi/Pakistani backgrounds) who are not-eligible for FSM making faster progress at secondary school than their peers who are eligible for FSM.

Notably, even poorer pupils with high attainment at Key Stage 2 (KS2) progress more slowly at secondary school in comparison to their more affluent peers with similar prior attainment (ibid). Education Datalab (2015) examined “Progress 8” scores for the top 10 percent of KS2 attainers in the 2014 GCSE cohort and found that around 7,000 of these “highly able” pupils at KS2 attain GCSE scores outside of the top quarter of all pupils nationally. They also find that these pupils who drop off ‘high attainment trajectories’ are particularly likely to be male and eligible for the pupil premium. Indeed, pupils with high prior attainment who are eligible for the pupil premium achieve half a grade lower at GCSE than their more affluent peers (ibid). Crawford et al. (2014) too show in stark terms that high achieving pupils from families with the lowest income levels are overtaken at secondary school by low achieving pupils from families with the highest income levels.

Together, these studies demonstrate the extensive and persistent barriers to achievement that poverty presents over the course of pupils’ secondary school careers.

An unexplained divergence

Whilst research frequently highlights the progress gap and the, consequently, widening attainment gap between low income pupils and their more advantaged peers, the UK literature does less to explain the reasons for pupils’ inequitable trajectories at secondary school. Instead, studies tend to focus on:

- Patterns in progress at secondary school (Crawford et al. 2014; Education Datalab 2015), with some speculation as to causal factors;
- Low income pupils’ GCSE attainment, with some suggested reasons for their underachievement and some analysis of prior attainment (Chowdry et al. 2010);
- Progress in secondary school, without focusing on low income pupils in particular (Sammons et al., 2014);
- Progress (including that of low income pupils) throughout curriculum phases but without a focus on what happens during the secondary years (Francis & Hutchings 2013).

Taken together, these studies highlight a number of factors that may explain low income pupils’ limited progress in secondary schools relative to their more advantaged peers, and these factors can be grouped into three broad sets. Two can be understood as “within-school factors”, as defined in Part One of the report:

- 1) Differences in progress within schools, attributable to different pupils’ varying experiences within the same school (for example through SEND provision, setting or pupil premium spending);

- 2) Differences in progress between FSM and non-FSM pupils in the same school that are attributable to the influence of external factors on pupils' progress at secondary school (such as their Home Learning Environment or neighbourhood effects).

The third can be understood as "between-school factors":

- 3) Those factors that arise from differences between different schools and types of school (such as differences in the quality of teaching, school culture, or organisation).

Part One of the report showed that "between-school factors" accounted for 12% of variations in pupil progress at secondary school, a figure consistent with the findings of Thomas et al. (2007). Clifton and Cook (2012) who come to similar conclusions, noting that if every school had similar results as outstanding schools, the attainment gap between pupils eligible for FSM and those not eligible for FSM would only be cut by 20%, as poorer pupils still do worse than their peers within outstanding schools.

Differences in pupils' backgrounds do more to determine their achievement and progress than the school they attend. Within school differences are therefore greater than between school differences. Pupils only spend some of their time in school and differences in parents' levels of education, pupils' early cognitive development, out-of-school experiences and pupils' hopes and expectations of their future therefore often do more to shape achievement than schools themselves (Sammons et al. 2014). Factors such as low income parents being more constrained in the extent to which they can support school also play a role.

The challenge of measurement

The progress pupils make at secondary school is measured using tests carried out at the start of the Early Years (EYFSP), KS1, KS2 and KS4 (GCSE or equivalent). There are three problems with using data from these end-of-Key Stage tests to gauge progress:

- 1) Single tests may misrepresent pupils' abilities because of a range of factors, such as how the pupil is feeling on the day of the test as Jerrim and Vignoles (2013) point out. Pupils whose test performance is affected by such factors are therefore likely to have more extreme test scores on the initial test, but then become 'more average' in the future. This issue is known as regression to the mean. As pupils get older and take more tests, this effect diminishes. Thus the effect is strongest at KS1, lower at KS2 and even lower at KS3 and KS4. Importantly, regression to the mean is particularly likely to affect test scores of pupils from low SES backgrounds, as lower cognitive skills (understanding the task or question being tested) among this group are likely to lead to anomalous results (ibid).

- 2) KS2 tests also have limited reliability. This is particularly highlighted in a DfE summary of over 4,000 responses to a call for evidence (2011). Responses largely came from primary school head teachers, but also included a small number of secondary school head teachers. Secondary school respondents raised concerns that KS2 tests are not accurate measures of a pupil's ability, and instead reflect the result of a period of intense preparation for those tests during Year 6. Many secondary schools therefore use Cognitive Ability Test Scores (CATS) to provide information about pupils' ability of pupils as they start secondary school (ibid). Similarly, in a small scale survey of Year 7 science and maths teachers, De Waal (2008) finds that the majority felt that pupil abilities were lower than KS2 scores suggested.

While the focus of this report is on pupils whose attainment trajectory at secondary school diverges from their primary school attainment, pupils whose trajectories stay the same between primary and secondary school should not be forgotten. If low prior attaining pupils make average progress at secondary school, they will be unable to catch up with higher prior attaining peers and achieve GCSE outcomes that enable opportunities later in life.

2.2 Pupil level factors

A range of individual characteristics shape low income pupils' progress at secondary school. Of these, the most commonly cited in the literature are:

1. A pupil's gender, age and ethnicity;
2. Whether or not they have Special Educational Needs and Disabilities (SEND) or mental health issues;
3. Whether or not a pupil is in care;
4. How often a pupil moves secondary school, and the reasons for those moves;
5. Where a pupil lives;
6. Conduct, absences and 'risky behaviours' outside of school;
7. Pupils' expectations and aspirations;
8. Pupils' social and emotional skills.

2.3.1 Gender, age and ethnicity

Sammons et al. (2014) use a longitudinal mixed methods approach as part of the EPPSE 3-16+ project to show that pupils who are older for their year group, females, and pupils from minority ethnic groups (in particular those of Bangladeshi heritage) are all more likely to make progress at secondary school than others.

The influence of gender on progress

Although Part One shows only a small gender difference in progress at secondary school for low income pupils, analysis of the 2014 GCSE cohort shows that boys are more likely than girls to fall off high attainment trajectories at secondary school (Education Datalab 2015), a trend noted by a number of our case study schools:

“In terms of progress we get very good results across the school, however there is a gender gap between boys and girls”.

School Six

The evidence is less clear about the reasons for boys poorer progress compared to girls, although a number of possible explanations are put forward. First, boys are more likely than girls to have problems with conduct at school, and are more likely to be excluded as a result (see section 2.3.6). Strand (2011) finds lower progress for Black Caribbean 11-14 year old boys in the LSYPE survey, which is unexplained by his analysis, and which he suggests is linked to lower teacher expectations for boys, especially those from this ethnic group. This may impact on their progress since these pupils are often placed in lower streams or sets (Hallam & Parsons 2013). As we set out in section 2.3, being placed in lower streams or sets can lower boys' educational expectations and cap their attainment if they are then entered for lower exam tiers. Hartas (2016) uses data from the 2016 UK Household Longitudinal Study to show that boys may also have less 'pro-educational' attitudes and values, for example seeing less value in a degree.

2.3.2 SEND and mental health

SEND and mental ill-health can hamper progress at secondary school since a number of disorders, particularly those relating to mental health, are more likely to develop during teenage years. SEND is particularly likely to affect poor pupils' progress: Shaw et al. (2016b) review UK literature on SEND to show causal links between poverty and prevalence of SEND, whereby parental SEND is both likely to produce family poverty, and for hereditary disorders, can lead to intergenerational disability. At the same time, “co-occurring causal factors” such as smoking during pregnancy, are associated both with poverty and a higher likelihood of children developing SEND. The authors also note larger gaps in progress at secondary school between pupils with SEND and those without (ibid).

