

# Education in England: Annual Report 2016



Natalie Perera and Mike Treadaway

With Peter Sellen, Jo Hutchinson, Rebecca Johnes and Lance Mao

April 2016

**CENTRE:FORUM**

## About the authors

**Natalie Perera** is Executive Director and Head of Research at CentreForum. Her background includes twelve years at the Department for Education (leading on policies including Early Years and school funding) and a period working in the Cabinet Office.

**Peter Sellen** is Chief Economist at CentreForum. Prior to this he worked as an economic adviser at the Department for Education from 2012. Peter's previous civil service career spanned analytical and policy roles in Defra, the Department for Transport, Communities and Local Government, and HM Treasury.

**Jo Hutchinson** is Associate Director for Education at CentreForum. Her background includes ten years as a statistician at the Department for Education. She also led on evidence for the London Mayor's Education Inquiry and on international evidence for the National Curriculum Review.

**Rebecca Johnes** is a Research Officer at CentreForum, specialising in Education. Rebecca has taught in schools both in England and Japan.

**Lance Mao** is an analyst and researcher at CentreForum. He studied natural sciences at Selwyn College, Cambridge, specialising in physics.

## Acknowledgements

**Mike Treadaway** is Director for Research for the Fischer Family Trust (FFT). As a leading national figure in the area of educational research, he is best known for his innovative work in developing data to support target setting and evaluation in schools and local authorities throughout England and Wales. As well as continuing to develop FFT data and undertake research, Mike is also a regular national speaker and trainer, providing advice and support on how data can be most effectively used to challenge, motivate and understand pupils progress.

CentreForum is very grateful to Mike Treadaway (on behalf of the Fischer Family Trust and Education DataLab) for his detailed data analysis, advice and support.

## About

CentreForum is an independent think tank which develops evidence-based research to influence both national debate and policy making.

Education Datalab brings together a group of expert researchers who all believe we can improve education policy by analysing large education datasets. Many of these are administrative databases held by Government, such as the National Pupil Database and School Workforce Census – others are large surveys like the Programme for International Student Assessment (PISA) and Labour Force Survey.

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# Introduction

By David Laws

This is CentreForum's First Annual Report into the state of English Education. We will from now on publish an Annual Report each spring, and over time we will extend its scope and ambition.

The purpose of our Annual Report is to look at trends in educational outcomes in England, so as to inform the policy debate about English education. We also intend to benchmark reliably our performance in England against the rest of the UK and the world.

Politicians, the media, the public, and academics often discuss whether our education system is doing better or worse, whether exam results can be trusted, which pupils and parts of the country are doing well or badly, and how we compare with other nations. But this debate is not always informed by rigorous and objective analysis. Our aim is that it should be. This will assist in understanding and is also more likely to lead to robust conclusions about which policy proposals might advance the changes which the country wants to deliver.

I am very grateful to our excellent CentreForum team – and in particular to Natalie Perera, Peter Sellen, Jo Hutchinson, Rebecca Johnes and Lance Mao – for the hard work involved in this Report. We are also in debt to Mike Treadaway of Education DataLab/FFT, who has made a huge contribution to the Report by analysing much of the relevant data.

In time, we want our Annual Report to be as influential a contribution to the education debate in England as the Institute for Fiscal Studies 'Green Budgets' are to the economic debate.

We welcome feedback on this Report, and any proposals for improving the Report in future years.

David Laws

Executive Chairman, CentreForum

# Executive summary

## Overall performance

Overall levels of attainment are rising, according to our measures for educational outcomes in England. Since 2005, average performance at the end of secondary school has improved by just over half a GCSE grade. Primary pupils are also achieving about a fifth of a National Curriculum Level higher than ten years ago.<sup>1</sup>

In January this year, CentreForum set out what it considers to be world-class standards in education. These standards are measured by how well pupils perform by the end of secondary school; by the end of primary school; and in the Early Years.

