

# CLOSING THE ACHIEVEMENT GAP IN ENGLAND'S SECONDARY SCHOOLS

Save the Children believes children's backgrounds should not limit the opportunities they have in life. In particular, we believe there is a need to improve the prospects of children growing up in deprived circumstances so that they can realise their potential at school. As things stand, children from poor homes do worse educationally than their classmates. Last year 34% of pupils on free school meals achieved five good GCSEs,<sup>1</sup> compared to 62% of better-off pupils (DfE 2012).

A child's educational development is influenced by a complex range of factors, including individual characteristics, the wider family environment, the neighbourhood where they live and the schools they attend. We therefore must work towards a more holistic approach to improving children's outcomes that links families, schools and communities. However, we also recognise that the quality of teaching and learning in schools is important in itself.

This briefing focuses specifically on the role of teaching and learning at England's secondary schools in closing the achievement gap between children from poor homes and their peers. It summarises research carried out by the Institute for Public Policy Research (IPPR) (Clifton, J and Cook, W (2012) *A long division: closing the attainment gap in England's secondary schools*, London: IPPR), which was supported by Save the Children.

## A. THE ACHIEVEMENT GAP IN CONTEXT

Existing research tells us many things about the educational achievement gap:

- The Programme of International Student Assessment (PISA) shows that an achievement gap between rich and poor pupils exists in all OECD countries, and that the UK performs poorly on equity measures compared to our key competitors (OECD 2010).
- UK studies show that about 20% of variability in a pupil's achievement is attributable to school quality and around 80% is attributable to pupil-level factors (family influence, the neighbourhood and so on) (Rasbash et al 2010).
- Research by the *Financial Times* journalist Chris Cook earlier this year shows that between 2006 and 2010 the educational achievement gap in England closed by one-sixth of a grade in core GCSE subjects, such as maths, English, sciences, modern languages and humanities.

Analysis of pupil performance data from 2010/11<sup>2</sup> carried out by the IPPR (Clifton and Cook, 2012)<sup>3</sup> reveals further insights.

Chart 1 (on page 2) shows capped GCSE points scores<sup>4</sup> according to postcode deprivation percentile (scores in the 20% most deprived postcodes are on the left of the horizontal axis in chart 1 and subsequent similar charts). It shows the primary



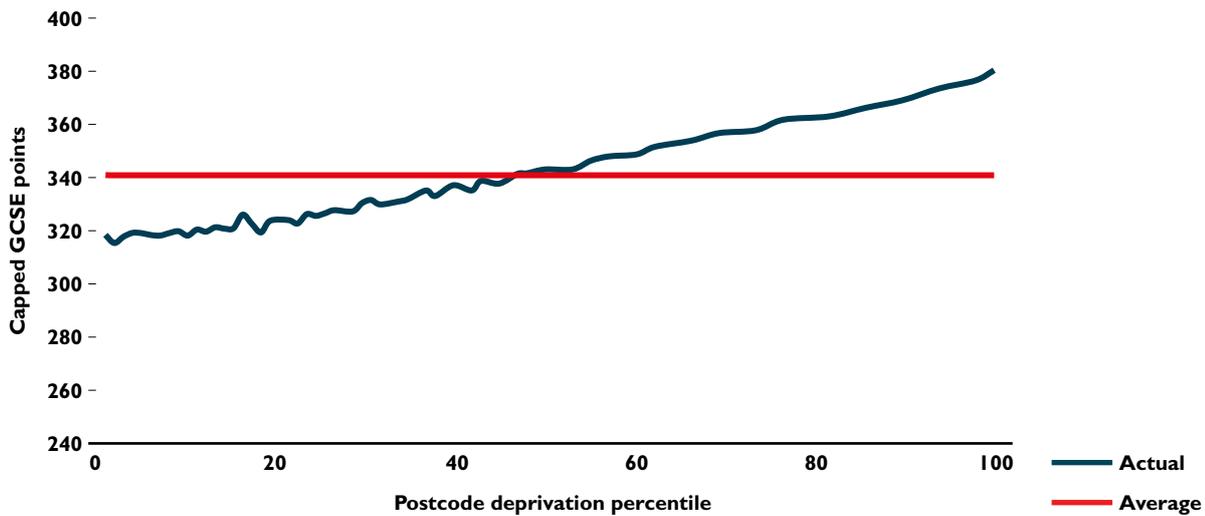
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school results for the cohort of pupils who sat their GCSEs in 2010/11. In the most deprived postcodes, the majority of pupils score on average 320 points at GCSE, or the equivalent of about eight grade Cs, and the results gradually improve as you move towards the least deprived postcodes. Pupils in the least deprived postcodes score on average just over 380 points or the equivalent of just over eight grade Bs. There is a clear and consistent relationship between deprivation and academic achievement at GCSE-level – the trend holds across the scale of deprivation. A