Mental health and wellbeing problems increase amongst pupils between the ages of eleven and fifteen (The Children's Society 2016) and there are signs that mental health amongst teenagers has worsened over time: Collishaw et al. (2004) use data going back to 1974 to show increased prevalence of behavioural disorders in particular, while The Key's (2015) survey of over 1,000 secondary school heads reveals that over two thirds rated their students' mental health as their top concern. Case study schools also reported concerns over mental health:

“There are several students in that group who arrived at the school with quite deep emotional issues actually and receiving significant pastoral support right from Year 7 through the school and a number that, to be honest with you, we did really well to keep in school”.

School Eight

Mental health disorders are particularly prevalent among poor pupils, and there are widening socio-economic inequalities in conduct problems, hyperactivity and emotional symptoms (Richards et al. 2016). All of these are likely to impact on poor pupils' progress at secondary school.

Another explanation for the greater gap in progress at secondary school for pupils with SEND and mental health disorders is the difference in the way secondary and primary schools manage SEND (Shaw et al. 2016b). A small scale qualitative study across 20 local authorities suggests that pupil stress when transitioning between primary and secondary school is exacerbated due to larger school size and less time spent with one teacher (Black and Norwich 2012). Secondary school exclusion rates are higher for pupils with SEND than for those without³ (DfE 2015a). Pupils with SEND and mental health disorders are therefore likely to face barriers to their progress at secondary school.

³ 23.80% of pupils with an EHCP or statement of SEND and 22.50% of pupils on SEN support received a fixed term exclusion in 2014/15 compared to 4.99% of pupils with no SEND. 0.27% of pupils with an EHCP or statement of SEND and 0.55% of pupils on SEN support were permanently excluded in 2014/15 compared to 0.09% of pupils with no SEND

Box 1: Supporting pupils with SEND and mental health problems

School Five is a secondary Academy with a sixth form in West London. The school has a much higher than average proportion of pupils who have been eligible for FSM at any time in the last six years, and a higher than average proportion of pupils identified with a statement of SEN or an Education Health and Care Plan. Low income pupils at School Five make good progress.

The school noted a link between low progress, low income and pupils with Mental Health problems and SEND. The school attempts to mitigate the effects of these by working with local authority-run services such as CAMHS (Child and Adolescent Mental Health Services):

“We work really closely with CAMHS and with the educational psychologist and we try extremely hard to tailor the timetable individually to the children where we have things like that going on”.

The school also attempts to avoid excluding pupils with SEND and Mental Health by organising specialist provision on the school site which pupils can access when they need it:

“We have our own on site pupil referral unit so that we can keep them in house and they can work with the people that have always known them and can support them through that and then try to reintegrate them into as many mainstream lessons as possible where they feel comfortable and feel that there will be a success.”

2.3.3 Pupils in care

Looked after pupils make less progress at secondary school compared to their peers. 37% make expected progress in English, while fewer than 29% make expected progress in maths (DfE 2016). Pupils are more likely to be taken into care during their time at secondary school than at primary. There are 69,540 looked after pupils in England, nearly half of whom (38%) are over 10 years of age (DfE 2015d). The number of looked after pupils has risen since 2011, particularly in the 10-15 age category. Family disfunction is a growing reason for pupils of this age being taken into care (ibid) and two-thirds of looked after pupils are identified as having SEND, most commonly behavioural, emotional or mental health disorders (ibid).

In a large scale mixed methods study linking the NPD with the Pupils Looked After Database, and drawing on a range of qualitative interviews, Sebba et al. (2015) show that for pupils in care, progress in secondary school differs depending on the length of time in care and pupils' circumstances in the year leading up to GCSE results. The shorter the time between being placed in care and their exams, the worse pupils performed in their GCSEs. The authors warn about inferring causality from their analysis, but suggest that the

circumstances that result in pupils being placed in care have a negative impact on exam performance. Addressing the needs of pupils in care or at risk of being taken into care may therefore play a role in help to secure progress for low income pupils.

2.3.4 Changing schools: pupil mobility

Over the last 20 years, there has been increasing concern over the impact on GCSE attainment of pupils moving between schools (Education Datalab 2016). Strand and Demie (2007) use regression analysis of pupil attainment in a single English local authority to demonstrate that the impact of pupil mobility on attainment is small at primary school but that at secondary school, pupils who move school make less progress than others, even after controlling for prior attainment and other factors. This is particularly important as a barrier to progress for low SES pupils since these pupils are more likely than others to move schools (57% of pupils who moved school in 2013/14 had been eligible for FSM at some point during primary and secondary school; Education Datalab, 2016). While Strand and Demie's study did not prove that mobility caused lower educational outcomes, they suggest a number of reasons why mobility might have a particularly negative effect on progress at secondary school:

1. A greater reluctance amongst parents to move pupils at secondary school compared to when pupils are at primary schools, which may mean those that do move do so in more "extreme" circumstances that may in themselves have a negative effect on progress (such as exclusion or family breakdown).
2. More complex rules and routines in secondary schools may create challenges for older pupils when they move between schools.
3. The more specialised curriculum at secondary level is more challenging for parents to support and therefore results in a greater penalty for missing lesson time (Strand and Demie 2007).

2.3.5 Where a pupil lives

As noted in Part One of the report, low income pupils make greater progress in urban areas (especially in London) compared to urban fringe/rural areas. One explanation suggested in the literature is the greater range of ethnicities present in urban areas. Much of this literature focuses on attainment, and the link between the high numbers of minority ethnic pupils and relatively high attainment amongst pupils living in London, both at primary and secondary school level. A number of studies however do suggest reasons why low income pupils in the capital are likely to make more progress at secondary school than those elsewhere.

Burgess (2014) analyses NPD and census data to suggest that pupil progress in London secondary schools is a result of an "ethnic effect" with the high proportion of ethnic minority pupils making greater progress at secondary school in the capital accounting for much of the greater progress low income pupils make in London. Similarly, one case study

school reported that their ethnic minority pupils made particularly strong progress due to their parents' high expectations:

"We have quite a lot of parents who because they're from an immigrant background they're very idealistic for their children"

School Five

Baars et al. (2014) on the other hand, use a mixed methods approach to suggest that other factors, such as improvements to schools, policy context and the opportunities in the capital's labour market also play a role in London secondary school pupils' impressive progress. It may be that London's opportunity structures are a particularly strong example of the positive effects of an urban environment on young people's motivations, aspirations and expectations. On the other hand, it is not the case that all urban schools benefit from a local context conducive to progress. For example, School Two is located in an urban setting in Yorkshire and Humber, and the head teacher argues that:

"Aspirations are a huge issue... you have got second, third, fourth generation unemployment, kind of a welfare and benefits mentality."

School Two

2.3.6 Conduct, risky behaviour and absence from school

School exclusions impact negatively on progress and secondary age pupils are far more likely to be excluded than primary pupils. 25% of exclusions occur when pupils are aged 14 and this is the most common age for pupils to be excluded at. Meanwhile over half of all exclusions occur in Year 9 or above. This is partly because these pupils are more likely to have conduct issues that result in exclusion compared to primary age pupils (Department for Education 2016). Pupils eligible for FSM are particularly vulnerable to exclusion with an exclusion rate four times higher than their better off peers. Boys are three times more likely to be excluded than girls, while half of all exclusions are for pupils identified with SEND (ibid). This was exemplified in School Eight where a relatively small cohort of low income pupils has made high levels of progress in recent years. However, their 2015-16 Year 11 (GCSE) cohort made less progress and the school attributes this, in part, to higher levels of fixed-term exclusion and absences:

"With last year's cohort it was much more obvious who the disadvantaged students were because they were hitting on into other areas; their attendance wasn't high as a group and their exclusions were higher as a group."