Our benchmark for secondary school performance is measured by the proportion of pupils who achieve 50 points or higher against the new Attainment 8 qualifications. Attainment 8 requires pupils to take eight GCSEs in subjects (including English and maths) which fulfil certain requirements and which are designed to focus more heavily on academic courses. Each of the subjects will be scored using a scale of 1 to 9 and a score of 5 will in future be considered to be a 'good pass'. Further details on Attainment 8 are set out in chapter one.

These reforms to GCSE arrangements have significant consequences for how educational attainment will be reported in the coming years. If we take the national GCSE results in 2015 and apply them to the new grade 5 threshold, then we estimate that the **proportion of pupils achieving a good pass in both English and maths falls by around 23 percentage points, from 58 per cent of pupils to 35 per cent.**

These new arrangements, as well as the introduction of the English Baccalaureate to performance tables, are already beginning to have an effect on entry patterns to GCSE exams. **Entry into the full Attainment 8 requirements has increased from 51.6 per cent in 2012 to 67.3 per cent in 2015.**

CentreForum's proposed world-class benchmark requires 75 per cent of secondary pupils to score 50 points or higher (the equivalent of a 'good pass' in all eight subjects)<sup>2</sup> across Attainment 8 by 2030. In 2015, **only 38 per cent of secondary pupils achieved our benchmark of 50 points or higher in Attainment 8 subjects.**

Most secondary schools in England see between 25 to 50 per cent of their pupils achieving 50 points or higher in Attainment 8. **There are only 21 non-selective schools in which 75 per cent or more of pupils are already achieving 50 points or higher; a third are found in London.** In the North East, not a single secondary school achieved our benchmark. With the exception of the North West, we see fewer and fewer schools achieving this benchmark as we travel from the South to the North of England.

**Almost 40 per cent of schools in the East Midlands and a third in Yorkshire and the Humber are failing to get 25 per cent or more of their pupils to this standard.** Meanwhile in London, that figure drops to less than 10 per cent.

**Together with Knowsley, which sits at the bottom of the table, Blackpool, Stoke on Trent, Nottingham City, Barnsley and Doncaster** are among the worst performing areas in the country in both attainment and progress at secondary school.

Our primary school benchmark requires at least 85 per cent of pupils to achieve a Level 4b or higher in reading, writing and maths at Key Stage 2.<sup>3</sup> **In 2015, 58.5 per cent of primary pupils achieved this,** an increase of just over 2 percentage points compared with 2014.

**580 schools across the country are already getting 85 per cent or more of their pupils to a Level 4b or higher by the end of Key Stage 2.** 150 schools failed to get more than a quarter of their pupils to this standard, although that figure has been decreasing since 2013.

<sup>1</sup> The method for calculating this is set out in the Technical Annex to this Report.

<sup>2</sup> English and maths are double-weighted

<sup>3</sup> Because National Curriculum Levels are being abolished from summer 2016, we will need to revise our primary benchmarks to reflect the new national standard once it is set. In the meantime, we are using Levels to review performance to date and as a proxy of where the 2025 benchmark should be set.

**In London, 61.2 per cent of pupils achieved our primary benchmark, compared with 55.4 per cent in Yorkshire and the Humber** which sit at the bottom of the regional table on this measure. Unlike the pattern in secondary performance, the North-South divide is not as distinct in primary. In fact, the North East is positioned second on the regional table for attainment, with 60 per cent of pupils achieving a Level 4b or higher.