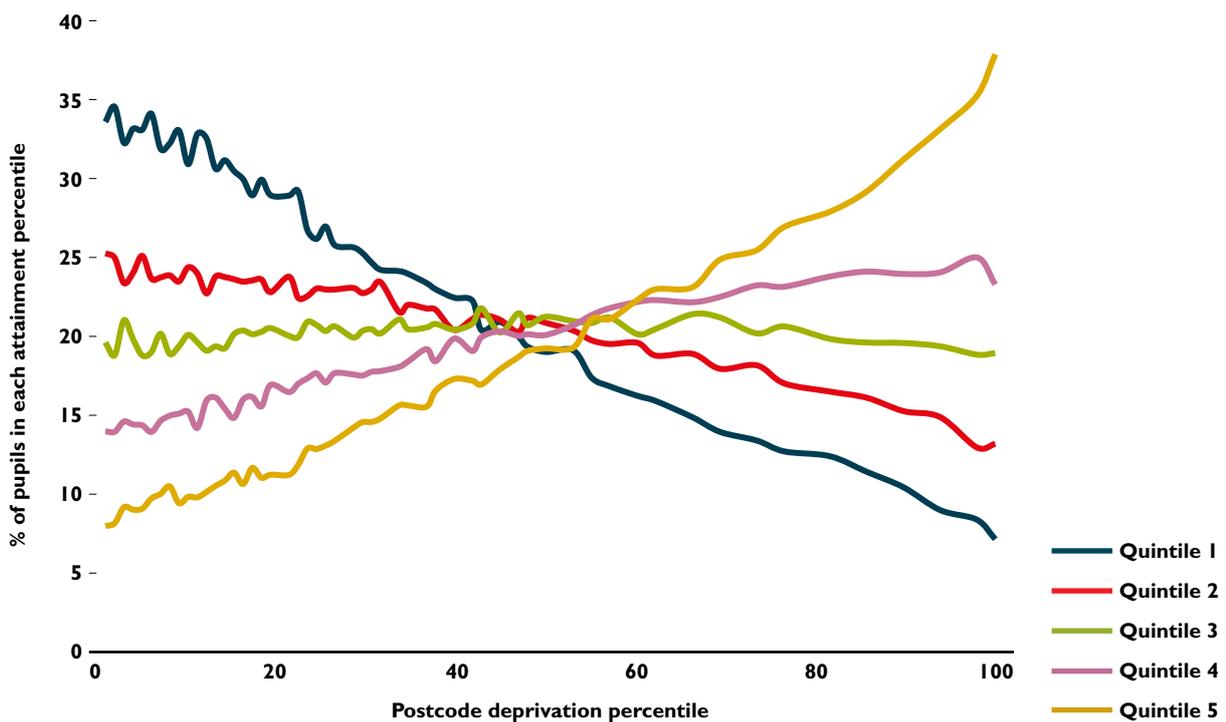
flat blue line would show no link between a child's social background and academic achievement.

Chart 2 (below) shows that the achievement gap is well-established before children arrive at secondary school (and therefore that the early and primary years have a key role to play in closing the achievement gap). It shows that in the most deprived postcodes, the majority of pupils score in the bottom key stage 2 attainment quintiles, and in the most affluent postcodes the majority of children were in the top

**CHART 1: CAPPED GCSE POINTS (INCLUDING EQUIVALENT QUALIFICATIONS) BY POSTCODE DEPRIVATION**



**CHART 2: DISTRIBUTION OF PUPILS IN EACH POSTCODE DEPRIVATION PERCENTILE BY KEY STAGE 2 (LAST YEAR OF PRIMARY SCHOOL) ATTAINMENT QUINTILE**