School Eight

The school attempted to respond by providing targeted literacy and numeracy support for this cohort, although the head teacher felt that this approach did not work fully with the schools' 2016 GCSE cohort:

“We did buy specific resources last year to support literacy and numeracy and new programmes and, again, we’ve used our funding to allocate those resources because such a great number of them are in need of those resources”.

School Eight

Missing school through truancy or absence also reduces pupils' progress at secondary school and low SES pupils are more likely to miss school than their peers (Department for Education 2015b). The Department for Education's (2015c) regression analysis of pupil absence and attainment shows that, regardless of the nature of absence from school, pupils that miss school make less progress than others. Some case study schools linked poor attendance with low income parents' long working hours and argued that this was a particular issue in single parent households:

“Attendance is really, really marked in homes that ... have maybe one parent who works a lot and so isn't there when the child gets up to go to school because the parent is a shift worker or the parent had to go out before the child so then it's really easy for the child to take the day off”.

School Five

“These are homes where there's very fractured and insecure employment, where the working hours are really anti-social, where they hold two or three jobs down, two or three low paid and insecure jobs”.

School Four

In response to this challenge, School Four, (where low income pupils make good progress), assigned a member of staff for each year group to track the progress, attendance, punctuality and conduct of low income pupils, and to liaise with other services when needed:

“Where there are really complex and deep and overlapping issues liaising with social services and mental health teams and any services that we can get on board to help families to help their children to succeed at school”.

School Four

A pupil's likelihood of taking part in risky behaviours is closely linked to the prevalence of risky behaviours amongst their peers in their neighbourhood and pupils who participate in risky behaviours outside of school are less likely to make progress at secondary school. Sammons et al. (2014) use data from the longitudinal EPPSE project to show that pupils from neighbourhoods with higher levels of deprivation and/or crime made less progress at secondary school than others. Importantly, they found that this was not the case at primary school and argued that this was because teenagers were more likely to take part in activities outside the home and interact with their peer group in that neighbourhood. Risky behaviour may therefore be a causal mechanism linking poverty and lower progress rates at secondary school in particular.

Box 2: Managing risky behaviour outside of school

School Five notes the impact of risky behaviour outside of school on progress and makes the link to homework, referring to:

"The influence of the estate and the other children on the estate or the gangs on the estate. Our children... don't do enough homework in the cases where progress isn't being made , and that's because.. they don't go home sometimes until very late at night".

The school also notes a link between risky behaviour and attitudes to school. It therefore buys in support from an external organisation which supports children who are showing signs of becoming disengaged. The school identifies small groups who attend a residential course for a week and then receive follow up visits. The school has used it with a number of groups of low income pupils:

"We've used it with just boys, we've used it with just girls, we've used it with mixed groups, we've used it with vulnerable children, children who are struggling behaviourally, and that's definitely something that is very expensive but we feel that that's a really good use of our pupil premium money"

2.3.7 Pupils' expectations and aspirations

There is considerable debate over the nature and impact of pupil aspirations on pupils' progress at secondary school. While policy makers have sought to raise aspirations as a means of raising attainment and progress in secondary school through programmes such as "Aim Higher" , a number of studies find limited evidence that aspirations by themselves improve educational outcomes (Carter-Wall and Whitfield 2012; Baker et al. 2014; St. Clair et al. 2013). Furthermore it is unclear whether low income pupils do have lower educational aspirations in the first place. Baker et al. (2014) use EPPSE data to show that all students generally hold high educational aspirations, regardless of their socio-economic status but also that aspirations were marginally lower among low income pupils at age 14. McCulloch (2016) also points out small differences in aspirations associated with socio-economic status.

Khattab (2015) analyses LSYPE data to show that even when pupils hold high aspirations, if they do not also hold high expectations they are less likely to convert those aspirations into high attainment at GCSE. Meanwhile, pupils who hold low educational aspirations and expectations at age 13-14 generally achieve the lowest number of A*-C GCSEs, although a significant minority (17%) do well despite their low aspirations and expectations and achieve five or more A*-C grades at GCSE (ibid). There is little evidence, however, to shed light on how aspirations and expectations interact with attainment at GCSE (Baker et al. 2014), nor is there evidence that aspirations and expectations cause variation in rates of progress at secondary school, indeed causality may run in either direction: aspirations and expectations may affect achievement, but pupils may also modify their aspirations and expectations in light of their achievement at school.

Box 3: linking aspirations, expectations and achievement

School Six is an 11-18 comprehensive school, with lower than average proportions of pupils eligible for FSM, located in Yorkshire. Low income pupils make less progress than average.

The school recognises that some pupils hold low educational aspirations, and that these stem from their immediate family:

"...who perhaps finished school at 16, didn't potentially have a positive experience with school, and often that can rub off on their children as well, and it's about challenging that."

To combat this, the school tries to ensure that pupils are aware of the links between educational achievement and careers:

"We've got an extensive careers guidance service which we utilise within the school, and that has a big impact in terms of focusing students as they move through the school".

Although there is little evidence to show that low income pupils have significantly lower aspirations that hold back their progress at secondary school, there is some qualitative evidence based on case studies with low income teenagers in three UK cities suggesting that a lack of information about career pathways may lead students not to realise how much progress is required at secondary school in order to achieve their future career goals (St. Clair et al. 2013). In these cases progress might therefore be hindered by a lack of knowledge about how GCSE attainment translates into career outcomes. Improving understanding of this may therefore be important when working with these groups of pupils.

2.3.8 Pupil social and emotional skills

A number of case study schools argued that low income pupils' poor emotional and communicative skills limited their ability to progress. According to some schools, low income pupils lacked the linguistic ability to manage conflict, or deal with setbacks:

"Language is a huge issue within the school, the children having a repertoire of language to be able to solve conflict, negotiate their way through conflict".

School Two

Similarly, schools argued that low income pupils were less confident, and more sensitive to failure:

"A lack of confidence, and a lack of self esteem, and a real lack of belief and understanding from families that children have an amazing capacity to achieve great things with the right support, and the right challenge".

School Two

This meant that low income pupils were less likely to attempt or succeed at tasks that they initially found difficult:

"What I mean is that ability to cock it up and pick yourself up again and the confidence, I think, to try something and risk failing. And some of our low income children are very, very risk averse".

School One

School Eight, who had a small cohort of low income pupils who make better than average progress, identified particular social and emotional needs amongst low income pupils. They therefore adapted their academic mentoring programme, which all pupils access, so that one member of staff:

"...is responsible for making sure that all of our low income students are getting access to clubs, resources, trips and visits and mentoring."

School Eight

Summary of pupil level factors

Across England, a number of pupil level factors are linked to lower progress at secondary school:

- Behaviour that is “risky” or results in exclusion or absence from secondary school;
- Behavioural, emotional and mental health needs, especially for those from low income backgrounds;
- The additional stresses experienced by secondary age looked after pupils, and in particular those that are placed in care in the same year as their GCSEs;
- Moving school, particularly for reasons associated with family dysfunction or exclusion, is more likely at secondary school;
- Pupils from low income families, especially boys, are at greater risk of developing behavioural problems or missing school than others.

2.3 Family and parental factors

The role of parents and families

The support and learning opportunities provided by the adults that pupils live with play a crucial role in determining how much progress they make at school. Secondary school pupils' progress is affected by a number of characteristics related to pupils' Home Learning Environment (HLE) that appear to have less influence at primary school. In particular, support with homework, activities that support studies, private tuition, and adults' engagement with pupils' progress at school and GCSE subject choices all contribute to greater progress at secondary school (Sammons et al. 2014). These factors are therefore likely to particularly impact on low income pupils' progress at secondary school.

2.3.1 Homework and leisure time

Homework is a key factor in progress at secondary school relative to primary school, with more time on homework strongly predicting better progress between KS2 and KS4, even when other factors are taken into account (Sammons et al. 2014). Sammons et al. found that progress at secondary school was greatest for those completing two-three hours of homework per night (ibid). The authors suggest that engaging in homework supports progress through three mechanisms:

1. Developing study skills, self-regulation and additional learning;
2. Reflecting school organisation and effectiveness;
3. Parents' encouragement to take school work seriously.