We do however find that London boroughs dominate our list of the 20 highest performing authorities. A quarter of the lowest 20 performing authorities are found in Yorkshire and the Humber, with only one in London and none at all in the North East. **Walsall, Doncaster, Peterborough and Poole all struggled to get just over half of their primary pupils to our world-class benchmark.**

**In 2015, 67.2 per cent of pupils achieved a good level of development in the Early Years Foundation Stage Profile**, a considerable increase from 62.1 per cent in 2014.<sup>4</sup>

The proportion of children who achieved a good level of development in 2015 ranges from 71.9 per cent in the South East to 64.0 per cent in the North East. **There is a clear North-South divide, with the highest performing regions located in the South and the lowest performing located in the North of England.**

### **Closing the disadvantage gap**

Disadvantaged pupils are yet further away from reaching these benchmarks. In 2015, only **20 per cent of disadvantaged pupils achieved our benchmark for secondary performance**, compared with 45 per cent of non-disadvantaged pupils. If we take the national GCSE results in 2015 and assess them under the new arrangements, we estimate that the **proportion of disadvantaged pupils achieving a good pass in both English and maths falls by around 20 percentage points, from 39 per cent to 19 per cent. This means that 4 out of 5 disadvantaged pupils are currently failing to achieve the standard we believe is necessary for a world-class education system.**

**More than half of disadvantaged primary pupils also failed to meet our benchmark, compared with over a third of non-disadvantaged pupils.** In 2015, there were **569 schools across the country in which 90 per cent of disadvantaged pupils failed to meet our secondary benchmark.**

**In 2015, the gap between the most disadvantaged pupils and the rest narrowed compared with 2014 in both the Early Years and by the end of Key Stage 2**, by 0.3 months in each case. This was broadly consistent with the trend over recent years, where we have seen the Early Years gap narrow by a total of 1.2 months since 2007 and the Key Stage 2 gap narrow by 3.2 months since 2006.

**For secondary schools, we see that in 2015 the gap actually widened slightly by 0.2 months compared with 2014.** This follows a consistent narrowing of the gap between 2006 and 2013 and so it is too early to determine whether this is a short-term anomaly or otherwise.

We also find that the **disadvantage gap at the end of Key Stage 2 narrowed more quickly between 2011 and 2015** (by 0.4 months per year) compared with between 2006 and 2011 (0.3 months per year). **However for the most acutely disadvantaged pupils (those who have been on free school meals for 80 per cent of their school lives or longer), the Key Stage 2 attainment gap narrowed more slowly**, by 0.3 months per year since 2011.

**For secondary pupils, we found that the gap was slower to narrow during 2011-2015** than during 2007-2010 (by 0.3 months per year compared with 0.4 months per year). During both periods **the Key Stage 4 attainment gap actually widened for the most acutely disadvantaged pupils** but, since 2011, it did so at a slightly slower rate.

<sup>4</sup> These figures differ from those published by the Department for Education, which states that the proportion of children who achieved a good level of development in the EYFSP was 66.3 per cent in 2015 and 60.4 per cent in 2014. This is because the Department for Education includes all English providers of state-funded early years education, whereas this report includes only mainstream settings; it excludes special schools and alternative provision. For the Department for Education's analysis of EYFSP results, see: Department for Education, 'Early years foundation stage profile results in England, 2015', October 2015.



Despite the gap decreasing over time at all Key Stages (with the exception of a small increase in 2015 for secondary pupils), we find that disadvantaged pupils continue to fall further behind their peers as they progress through school. While primary schools have successfully reduced the growth of the gap between Key Stage 1 and Key Stage 2, we find that **around half of the gap at the end of primary school is actually attributable to the gap that is inherited from the Early Years**. Around one third of the gap is due to disadvantaged pupils falling further behind during Key Stage 1.

Disadvantaged pupils then fall further behind their peers as they progress through secondary school. The 2015 GCSE cohort of disadvantaged pupils fell behind by a further 7.5 months over the course of secondary school.

Since 2010-11, a number of policy changes have taken place that may have an impact on the size and trend of the gap. **It is too early to say with any certainty whether interventions such as the Pupil Premium, large-scale academisation or preparations for the introduction of new floor-standards have had a discernible and consistent effect on the gap.**

There are also wide regional variations in the gap. In the Early Years, the gap between the most disadvantaged pupils and the rest in London is 2.7 months. In the North East it is 5.1 months. This means that **after only one academic year (at most) of school, the gap between poor children and the rest is twice as large in the North East than it is in London.**

Over the course of secondary school, **disadvantaged pupils in the South East have fallen 9.8 months further behind their peers**. Just a few miles away in London, this figure drops to 4.3 months.