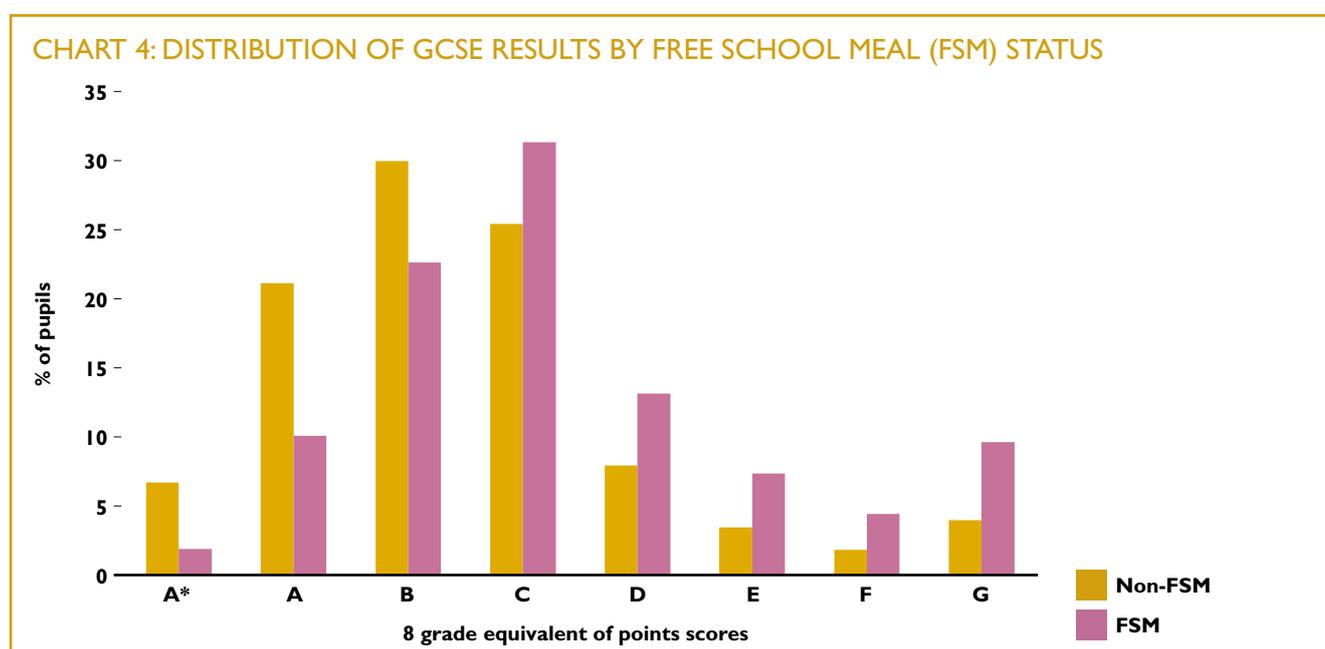
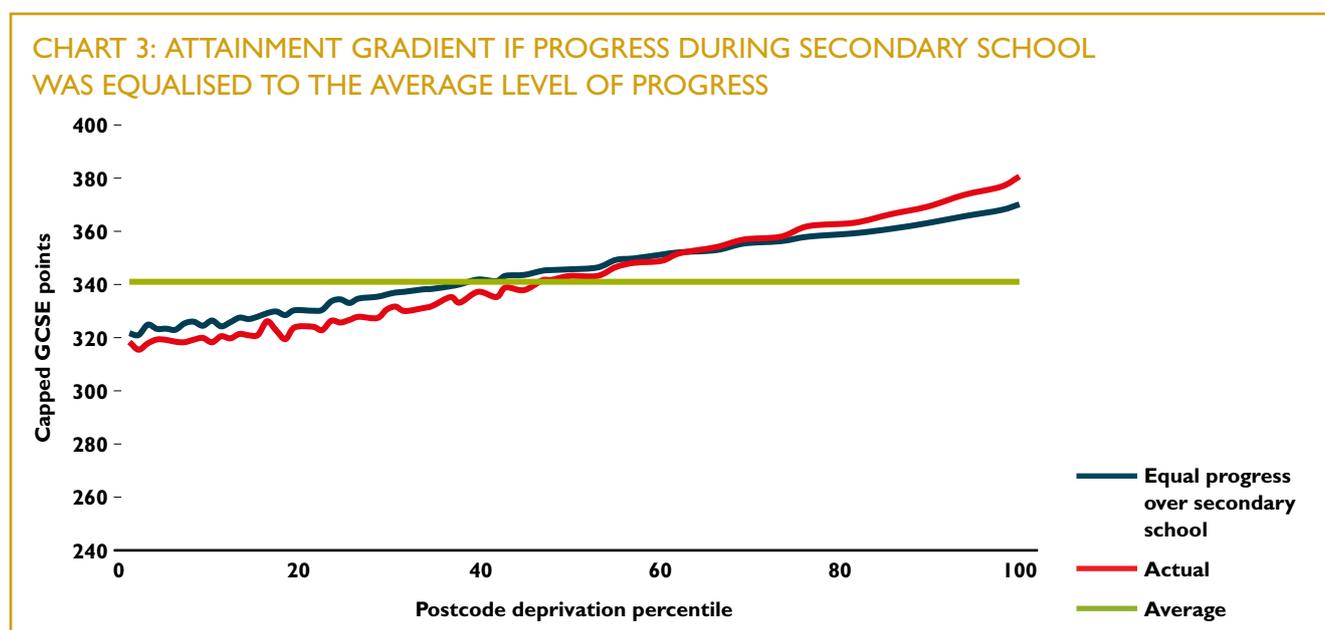
two attainment quintiles (quintile 1 represents the lowest fifth of attainers at key stage 2 and quintile 5 represents the highest fifth of attainers at key stage 2). The IPPR analysis estimates that around half of the achievement gap (in terms of the achievement gap gradient) is already present by the time children enter secondary school.