Lower income parents are less likely to help with homework but no less likely to monitor homework⁴ (Richards et al. 2016) although others find differences in the ways low income parents regulate homework, as set out below. Strand (2011) notes an ethnic dimension to homework practices, with Indian pupils more likely to spend time on homework, regardless of their socio-economic status, a finding that may help explain why these pupils seem to be relatively insulated from poverty's effect on progress compared to their peers from "Other Asian" backgrounds.

In a study of 35 case studies of 14-16 year old pupils and their families sampled from the EPPSE project Mayo and Siraj (2015) look at low income pupils at the end of KS3 and suggest a number of links between progress at secondary school and the home learning environment:

⁴ The authors note that their measure potentially combines a positive and negative impact on progress, on the one hand through supportive help and the other through intrusive help with homework, and also note that the SES gap in home support has been decreasing over time (ibid).

- 1) Parents of boys who were not making progress at secondary school reported that they felt they had missed an opportunity to develop positive attitudes to school and learning when their pupil was at primary school;
- 2) The ways in which parents supported homework changed at secondary school, with less direct help as work became more challenging;
- 3) For parents of pupils who had achieved as expected at primary school, regulation of homework in terms of time or routines ended as their pupil moved through secondary school;
- 4) For pupils who had achieved beyond what was predicted at primary school, support at home was markedly different and involved frequent conversations about school at home, regulations and routines around homework and leisure, and positive feedback not just on achievements but also behavior that was perceived to demonstrate a positive attitude to learning.

One case study school identified material poverty as limiting low income pupils' capacity to complete homework:

"The bigger barrier comes really from children not having a space at home to do the work in, they're all sharing bedrooms, no child that I know here has their own bedroom. Not having a space to do homework, not having the family understanding that they need to do homework".

School Five

Meanwhile, another school highlighted its homework support for low income pupils with SEND.

"We noted that SEND disadvantaged students in particular ... were attracting the most consequences for missed homework. So this year we've got extra homework clubs on to help them with that."

School Four

2.3.2 Engagement with school

See and Gorard's meta-analysis of international literature relating to parents' impact on school performance indicates that throughout a pupil's schooling there is a causal link between parental interest and involvement in their child's schooling, and the pupil's performance at school (See and Gorard 2015). At secondary school, this involvement is often measured in terms of parents' participation in parents' evenings (Richards 2016), something that may have increased importance at secondary school due to parents' involvement in GCSE choices, as discussed below. Francis and Hutchings (2013) use a range of survey data to show that parents' involvement at secondary school is marginally less likely to include attendance at parents' evenings than at primary school. Similarly Baker et al.'s survey of Year 9 pupils (2014) finds that FSM eligibility and neighbourhood deprivation

both correlated with parents being less likely to attend parents evenings. On the other hand, Richards et al. (2016) find that attendance at parents' evenings is still proportionally high, and increasing, for low income parents, and does not find a socio-economic status gap in pupils' perceptions of their parents' interest in their education (ibid).

Despite the literature's ambivalent stance on parental engagement's influence on pupil progress, all case study schools highlighted a lack of parental engagement with school as a barrier to progress for low income pupils. Schools reported negative expectations of school and education that prevented parents engaging with their child's education:

"They also have issues with educational authority which means that they're not always going to act with you when you're trying to discipline a child or even actually when you're trying to support the child and the family, so quite often there's a level of non-engagement that's unhelpful".

School One

Another school also recognised a lack of parental engagement, and saw the school as filling in the gaps in home learning and support:

"So the effective study, the homework club, holiday lessons, these things where if they go home they're not going to get the right learning environment or they're not going to get good support from their parents ... [what] we try and do is we try to be a surrogate for that and we do it at school."

School Seven

Case study schools with a large number of pupils from low income migrant families reported high levels of parental engagement which supported pupils' progress at school:

"They want their children to have high status jobs, and they want their children in one generation to seize the opportunities and make financial and employment progress that the parents weren't able to make ... [so] we get lots of pro-learning behaviour and keenness to learn. Because although they don't have the language or the sophistication of vocabulary, their English isn't as well developed, they are keen to act on the advice and the teaching."

School Four

2.3.3 Academically enriching activities

EPPSE, a mixed-methods longitudinal study of the factors influencing progress and attainment at secondary school, suggests that taking part in academically enriching practices at home during adolescence is an important predictor of progress (Sylva et al., 2014). Richards et al (2016) use data from the "Taking Part Survey 2006-2008" to show the difference between high and low income families in relation to a range of characteristics that affect the home learning environment. They find that low income pupils wanted to take part in more activities than they currently did, while high income pupils were satisfied with their levels of extra-curricular activity, and that financial constraints, as well as transport and social factors (a lack of people to go with) also hold poorer pupils back (ibid).

Box 5: Enabling enriching cultural experiences

School Four reported that low income pupils were unlikely to take part in enriching extra-curricular activities due to the cost involved:

"They wouldn't take up the trips and extra-curricular activities that we have unless we help to fund them."

To help combat this, the school introduced music scholarships to help low income pupils gain access to musical tuition:

"We have 12 tutor groups in Year 7, and we've designated one of them the music scholarship group, and over half of that group are disadvantaged... we've given them a scholarship where they get an instrument, they get their ...tuition paid for, and we are convinced that it is going to lead to gains ... not only in music but in academic subjects, in their social and emotional aspects of their learning".

Similarly, Francis and Hutchings (2013) surveyed 1,173 parents of pupils aged 5-16 in 2012 and revealed a large gap in participation in academically enriching activities between high and low socio-economic groups. The authors also claim, however, that for activities with no financial cost, such as museum visits, there are fewer differences in participation by socio-economic group than those with high financial costs such as purchasing private tuition (discussed in more detail below). Although these latter two studies do not specifically examine secondary school progress, Sylva et al. (2014) suggest that academically enriching activities at home may help shape differing rates of progress in pupils from different socio-economic groups although it is difficult to disentangle correlation and causation in this area.

2.3.4 Tutoring

There is strong evidence confirming that individual tuition increases secondary school outcomes, whether in terms of GCSE maths attainment (Ireson & Rushforth 2014); or additional months of progress attributed to state-funded catch up literacy tuition for Year 7

pupils (Siddiqui et al. 2016; Gorard et al. 2016). However, not all pupils are equally likely to receive individual tuition and this can place poorer pupils at a distinct disadvantage in comparison to their better off peers⁵. Large scale surveys of parental practices regarding private tuition show that parents of pupils eligible for FSM are less likely to engage a private tutor to support their pupil's progress, partly because of the high financial cost of doing so (Baker et al. 2014; Kirby 2016). Poor secondary school pupils are therefore much less likely to receive private tuition. Combined with the fact that secondary age pupils are more likely to receive private tuition than primary age pupils, this is likely to particularly boost more affluent children's progress at secondary level (Kirby 2016).

Francis and Hutchings (2013) also find that parents with qualifications at degree level or above were more likely to engage a private tutor for their pupil whilst Kirby (2016) shows that pupils from ethnic minorities and pupils living in London are more likely to receive private tuition. The boost to secondary school progress provided by private tutoring is therefore inequitably distributed.

Summary of parental and family influences on progress

- Parents' regulation of homework has a large influence on school progress, particularly at secondary school. Parents with higher level qualifications and higher socio-economic status are more likely to negotiate effective homework routines than parents with lower socio-economic status. There is some evidence that parents feel that a lack of an effective homework routine is particularly detrimental to boys;
- Low income parents are less likely to engage with school in ways that support their pupil's progress (for example by attending parents' evenings);
- Academically enriching activities may help support attitudes to school and learning, but low income pupils are less likely to take part in these;
- Tutoring has a positive effect on secondary school progress. However low income pupils are less likely to have access to private tutoring;
- Taken together these factors help explain why low income pupils with high prior attainment are at greater risk than their more advantaged peers of making lower than expected progress at secondary school.