## Pupil characteristics

Our analysis also confirms the continued strong performance and progress of pupils from certain ethnic groups and for whom English is an additional language (EAL).

During the Early Years, white British pupils are among the highest achievers. **By the end of secondary school however, those white British pupils are overtaken by ten other ethnic groups to just below average when compared with other ethnicities.**

Conversely, Bangladeshi, Chinese and Other Asian pupils rise up the relative rankings between the Early Years and the end of Key Stage 2 and then go on to hold or improve that position by the end of Key Stage 4.

**Chinese pupils are in fact already very close to achieving our secondary benchmark.** 73 per cent of Chinese pupils achieved 50 points or more across Attainment 8 subjects, only 2 percentage points short of our 2030 benchmark and 15 years ahead. They also achieve, on average, two grades higher in every subject at GCSE compared with white British pupils and **are twice as likely to score 50 points or higher than their white British peers.**

Pupils for whom English is an additional language (EAL) make significant strides. In the Early Years, 59.0 per cent of EAL pupils achieve a good level of development compared with 68.9 per cent of their non-EAL peers but, **by the end of Key Stage 4, they outperform non-EAL pupils** (40.2 per cent achieve 50 points or higher across Attainment 8 compared with 37.6 per cent respectively).

We also find that pupils for whom English is an additional language are less affected by poverty. Among disadvantaged pupils, EAL pupils perform consistently better than others and the difference between the two groups widens as they become more acutely disadvantaged. **EAL pupils who have been eligible for free school meals for all of their school lives score, on average, almost one grade higher in Attainment 8 than non-EAL pupils who have been eligible for free school meals for all of their school lives.**

We have also created a new proxy for **children who are newly arrived to this country**. Despite having relatively low prior attainment, we find that these pupils go on to achieve close to the national average in terms of overall attainment by the end of Key Stage 4. In some cases these pupils make **around 2 years of additional progress over the course of secondary school, compared with their peers, as their English fluency improves**.

## Regional trends

Finally, we consider how performance within each of the regions has changed over the past decade and what might be driving the high performance that we see in London and poor performance in the North and coastal areas.

London has improved its Key Stage 4 attainment the most over the past decade – **by two-thirds of a grade on average across all GCSE entries**. However, there have also been relatively large improvements in both the North East and North West, of 0.61 and 0.57 of a grade respectively. In contrast, the South West, South East, and the East of England have all secured improvements of 0.44 of a grade or less over the last ten years.

When we looked at how the most disadvantaged schools have improved in London, the North and the South, we find that at Key Stage 4, London's attainment has improved by 0.89 of a GCSE grade. That is almost a fifth of a grade more than in comparable schools in the wider South of England. More generally, over the last decade, schools serving deprived communities improved their overall attainment the most: **the ten per cent most disadvantaged schools improved results at both Key Stage 2 and 4 by amounts over three times those of the ten per cent least disadvantaged schools**.

We do see some positive signs of improvement in the North, particularly for some disadvantaged pupils. **The North East, North West and Yorkshire and the Humber have raised progress at Key Stage 2 and 4 for pupils who are FSM but not EAL as much as London has, and more than elsewhere**. This improvement has also been reflected among white pupils within this group in particular (our closest proxy for white working class pupils).

**These differences have not significantly narrowed regional differences in overall attainment at Key Stage 4 and the biggest change has been London's emergence as the best performer for attainment and progress**. This has been driven by raising performance for both disadvantaged and non-disadvantaged pupils, whereas in other areas some significant improvements for particular groups of disadvantaged pupils have come with smaller gains in performance overall.