Chart 3 (below) shows what would happen to the achievement gap gradient if all pupils made the same amount of progress during their time at secondary school (represented in the blue line) compared with what actually happens (represented in the red line). All pupils making equal progress over secondary school would only result in a slight flattening of the achievement gap gradient because – as shown in

Chart 2 – much of the gap is already present on entry to secondary school.

This shows the importance of secondary schools working intensively with pupils who are falling behind their peers as they move from primary school. This is the approach adopted in Finland, where nearly half of pupils receive some form of catch-up tuition over the course of their school career (Sahlberg, 2011). The alternative is that from age 11 onwards these children will have to make equal progress with their peers simply to maintain existing performance gaps.

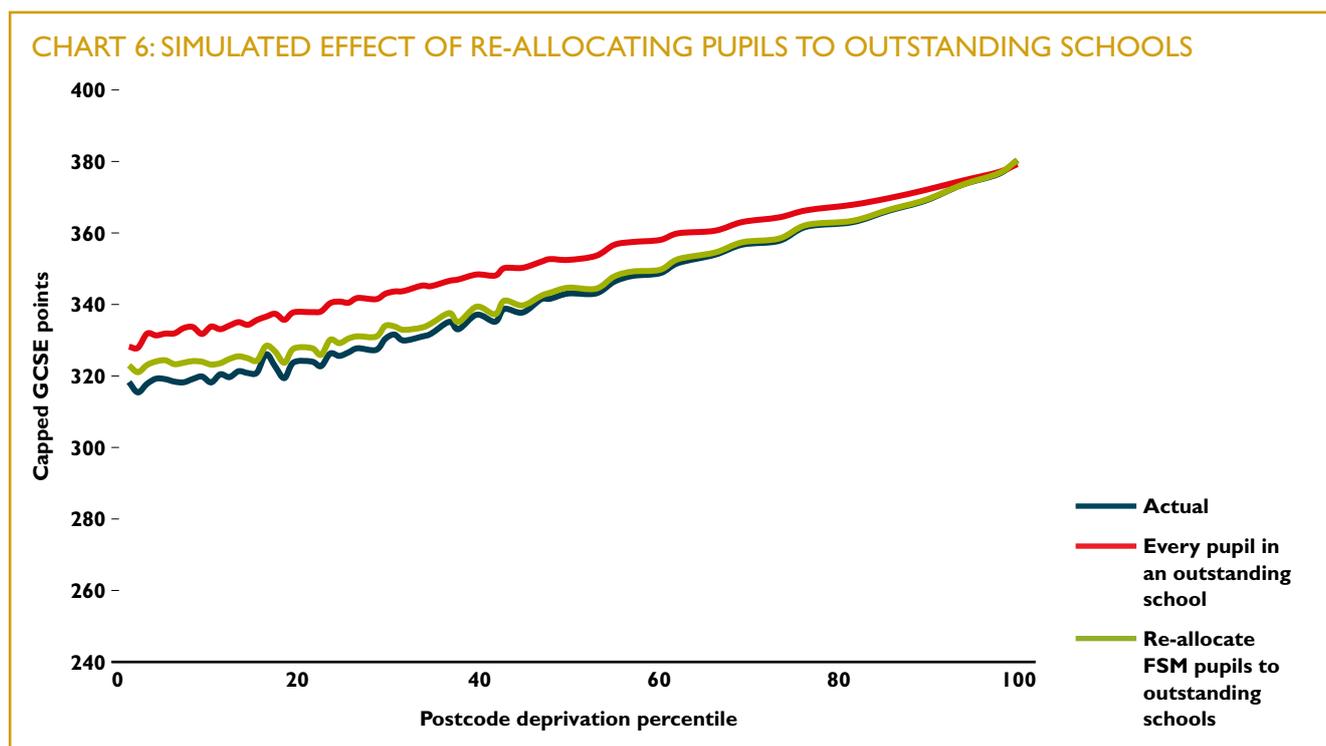