⁵ The state funded examples above were targeted at pupils with low KS2 scores in literacy in a limited number of secondary schools.

2.3 Within school factors

This section of the report considers the factors that shape the gap between low income pupils' and others' progress at secondary school that occur across most or all schools, and so can be understood as “within school” factors. We discuss factors that relate to differences between schools – “between school factors” – in section 2.5.

Within secondary schools, the literature identifies three school-based factors that impact on pupil progress in ways that are broadly similar across most schools:

1. Setting and streaming practices;
2. Teachers' expectations of low income pupils;
3. Widespread issues with progress in KS3.

2.3.1 Setting and streaming practices

Streaming and setting is commonly used at secondary school, especially in subjects such as maths (Atkinson et al. 2008). Such practices create classroom peer effects that influence pupil progress through a combination of limiting expectations, lower qualified teachers and capping of grades that pupils can achieve (William et al. 1996; Atkinson et al. 2008; Ireson et al. 2005). Broadly speaking, high attainers make more progress than low attainers when they are grouped by ability (Education Endowment Foundation, 2016).

The effects of setting may particularly hinder the progress of pupils placed in sets that restrict them to a lower tier of exam because this can cap how much progress they are able to make at secondary school. Atkinson et al. (2008) analysed the impact of setting by GCSE exam tier with a sample of 9,400 pupils in England and found that pupils in sets studying for higher tier papers did better, even when accounting for prior attainment and teacher factors. They suggest that being placed in a lower tier may reduce motivation due to the limits placed on attainment. Similarly, Ireson et al (2005), in a large but non-generalisable longitudinal study of over 6,000 pupils taking their GCSEs in 2000, find that being placed in a top set was associated with higher attainment at GCSE, and conversely placement in a lower set was associated with low attainment at GCSE (with the impact of setting especially strong for maths) but that this was largely explained by prior attainment (i.e. setting had no impact on attainment once prior attainment was controlled for).

According to Ireson et al.'s research, the picture for pupils in middle sets appears more complicated. Here, pupils with intermediate prior attainment were spread over a wide range of sets, as teachers made decisions on groupings based on a range of factors other than prior attainment (ibid). The authors suggest that teachers' lower expectations of low income pupils may therefore lead to disadvantaged middle attainers being placed in lower sets, hampering pupils' motivation and progress as a result. One school recognised the

negative impact that ability setting was having on low income pupils and re-organised their teaching groups in response:

“In English a radical thing that we did, which was successful, was we had a (mixed ability) GCSE group which was entirely made up of disadvantaged students, and we put one of our best most committed teachers with that group and gave her the resources”.

School Four

2.3.2 Teacher expectations

The literature tentatively suggests that teacher expectations may be lower for low income pupils, and that these lower expectations can limit progress, although the evidence for these claims is far from complete. Two studies refer to a possible effect of teacher expectation on progress. The Social Mobility and Child Poverty Commission (SMCPC) (2014) suggest that the schools that achieve most for low income pupils maintain high expectations regardless of socio-economic background. Their survey of 1,100 teachers aimed to identify attitudes to economic disadvantage and found that 25% of teachers in secondary schools, (compared to 21% in schools overall) felt their colleagues held lower expectations of low income pupils. Similarly in a small scale, non-generalisable study, Thompson, McNicol and Menter (2016) find that student teachers on an Oxford based ITT course held views that might lower their expectations of low income pupils, although it was not clear whether such expectations had a greater impact at secondary school.

Four of the eight case study schools highlighted that teacher expectations played an important role in securing good progress among low income pupils, and highlighted steps they had taken to reduce the negative impact on progress when teachers held low expectations of those pupils:

“Just really high standards demanded of every child, in terms of getting the basics right so that they know that you rate them as importantly as anybody else, and there's no excuse for them... the most important thing is making sure that every single teacher ...believes that every child can achieve.”

School Three

One case study school felt that low teacher expectations stemmed from teachers' own family backgrounds and relative higher socio-economic status than that of their pupils:

“Most teachers come from a fairly supportive, either strong supportive, working class background or middle class background and they've perhaps not experienced this. So I did worry a couple of years ago that there was a lack of empathy from our staff ...so we challenged that and I think that's been critical in changing our approach towards some of these disadvantaged youngsters”.

School Seven

Box 6: Raising teacher expectations

Two case study schools outlined their approach to raising teacher expectations.

Setting targets

School Four is a larger than average Academy in the East Midlands, with higher than average levels of FSM, SEND and EAL, where low income pupils make good progress. School Four recognised a problem with low teacher expectations for low income pupils. They therefore responded by adding additional targets for low income pupils and their teachers:

“What we do is try and add an extra ambition to their targets so that we are expecting more and the teachers are expecting more from them, and then putting in the support ...with all the multiple strategies that we have, to ... help make sure that they make accelerated progress”

School Four

Changing pedagogy

School Four also attempted to address low teacher expectations in its maths department by drawing on new pedagogical approaches, in order to bring about:

“... a cultural change in our maths department, and we are almost there, but there was a legacy of low expectation, and not having the growth mindset for particularly low ability disadvantaged students... so we are looking at our pedagogy, looking at approaches that are drawn from Singapore and Shanghai, and looking to revive that idea that everybody can succeed at maths.”

School Three

Meanwhile in the short term, the school organised staffing within the maths department so that:

“our best maths teachers are teaching groups where disadvantaged students predominate”.

School Three

Comparisons between schools

School Two is located close to another school with a similar demographic where low income pupils make good progress. The head teacher has used the pupil progress of its neighbour to challenge low teacher expectation:

“I am very careful in the way that I address the staff at the school, that we don't look for excuses, we pride ourselves in finding solutions, because actually down the road ... there is evidence that children ... from the most serious poverty can achieve with the right support and encouragement for them, and their families.”

School Two

2.3.3 Progress in KS3

A large scale survey on the effectiveness of Key Stage 3 (KS3) by Ofsted (2015), found evidence of widespread problems at KS3, with progress stalling in English and Maths in one in five schools inspected during the survey. Ofsted suggest a number of factors that may lie behind this (ibid):

- Weak teaching in KS3, with split classes and non-specialist teachers;
- Secondary schools and primary schools not working together to establish pupils' levels of attainment and knowledge, leading to a general acceptance that, in Year 7 in particular, pupils often repeat what they had learned in KS2, to the detriment of high prior attainers in particular;
- Weaknesses in tracking progress at KS3 compared to KS4;
- Prioritisation of pupil premium funding at KS4, leaving eligible pupils at KS3 without the support the funding might offer.

The three low APS, high progress case study schools (Three, Four and Five) all highlighted their efforts to give KS3 the same focus as KS4, as a means of ensuring low income pupils make good progress.

Case study schools with large numbers of low income pupils all recognised the risks of stalling progress, and attempted to mitigate this by using internal data and tracking to identify pupils early on who might not be making progress in KS3:

"It's done right from the very start of year 7, so... there is the same amount of attention paid to year 7, year 8, year 9 and year 10 as there is to year 11".

School Three

"We track against all targets disadvantaged students progress in Year 7, 8, 9 and 10 as closely as we do in Year 11".

School Four

Another case study school has used the Pupil Premium (PP) to fund more teachers in KS3:

"We fund an additional teaching class in Year 7 which is meaning maths and English are in a smaller teaching group and we do divert that from our PP funding because we feel that that is justified as there's so many people in that group who are disadvantaged. We also ensure that ... any student who is disadvantaged and in that group also receives one to one support and we monitor it that way."