In terms of intake and performance, coastal schools appear to face some similar challenges to other schools that are similarly isolated and deprived. More research would help establish whether such categories should be separately tracked as we monitor performance against our world-class benchmarks.



# Chapter 1: Overall performance

This chapter examines education performance in England, measured by the ambitious series of world-class benchmarks for secondary, primary and Early Years education proposed by CentreForum in January 2016.<sup>5</sup>

For secondary schools, we find that **performance in Attainment 8 is improving slightly. In 2015, 38.0 per cent of pupils attained 50 points or higher, compared with 37.7 per cent in 2014.** However, secondary schools will need to improve at a significantly faster rate in order to meet our benchmark of 75 per cent of pupils achieving 50 points or higher by 2030.

At Key Stage 2, the percentage of pupils **achieving a Level 4b or higher across all three of reading, writing and maths is also increasing.** In 2015, **58.5 per cent of pupils achieved the equivalent of Level 4b+ in reading, writing and maths, up from 56.4 per cent in 2014.** Nevertheless, this rate of improvement will also need to increase rapidly to meet our benchmark of 85 per cent of pupils achieving a Level 4b+ by 2025.

In the Early Years, the proportion of children reaching a **good level of development at age 5 is rising rapidly**, and CentreForum's proposed benchmark of 90 per cent of pupils reaching this threshold by 2020 is currently on course to be met. In **2015, 67.2 per cent of pupils achieved a good level of development in the Early Years Foundation Stage Profile**, a substantial increase from 62.1 per cent in 2014.

Concerns have been expressed elsewhere that improvements identified in educational attainment in recent years have been caused largely by grade inflation.<sup>6</sup> The main purpose of this report is not to consider the extent to which this has influenced trends over time. Instead, the fundamental aim is to draw comparisons between regions and pupils on measures of progress and attainment, in order to identify cases of particularly high or low performance.

**London remains the highest performing region at both Key Stage 4 and Key Stage 2, in terms of both attainment and progress.** The **top-performing local authorities on each of these measures are disproportionately located in London.**

There is a **clear North-South divide in performance on attainment and progress at Key Stage 4 and on attainment in the Early Years, with the highest performing regions located in the South and the lowest performing located in the North and Midlands**, according to regional and local authority rankings. This divide is much less evident for attainment and especially progress at Key Stage 2. Regional variations and trends are discussed in more detail in chapter Four.

Based on performance on **both attainment and progress indicators**, the **highest performing** local authorities at **Key Stage 4** are: **Barnet, Kingston upon Thames, and Westminster** (although this may be driven by relatively large proportions of selective schools in both Barnet and Kingston upon Thames). The **poorest performing** are: **Knowsley, Blackpool, Stoke-on-Trent, and Doncaster**. Knowsley is the worst local authority area for education at Key Stage 4, with only 16.8 per cent of pupils securing 50 points or higher in Attainment 8 in 2015; it also has the lowest average Progress 8 score of all English local authorities for 2015.

<sup>5</sup> N. Perera, M. Treadaway and R. Johns, 'Education in England: progress and goals', CentreForum, January 2016.

<sup>6</sup> Department for Education, 'Educational Excellence Everywhere', March 2016, p.91.

## Secondary school performance

Measure	National 2030 Proposed Benchmark	National 2015 Results
Percentage of pupils achieving 50 points or higher across Attainment 8 subjects.	75 per cent	38.0 per cent

### Proposed benchmark for 2030

#### Key Stage 4 reforms

The proposed benchmark for secondary pupils is based on a number of reforms to Key Stage 4 which are in the process of being implemented.