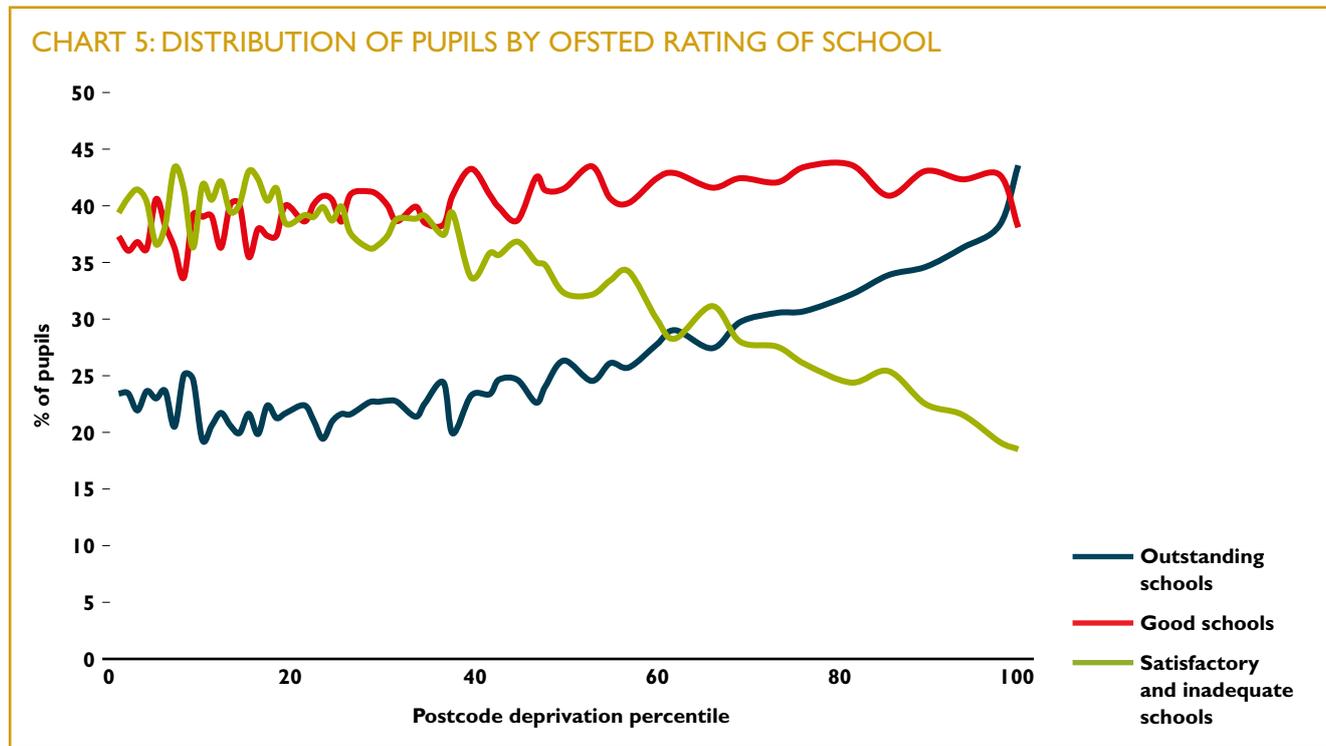
Chart 4 (below) shows the scale of the achievement gap problem by showing in more detail how pupils receiving free school meals (FSM) or not receiving FSM did in their GCSE results, using an 8 grade



equivalent of point scores. This chart shows that the gap is not just about pupils failing to get the top grades, but is also characterised by a long tail of low achievement. Estimates from the IPPR research show that closing the gap will require a bigger improvement in grades at the lower end of the distribution than at the top of the distribution.

## B. WHY IMPROVING SCHOOL PERFORMANCE IS IMPORTANT

A common explanation for the achievement gap is that pupils from deprived areas are more likely to attend worse schools. Chart 5 (below) shows this to be true (at least in the context of Ofsted school



ratings). This seems to point towards a lack of good or outstanding schools in deprived areas and some social sorting in secondary school admissions.