School Eight

Box 7: Targeting resources at younger pupils

School Five identified a problem with pupils arriving in KS4 having made less progress than was needed to achieve well at GCSE. The school therefore:

"...started to look more closely at our key stage three ... with the GCSEs getting harder we can't just put in the level of intervention that we were putting in at key stage four so we're definitely pushing our views and our opinions and all our ideas about intervention and closing the gap down now into key stage three"

One measure that the school has put in place is a course designed to help pupils and parents ease into the transition to secondary school, which:

"...helps them to understand what it's like to parent a teenager .. it's a program of around .. six or seven weeks... every week they work through different aspects of parenting the child, they cook together, they do art together and they spend time together and that's been extremely well received."

The school also shares progress data with pupils throughout KS3 and KS4. The school believes that this motivates pupils to make better progress:

"Data then is published in the school on the wall... children drive themselves to better progress because they want to move up the rank order"

The school deliberately emphasises progress over attainment because:

"Children who might be lower down on the attainment rank order ... [are] right at the top because they've come in below expected progress in literacy ... and they've had this intensive literacy [intervention] or whatever so they then come out higher up, and that is a really key factor for driving students' progress and the way they approach their assessments really and their learning"

Publishing progress rank orders also helps the school communicate with parents who may not understand:

"...what a 6a or a 5c mean but they did understand if their children dropped 100 places in a rank order. They could know that their child was not making enough progress and therefore something needed to be done, so in a crude way it enabled parents who have no knowledge of the British education system to engage with where their child's learning was at".

Summary of within-school factors influencing progress

- At classroom level, setting holds back low and middle attainers' progress. These pupils are more likely to be from low income backgrounds than pupils with high attainment at KS2.
- Although limited, there is some evidence to suggest that teacher expectations are lower for low income pupils, and that this may affect their progress in secondary school.
- Weak KS3 provision holds back low income pupils, and in particular those that were high attainers at KS2.

2.5 Between school factors: how does attending a particular secondary school impact on progress?

Differences between secondary schools account for only 12% of the variation in how much progress pupils make between KS2 and KS4. Nonetheless, some schools support low income pupils' progress more successfully than others. The literature identifies three reasons for this:

1. Individual schools' characteristics and culture;
2. School intakes;
3. Different schools' ability to recruit and retain high quality teachers;

This section also examines whether different types of secondary school (e.g. selective, faith, local authority governed) impact on progress, but finds that there is little evidence that any particular type of school is more effective in supporting pupil progress.

2.5.1 School characteristics and culture

A school's culture can be understood as the way it demonstrates shared values and assumptions through artefacts and practices, as well as the strength and consistency of the way these factors are expressed within the school (Schoen and Teddlie 2008).

Sylva et al. (2014) analyse Year Nine pupils' descriptions of their school in the EPPSE sample and found a number of factors that predicted greater progress at secondary school:

- Schools that placed a strong emphasis on learning;
- A positive behaviour climate;

and to a lesser extent:

- Pupils feeling valued and respected; and
- The quality of learning resources within the school.

Year 11 pupils made greater progress if they felt that in their school:

- There was a strong emphasis on learning;
- Student-teacher relationships were positive and founded on trust, respect and fairness;
- Teachers monitored pupils' work frequently and provided feedback (ibid).

A qualitative study by the Social Mobility and Child Poverty Commission, which looked at good practice in secondary schools with large numbers of low income pupils attaining well at GCSE also found that effective schools tended to be those that:

- Used data effectively to direct resources towards particular pupils;
- Held high expectations of success for every pupil (regardless of background);
- Were focused on recruiting and developing high quality teachers;
- Actively attempted to engage parents and;

- Worked to support pupils' social and emotional development (SMCPC 2014).

Likewise, the four case study schools in this report with high numbers of disadvantaged pupils making good progress also placed importance on high expectations of progress, along with detailed use of data to track that progress and intervene where necessary.

Box 8: Developing a culture that supports progress

School Three is an 11-18 academy in West London with well above average proportions of pupils eligible for FSM, and high numbers of students with EAL. Low income pupils make better than average progress.

The school believes that its culture helps low income pupils' to progress. The school's ethos emphasises a belief that low income pupils should not underperform relative to others, and senior leaders communicate this frequently to all staff and pupils:

"The kind of feeling of, 'this is the way we do things around here,' and it's very ... it is celebrated regularly in assemblies and the podcasts, all the messaging is very simple but repeated all the time so that everybody understands it. All the language is very simple so a year 6 child that visits can explain it to anybody, because we don't want anything lost in translation."

The school's ethos is supported by practices that help staff identify and target resources at pupils not making progress:

"Making sure that every child is meeting their targets, and if they're not then every six weeks checking whether they've made it or not, and then giving intervention... I mean a particular group of staff and a particular provision with resource that focuses entirely on the data for each child."

Meanwhile the school also fosters a culture of flexibility and openness to new ideas that supports low income pupils' progress:

"Never think that you've found the solution and the magic bullet, you've got to constantly drive with each single different scenario that the children are coming through on. Every year group is different and every cohort staff each year are different, so it's like we relentlessly focus on the things that we know work, but always be open to driving it further, and never ever think that you have achieved it."

2.5.2 School intake disadvantage

As we noted in Part One, pupils eligible for FSM make the most progress in either schools with *the most* disadvantaged or *the least* disadvantaged intakes. Meanwhile non-FSM pupils

achieve roughly in line with how disadvantaged the intake of their school is (Noden 2006). Two case study schools with high levels of disadvantage exemplified this trend, suggesting that the reason progress gaps in their schools were small (or in one case negative i.e. eligible pupils made more progress than their peers) was that there is very little socio-economic difference between their FSM and non-FSM pupils. As a result, those schools did not differentiate by disadvantage in the way they targeted resources at pupils:

“Over the last five years... there's actually a negative gap between pupil premium and non pupil premium children ... basically our pupil premium children are ...74 per cent [of the total cohort] , but we don't actually treat anybody differently. The other 26 per cent are on minimum wage, and actually some of them are living in worse poverty than the children that are pupil premium children.”

School Three

“We have so many [pupils only just above the threshold for FSM eligibility] that we don't separate them off although we obviously are aware of who they are, we try to give the opportunities to everybody because those that aren't are maybe only just above that threshold”.

School Five

Francis and Hutchings (2013)) show that some schools have fewer pupils with middle and high SES parents because the parents are more likely to use their social and financial capital to choose secondary schools with lower levels of disadvantage and higher levels of GCSE attainment, for example by using a range of sources of information when choosing secondary schools. This choice is more likely to be exercised at secondary school than primary (ibid).

2.5.3 Quality of teaching

The quality of teaching in secondary school plays a role in influencing the progress of low income pupils (SMCPC 2014) and thus in counteracting some of the disadvantage faced by low income students. Case study schools all agreed that quality of teaching was the most important factor in determining low income pupils' progress:

“There's a huge range of strategies that we employ, [but] the first strategy is to get the quality of teaching for all students the best that it possibly can be, that's the biggest single thing which has an impact on the progress of all learners, including disadvantaged students”.

School Six

Quality of teaching, however, is not uniform across all schools (ibid). Approaches to measuring the quality of teachers are contested, and the evidence on how teacher quality influences progress is limited as a result. The SMCPC (2014) uses Ofsted ratings of teacher quality to make comparisons at school level whereas other studies use teachers' prior qualifications as a proxy for quality (Brown 2015). Both approaches suggest that schools in

deprived areas struggle to recruit and retain qualified teachers. Indeed, more qualified teachers are less likely to choose to work in schools whose cohort is disadvantaged even where pupils progress well. Instead they are attracted to schools with high attainment (Brown 2015). The SMCPC's (2014) survey of teachers also found that only 15% would actively seek to work in a school with higher levels of socio-economic disadvantage or lower attainment with the pressures associated with 'challenging schools' discouraging many. Meanwhile in a sample of over 1,000 teachers Menzies et al. (2015) find that only 16% of teachers are "super social" and would be keen to move to areas where they could make a difference to society, a particular community and pupil learning.