#### i) Attainment 8

From 2016, schools will be judged according to a new accountability system which will include the new Attainment 8 headline indicator. This measures pupil achievement across eight subjects that fulfil certain requirements and include English and maths. Together with a second headline indicator, Progress 8, it replaces the old school performance measure of proportion of pupils achieving at least five GCSE qualifications at grade C or above, including both English and maths.<sup>7</sup>

Attainment 8 consists of four key subject elements, which together fill ten slots:

- : English (double-weighted, filling two slots);
- : Maths (double-weighted, filling two slots);
- : EBacc subjects (three subjects, filling three slots);
- : Other (three subjects, filling three slots).

#### ii) Transition to GCSE points scales

New GCSE qualifications are being phased in from 2015, with the first reformed GCSE examinations taking place in 2017. Results for these new GCSEs will be reported according to a scale of 1 to 9, with 9 being the top grade. Reformed GCSEs are being introduced in waves between 2015 and 2017 and old GCSEs are being phased out gradually; as a consequence, 2020 will be the first year that all results will be reported according to the new 1 to 9 scale. In the meantime, Attainment 8 scores for legacy GCSEs will be based on two interim scales which convert alphabetical grades into numbers: a 1 to 8 scale in 2016 and a 1 to 8.5 scale between 2017 and 2019.

Centreforum's proposed world-class benchmark for 2030 is based on attainment using the 2017 interim points scale. However, throughout this document attainment is reported using both the 2016 and 2017 points scales to allow for comparison. It is likely that the 1 to 9 scale for reformed GCSEs, which will be the sole basis for Attainment 8 from 2020, will fall between the 2016 and 2017 scales, probably slightly closer to the 2017 scale.

#### Impact of Key Stage 4 reforms

Under these new arrangements, a 'good pass' will be considered to be a grade 5 or above. Ofqual have stated that the new grade 5 will cover the top third of marks currently awarded a grade C and the bottom third of marks for the current grade B. This is therefore a higher benchmark than under the current system, where a grade C is considered to be a good pass.<sup>8</sup>

<sup>7</sup> Progress 8 is calculated for each pupil by comparing the Attainment 8 score of an individual with the average Attainment 8 score of all pupils nationally with the same prior attainment on entry to secondary school. Although a Progress 8 score is calculated for each pupil individually, the only purpose of this is to enable calculation of an overall Progress 8 score for each school (calculated as the average of the individual pupil Progress 8 scores).

<sup>8</sup> Ofqual, 'Your qualification, Our regulation', 2015.

Raising the threshold for a good pass will result in a substantial reduction in the proportion of pupils achieving what is currently considered to be a good pass. It has been estimated that the **proportion of pupils achieving a good pass in both English and maths falls by around 23 percentage points when the new grade 5 threshold is applied to the 2015 Key Stage 4 results, from 58 per cent of pupils who achieved a grade C or above in English and maths to 35 per cent who achieved the equivalent of a grade 5 or higher in both subjects.**<sup>9</sup>

For pupils eligible for the **Pupil Premium, the proportion achieving a good pass in both English and maths falls by 20 percentage points, from 39 per cent to 19 per cent, when the new grade 5 threshold is applied to the 2015 Key Stage 4 results.**