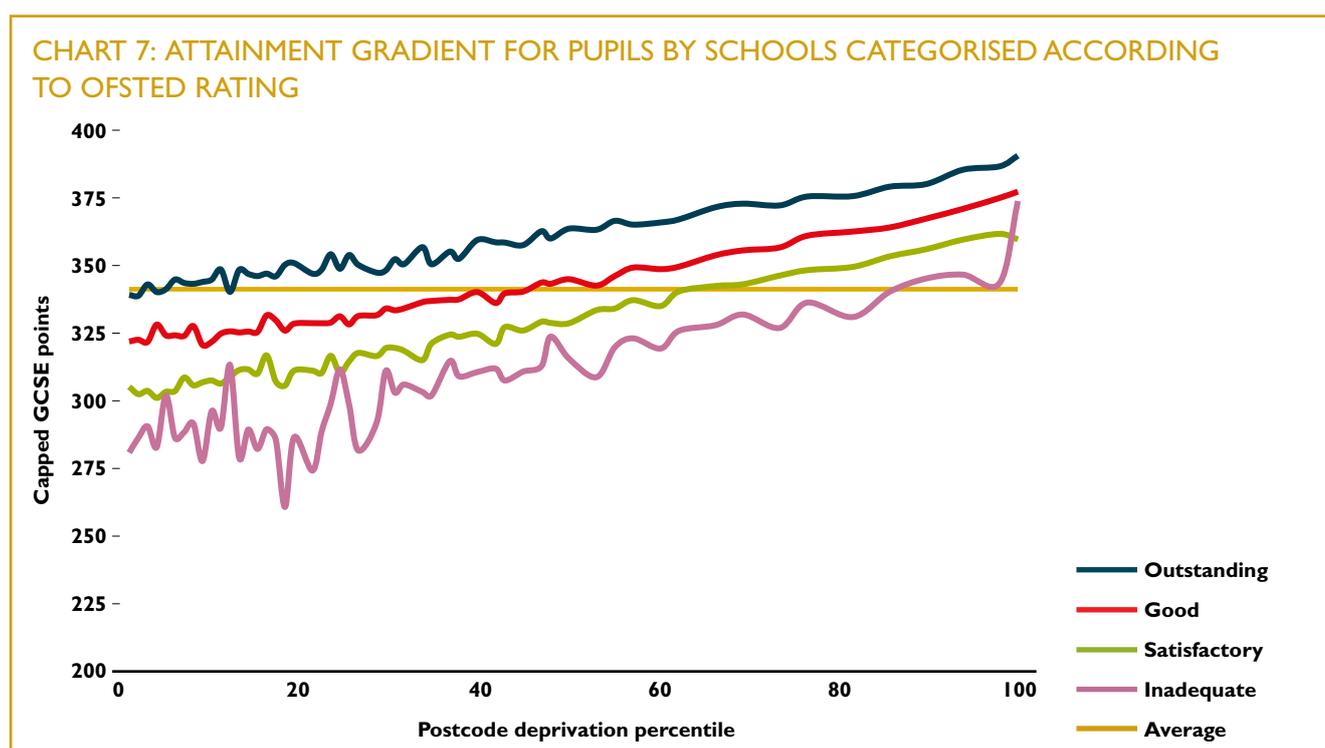
Chart 6 (on page 4) models what would happen to the achievement gap gradient if we relied on improving lower performing schools as our main policy lever. The blue line represents the current achievement gap gradient. The green line shows what would happen if every pupil on free school meals (FSM) went to an outstanding school (allowing for adjustment for pupil-level characteristics such as prior attainment, special educational needs (SEN), etc). The achievement gap gradient only flattens very slightly (partly because many pupils, even in the most deprived postcodes, do not claim FSM). The red line shows what would happen if every child, regardless of social background, went to an outstanding school. Even in this scenario the achievement gap between the poorest and wealthiest pupils would only be cut by a fifth.

Chart 7 (below) starts to explain the finding in the previous paragraph. It shows that all children are likely to do better in higher quality schools and this trend can be seen across postcodes. Absolute scores increase in higher quality schools, but the achievement gap continues to exist because the level of achievement is simply shifted upwards.

There is therefore a strong case for improving school quality on the grounds of raising overall achievement. Moreover, school improvement has some role to play in narrowing the gap because the achievement gain in moving from an inadequate school to an outstanding school is bigger for those from the most deprived postcodes (pupils in the 25% most deprived postcodes score on average 4Bs and 4Cs at GCSE in outstanding schools, compared to 4Ds and 4Cs in an inadequate school). However, even with school improvement, much of the achievement gap will remain, since wealthier pupils will also do better.