Pupils in secondary schools with high proportions of low income pupils are therefore less likely to benefit from high quality teaching compared to their more affluent peers. However, some studies note that this effect is likely to be more pronounced outside of London (Blanden et al. 2015; SMCPC 2014). Case study schools outside London did indeed highlight the difficulty in attracting high quality teachers. One, based in the South East of England, and close to a London borough in which teacher starting salaries were higher, found that:

"We have finished our school year and we still are missing three staff, and we just can't recruit. Things like English and Maths, it's hard enough to recruit if you're a leafy shiny school somewhere, when you are a fairly tough school facing some fairly specific challenges it's really difficult. I mean, we are an RI school at the minute... the housing costs an absolute fortune and if you work at the school half a mile down the road you get paid two and a half grand extra."

School One

Box 9: Improving the quality of teaching

The quality of teaching in School Two has been a major barrier to the low income pupils' progress over the last five years:

“Weak teaching, seriously weak teaching over time, and a poor curriculum, that means that they simply do not make progress, they don't make good progress. And in some cases they would be better off just doing it themselves, teaching themselves”.

However, the school has taken steps to improve the quality of teaching. The first was to identify weaker teachers and move them on:

“We have completely dismantled the school in the two years that we have been there. So to give you some indication what that means, we have moved on 61 members of the teaching staff, that is out of 68 teachers in the school”.

The second was to be innovative in finding ways to replace those teachers in an area that teachers are reluctant to move to:

“One example is just recently I have recruited an ex-pupil from [a local school] who has just finished a university degree, a BSc in maths ... We keep tabs on these kids who go away and do these types of degrees, and we will pay for their training provision in-house”.

The third was to adapt the school's CPD to specifically address the challenges faced by low income pupils:

“So for example, teachers at my school will need to be really skilled in helping children to develop the most basic skills around reading, writing, communication, and being numerate. And for some teachers that doesn't come naturally, we have got to help them to understand how to do that”.

2.5.4 Types of school

The literature on the effectiveness of different school types shows that pupils make no more progress in one type of secondary school than another (Coe et al. 2008; Gorard 2015).

Where there is an apparent difference in attainment between school type, this is often explained by prior attainment (see for example Allen and West 2010). Andrews et al. (2016) also found that low income pupils made less progress than others across all types of schools when comparing the value added scores of selective and non-selective schools.

2.5.5 Changing levels of funding

Detailed research on the impact of recent budget cuts on low income pupils' progress has yet to be conducted. However, case study schools were clear that substantial reductions in funding faced by many schools were having a substantial negative effect on low income pupils:

"I'm running this place on £500,000 less than I was last year and on a £9 million budget that's serious. There's an inequity in school funding across the country and I could do a hell of a lot more with more resource".

School Seven

"The pupil premium is just making up for cuts that we had suffered already and are continuing to suffer".

School Four

"When things happen around funding cuts that definitely makes it harder ... [for example] money that we're spending on an extra teacher in year seven, eight, nine ... it makes it much harder to do things like that".

School Five

Summary of "between school" factors influencing progress

- Low income pupils are more likely to attend secondary schools where attainment is poor, and their progress may be limited as a result.
- Pupils make better progress in schools where there is a culture of universally high expectations and a focus on teaching quality. It is unclear whether particular groups of pupils are more or less likely to attend schools with this progress-enabling culture.
- Pupils from low income families are more likely to go to school in areas with high levels of disadvantage, which are less likely than others to have well-qualified teachers, and their progress at secondary school may stall as a result.
- There is little evidence that the type of secondary school has an impact on progress.

2.5 Conclusions

Pupils who make less progress at secondary school are less likely to go onto Higher Education, whilst those with GCSE scores below national benchmarks may find their career choices limited. Yet low income pupils would achieve far more highly if they progressed as rapidly at secondary school level as their better off peers.

Whilst we should be concerned about high attaining pupils who are unable to maintain the progress they make at primary school, it is equally, if not more important, to focus on low and middle attaining pupils' progress, since pupils who leave primary school with low KS2 scores will continue to achieve poorly at GCSE and have diminished life chances unless they make accelerated progress during their secondary education.

The material consequences of low income pupils' poverty cannot be overlooked. Low income pupils are more likely to be placed in care, more likely to develop SEND and less likely to access activities that support their learning outside school. Yet secondary schools can play a part in tackling these barriers to progress. There is strong evidence to show that secondary schools with a culture that fosters high academic and behavioural expectations regardless of background; which focus on high quality teaching; and which respond sensitively to each pupils' needs, can help pupils flourish and succeed.

Unfortunately, schools' actions can also hinder pupils' progress. In many cases Key Stage Three provision fails to build on what pupils have learnt at primary school, while weak provision for pupils placed in lower sets or exam tiers holds back low income pupils in particular. Such problems are exacerbated by the current difficulty of recruiting high quality teachers to schools working in deprived areas and recent cuts to school budgets.

Pupil factors

Some barriers to low income pupils' progress arise from factors associated with pupils' own characteristics. Our analysis of the NPD in Part 1 shows that the FSM gap in secondary progress varies substantially across ethnic groups. The largest gaps are seen for the White British group, and lowest for the Black African and Chinese groups. Low income Black African, Chinese, Indian, Other, Pakistani/Bangladeshi and White Other pupils make above average progress. It is likely that low income pupils from these ethnic groups have parents with greater levels of engagement in their schooling, and who live in urban areas. They may also face a different 'type' of poverty or disadvantage compared to low income pupils from other ethnic groups.

Gender on the other hand accounts for a very small amount of the variation in secondary school progress between pupils. Nonetheless the literature points to important factors that limit boys' progress such as behaviour, conduct and attitudes to school work. Recent

research has also cast light on how this picture varies between ethnic groups and the considerable link between subject choice and gender (Shaw et al. 2016a). However, many of the issues associated with gender also apply at primary school, and so may be less important in explaining secondary school specific issues.

Low income pupils who live in London, and to a lesser extent other urban areas are more likely to make progress at secondary school than others. This trend is likely to be influenced by the relatively high proportion of ethnic minority pupils living in cities, greater labour market opportunities in cities (particularly London) and higher levels of private tutoring of low income pupils in London, as well as school factors such as the ability to recruit high quality teachers and school culture.

The literature also reveals other pupil characteristics that influence progress. Of these, SEND and mental health are key, with strong evidence of causal links between disadvantage and disorders that limit progress for secondary age pupils. There is also evidence that progress is limited by changing school, particularly in the year leading up to GCSEs, 'risky behaviours' outside of school, absence, and exclusions (which are more prevalent among low income pupils at secondary school). Less tangible factors, such as lower aspirations and expectations as well as pupils' social and emotional skills may also hold progress back.

Parental and family factors

What happens at home is an important driver of pupil progress at secondary school. Parents in low income households are less likely to be able to afford learning materials, such as books or laptops, or private tutoring. There is also a wealth of evidence to suggest that low income pupils have a home environment that offers less effective support for learning. Low income pupils are less likely to have regular homework routines, regulated leisure time, take part in academically enriching activities and have parents that actively reinforce attitudes to learning and school.

The best secondary schools in our case studies not only recognised these disadvantages at home, but took steps to reduce them by offering parenting programmes or regular and individually targeted homework sessions and afterschool activities.

Within school factors

The secondary school progress gap between low income pupils and their peers is largely driven by differences in how well pupils do within their school. Around 88% of the gap is due to within-school differences, and only a small proportion (12%) of the gap in progress is due to variation between schools. Certain highly prevalent practices in English secondary schools can contribute to this by entrenching, and even widening progress gaps between low income pupils and the rest. Setting and streaming practices hold pupils with low prior attainment back and these pupils are particularly likely to come from low-income households. Linked to setting, there is evidence that across the country, teachers hold lower

expectations of low income pupils. Finally, schools' focus on GCSE results as a measure of their performance has led them to target resources (time, teachers and interventions) at KS4 pupils. Addressing pupils' lack of progress in KS3 would in all likelihood make an important contribution to reducing the gap between low income pupils and the rest.