**Setting a proposed benchmark for 2030**

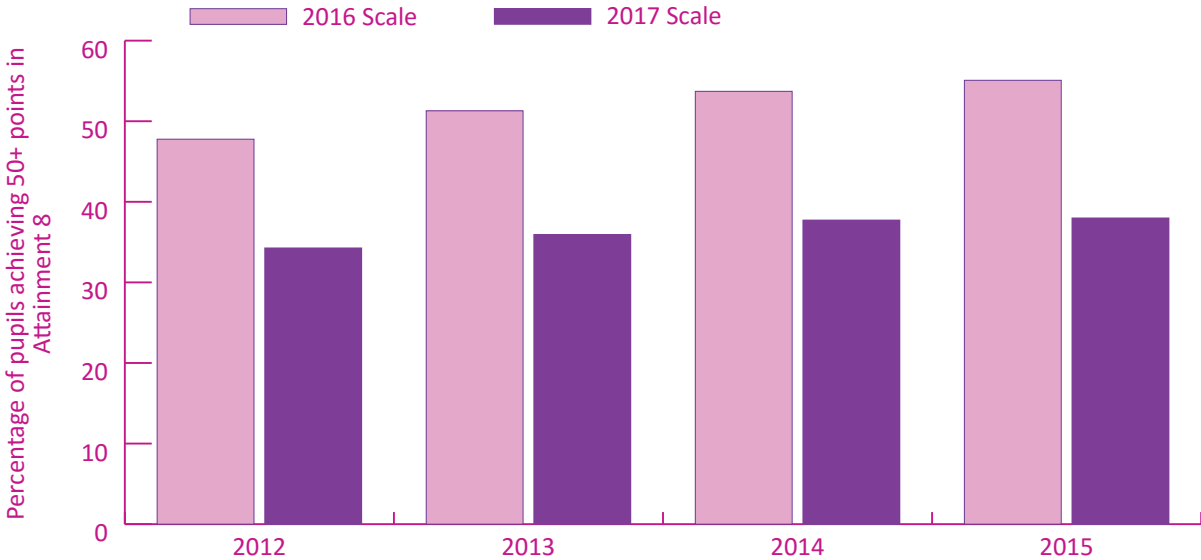
CentreForum’s proposed secondary benchmark for 2016 requires 75 per cent of pupils to achieve 50 points or higher across Attainment 8 subjects. A total of 50 points would imply an average of grade 5 (a good pass) in each Attainment 8 subject.<sup>10</sup> Analysis of the 2009 PISA Study indicates that average performance in England was equivalent to the attainment of seven grade Cs and one grade B at GCSE. It also suggests that to bring average performance in England up to that of top-performing countries such as Finland and Canada, a pupil whose best eight grades at GCSE are all at grade C would need to increase most of these to a grade B.<sup>11</sup> This is broadly equivalent to attainment of an average of grade 5 across all Attainment 8 subjects.

Aiming for 75 per cent of pupils to reach this level by 2030 is in line with current results at England’s top-performing secondary schools, some of which are already exceeding this threshold.<sup>12</sup> This benchmark will be reviewed as the impact of the current and forthcoming reforms to Key Stage 4 becomes clearer.

**Current national performance**

**In 2015, 38.0 per cent of pupils achieved the equivalent of 50 points or higher across Attainment 8 subjects.** This represents only a small increase from 37.7 per cent in 2014.

**Figure 1.1: Percentage of pupils achieving 50 points or higher in Attainment 8, 2012-15**



9 D. Thomson and A. McCulloch, ‘How many pupils will achieve grade 5 in English and maths?’, Education Datalab blog, 4 December 2015: [http://www.educationdatalab.org.uk/Blog/December-2015/How-many-pupils-will-achieve-grade-5-in-English-\(1\).aspx#.Vur7SOKLQdU](http://www.educationdatalab.org.uk/Blog/December-2015/How-many-pupils-will-achieve-grade-5-in-English-(1).aspx#.Vur7SOKLQdU), accessed 4 January 2016.  
 10 There are ten subject slots in Attainment 8, as English and Maths are both double-weighted. See above for further information.  
 11 Department for Education, ‘PISA 2009 Study: How big is the gap?’, October 2011; N. Perera, M. Treadaway and R. Johnes, ‘Education in England: progress and goals’, CentreForum, January 2016, p.11.  
 12 N. Perera, M. Treadaway and R. Johnes, ‘Education in England: progress and goals’, CentreForum, January 2016, pp.12-14.