### C. WHY HAVING MORE GOOD SCHOOLS IS NOT ENOUGH

Chart 8 (on page 6) takes a different approach to previous charts and shows the performance of pupils at GCSE level within schools rather than across different schools. This shows the real problem with our education system. Children from poorer backgrounds perform worse than their wealthier peers whichever school they are in. The trend is evident in poorer performing schools with low Contextual Value Added (CVA) rankings (on the left of the horizontal axis) and in higher-performing schools with high CVA rankings (on the right of the horizontal

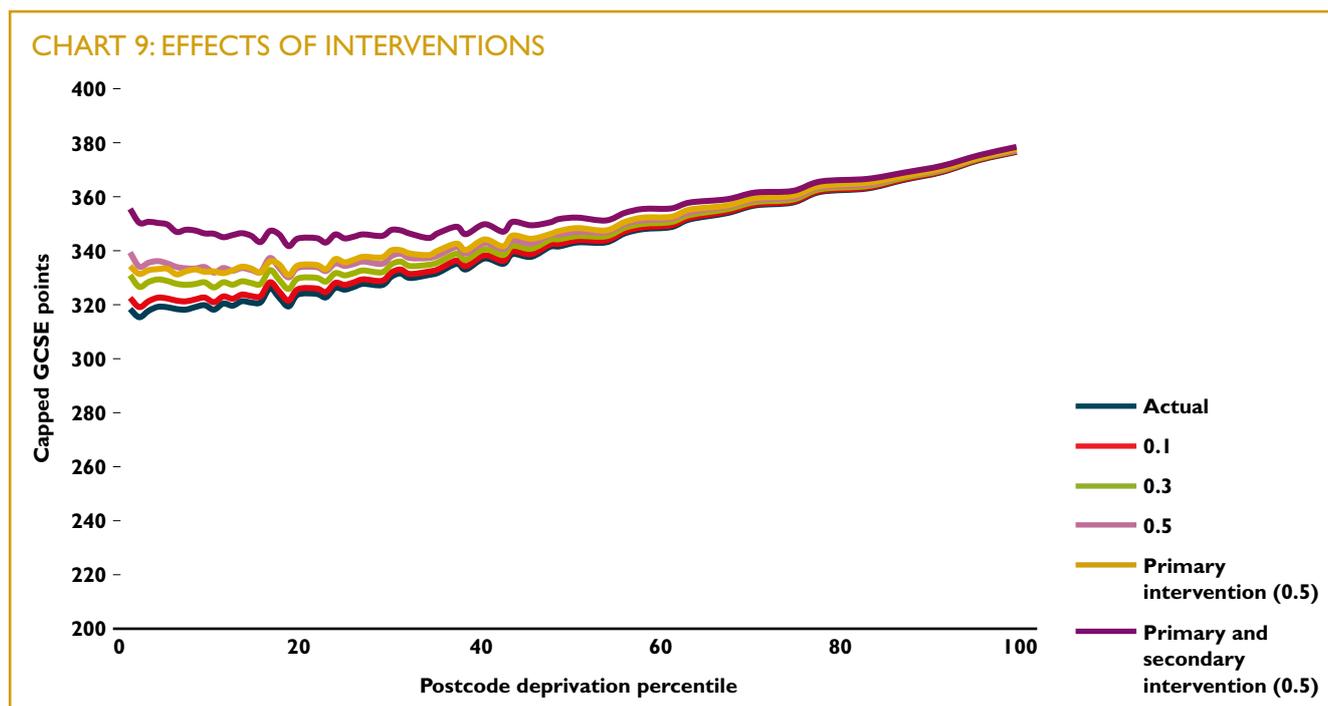
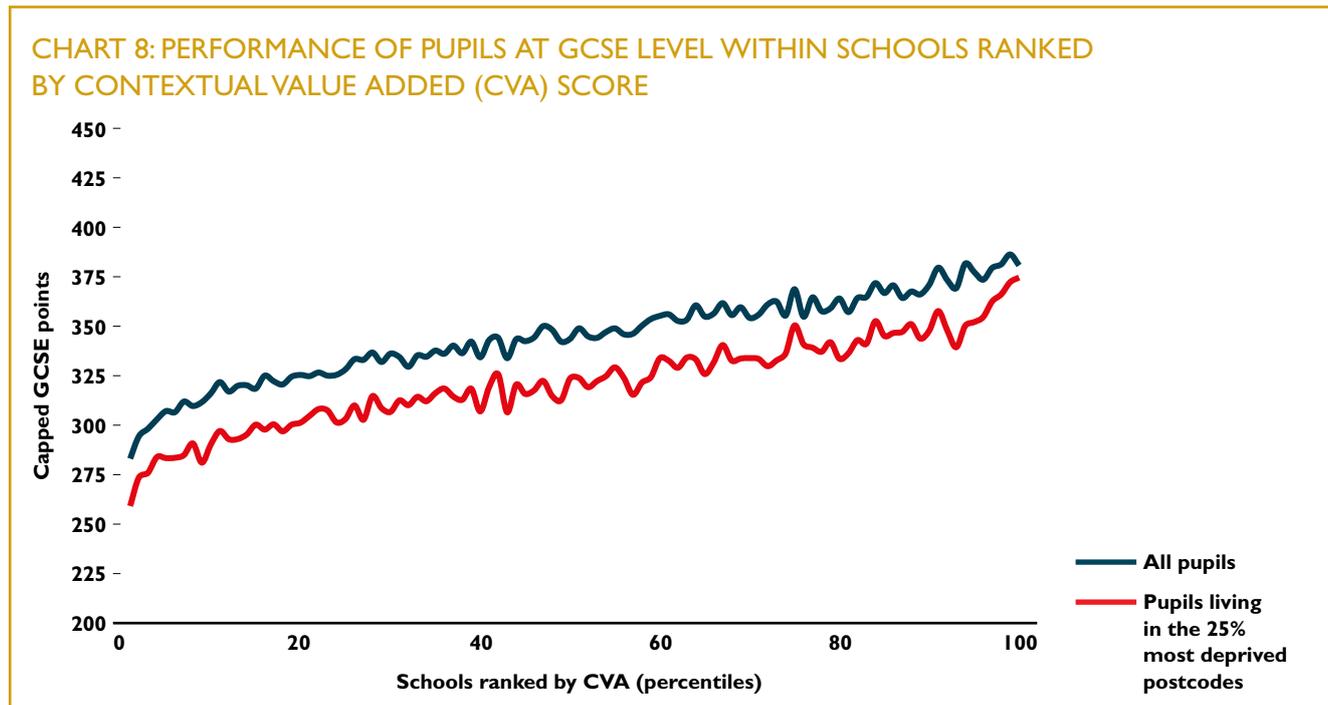