Between school factors

Outstanding schools secure higher levels of progress for their pupils. The schools in which low income pupils make the most progress are those that are both outstanding and which have particularly high or low proportions of low income pupils. These schools are more likely to have developed a culture that encourages pupils and staff to believe that low income pupils are capable of making good progress. This belief is accompanied by tangible practices such as tracking progress data and intervening when pupils' progress drops off as well as ensuring that SEND provision is high quality. They also particularly target resources at low income pupils. On the other hand, many factors are less within schools' control. These factors include the limited supply of high quality teachers, and the worrying effects of recent funding cuts.

Low-income pupils' stalling progress at secondary school must be addressed. Urgent action is needed to address the many issues that disproportionately affect poorer pupils. We must encourage high quality teachers to work in schools with high numbers of low income pupils, prioritise high quality teaching of SEND, improve specialist services for mental health, SEND and looked after children, work to reduce exclusions, and ensure that schools are funded adequately so that they have the resources they need to meet low income pupils' needs.

Recommendations

For policy makers:

- The government must ensure education funding cuts do not further exacerbate the difficulties in ensuring disadvantaged pupils make good progress at secondary school;
- The Department for Education should press ahead with efforts to develop a better measure of deprivation than Ever 6 FSM and ensure that pupil premium eligibility quickly moves towards a more sensitive and graduated measure;
- The Department for Education should build on the 2014 SEND reforms and January 2017 funding announcements to raise the profile of SEND within the sector and make additional funding available for schools and middle tier (local authority, MAT) to buy in high quality specialist provision where local services do not meet needs;
- In order to tackle teacher recruitment in areas where low income pupils make low progress and schools struggle to recruit high quality staff, the Department for Education should ensure that teacher wages rise in real terms as the economy recovers;

- The Department for Education should avoid further segregation of low income pupils by ending plans to increase the number of secondary schools able to select by ability. Expansion of grammar schools would have a corrosive impact on social mobility;
- The Department for Education should establish an “avoiding exclusion” fund whereby schools with pupils who are at risk of permanent exclusion (who are more likely to be low income and identified with SEND) receive per-pupil funding comparable with alternative and specialist provision, in order to reduce the chances of that pupil being excluded;
- The Department for Education should review the quality of specialist provision for looked after children, and if necessary, make funding available so that schools can offer high quality specialist support for those pupils.

For system leaders including Regional School Commissioners (RSCs), Directors of Children’s Services and Multi Academy Trust (MAT) leaders:

- MATs should recruit head teachers who take a long term view of school improvement (which prioritises the development of school culture and which recognises the crucial role of KS3);
- RSCs must work closely with regional health and social care services to ensure pupils have access to the best possible quality of specialist SEND and Mental Health provision;
- MATs must help secondary schools reduce exclusion by offering a variety of specialist services that meet the needs of pupils with behavioural or conduct problems, and to ensure different school types (such as Pupil Referral Units, Alternative Provision, Special and Mainstream schools) can support each other and work collaboratively;
- System leaders must work with the Department for Education to ensure that all schools prioritise quality-first teaching of SEND and high quality specialist provision for low income pupils with SEND.

For secondary schools:

- Head teachers must ensure that resources are targeted at KS3 and Year 7 pupils making the transition from primary school, to the same level or beyond the resources targeted at KS4;
- Head teachers should develop a school culture of universally high expectations, and practices that support those expectations;
- Schools should make regular use of data to analyse progress, in order to intervene as early as possible when low income pupils’ progress stagnates or drops off;
- Heads of departments and senior leaders should exercise great caution in using setting and streaming practices that can negatively impact on low income pupils;
- All staff in school, particularly school leaders, should prioritise support for pupils with SEND, for example by providing CPD which improves teachers’ skills and confidence in providing ‘quality-first’ teaching in every classroom;

- All school staff should improve their understanding of pedagogical approaches that support low prior attainers and low income pupils;
- Senior leaders should reduce exclusion, particularly of low income pupils;
- Secondary schools should provide early and regular careers guidance that makes clear the links between progress at school and the freedom to choose from a wide range of careers.

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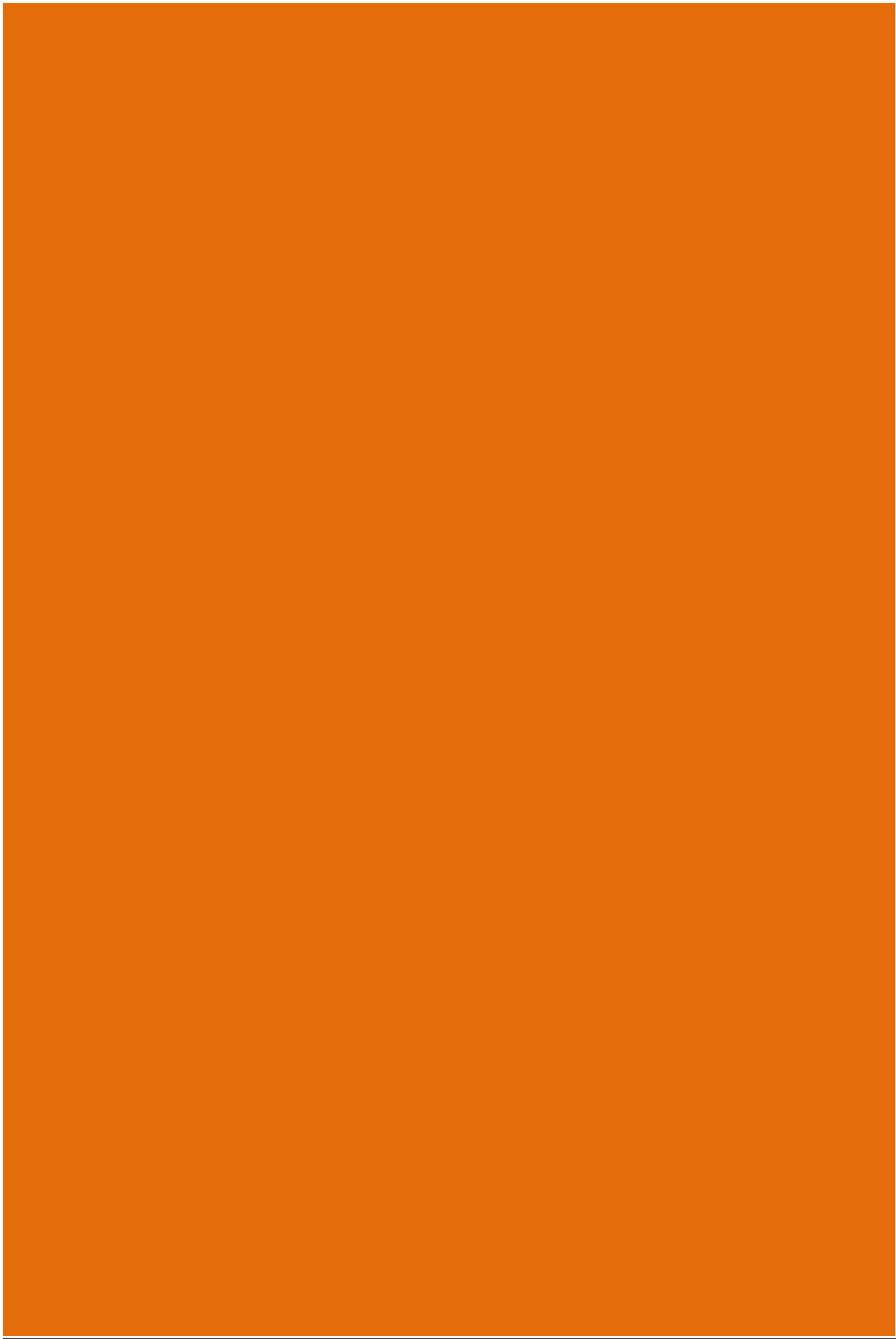
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