axis). This suggests that school improvement strategies will not do all of the work necessary to close the achievement gap. These strategies need to be combined with pupil-level interventions in all schools targeted at children from poor homes.

Chart 9 (below) models the effect that targeted interventions (such as one-to-one tutoring, summer clubs, etc) could have on the achievement gap

gradient, based on their effect size. It tells us how big an effect we need these interventions to have in order to narrow the achievement gap.

To halve the achievement gap would require an effect size of 0.5 at both primary and secondary school. This would be a very large effect size. A more normal effect size would be 0.2–0.4 in just one subject area (with a much smaller effect over total points score).



From this we can see that targeted pupil-level interventions – such as those potentially funded through the Pupil Premium – can build on the progress made by school improvement by further closing the achievement gap between children from poor homes and their peers. However, it is essential the Pupil Premium is spent on approaches that are proven to work.

## D. KEY CONCLUSIONS

1) School improvement strategies have a key role to play in closing the achievement gap, but on their own they will be insufficient. Pupils from poorer homes tend to perform worse than their wealthier peers, whichever secondary school they are in. This suggests pupil-level interventions to narrow the gap at each school are also essential.

2) Around half of the achievement gap is already present by the time children enter secondary school. This suggests the early years and primary schools have a pivotal role to play and that intensive catch-up programmes at the start of secondary school should be widely used.

3) The Pupil Premium could be used to fund the targeted interventions needed to help narrow the gap at each school. However, it must be used strategically on approaches that are proven to work. It is important that the right information and incentives are put in place to ensure schools use the Pupil Premium to maximum effect.

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## NOTES

<sup>1</sup> Grade A\* to C GCSEs or equivalent, including English and mathematics GCSEs.

<sup>2</sup> This is the latest data available from the National Pupil Database.

<sup>3</sup> Much of this analysis is based on educational achievement in deprived postcodes. It has been put together using the IDACI score and rank for the Super Output Area (SOA) in which the postcode lies. The IDACI score and rank of IDACI have been sourced from Communities and Local Government, Indices of Deprivation, 2010.

<sup>4</sup> This is a pupil's best 8 GCSE results, expressed as an overall point score (58 points for an A\*, 52 points for an A, 46 points for a B etc).

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