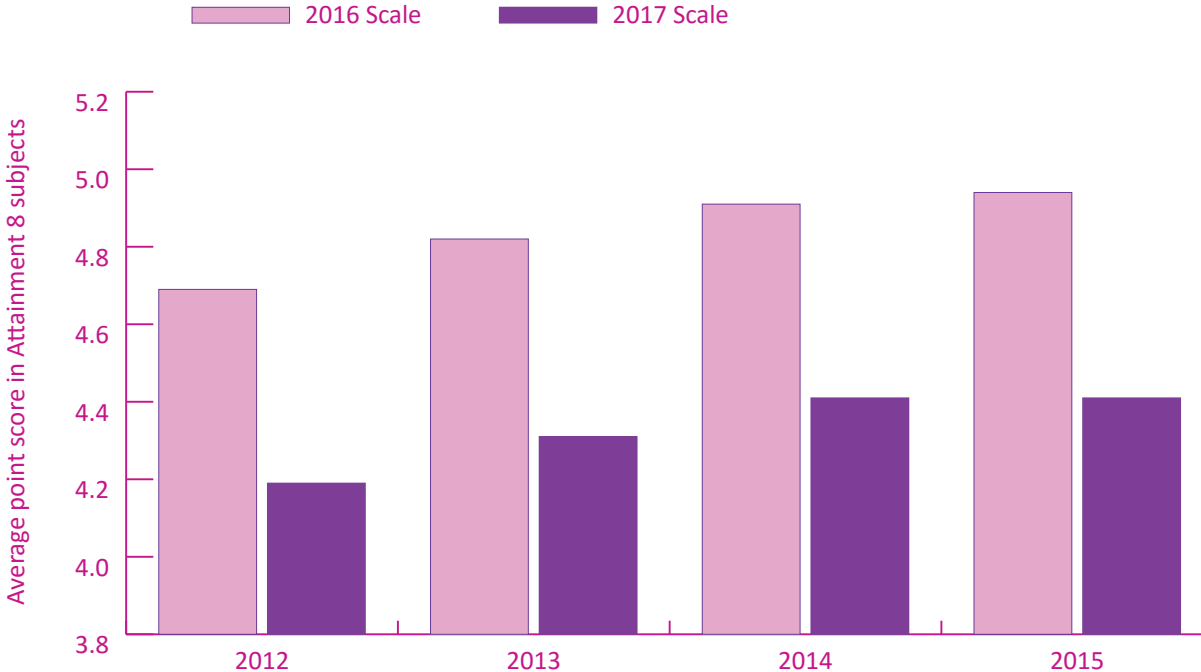
The proportion of pupils achieving the equivalent of 50 points or higher has been rising each year since 2012, despite the introduction of new early entry rules in September 2013, whereby only a pupil's first entry to a Key Stage 4 qualification can be included in school performance measures. This rule contributed to a drop in 2014 in the percentage of pupils achieving five GCSEs between grades A\* to C, including English and maths, which was at that stage the main headline measure at Key Stage 4.<sup>13</sup> This pattern is not reflected in the percentage of pupils achieving the equivalent of 50 points or higher in Attainment 8, largely because increased entry to Attainment 8 subjects led to an overall rise in the percentage of pupils reaching the 50 point threshold.<sup>14</sup>

Nevertheless, the proportion of pupils securing 50 points or higher across Attainment 8 will need almost to be doubled between 2015 and 2030 in order to reach the proposed benchmark of 75 per cent. If the current rate of increase continues, only around 60 per cent of pupils will be achieving 50 points or higher in Attainment 8 by 2030.<sup>15</sup> The rate of improvement will therefore need to accelerate considerably if the 2030 benchmark is to be achieved, particularly as much of the improvement since 2012 is due to increased entry to Attainment 8 subjects. Increases in entry levels will taper off as they become closer to 100 per cent and so are likely to have a much smaller impact on raising the proportion of pupils achieving 50 points or higher over time.

**Average point score achieved in Attainment 8**

The national average point score in Attainment 8 subjects stood at 4.41 points in 2015, according to the 2017 interim points scale. This is broadly equivalent to a fairly low grade C under the current A\* to G scale.<sup>16</sup> It represents no change from the national average point score in 2014.

**Figure 1.2: Average point score in Attainment 8 subjects, 2012-15**

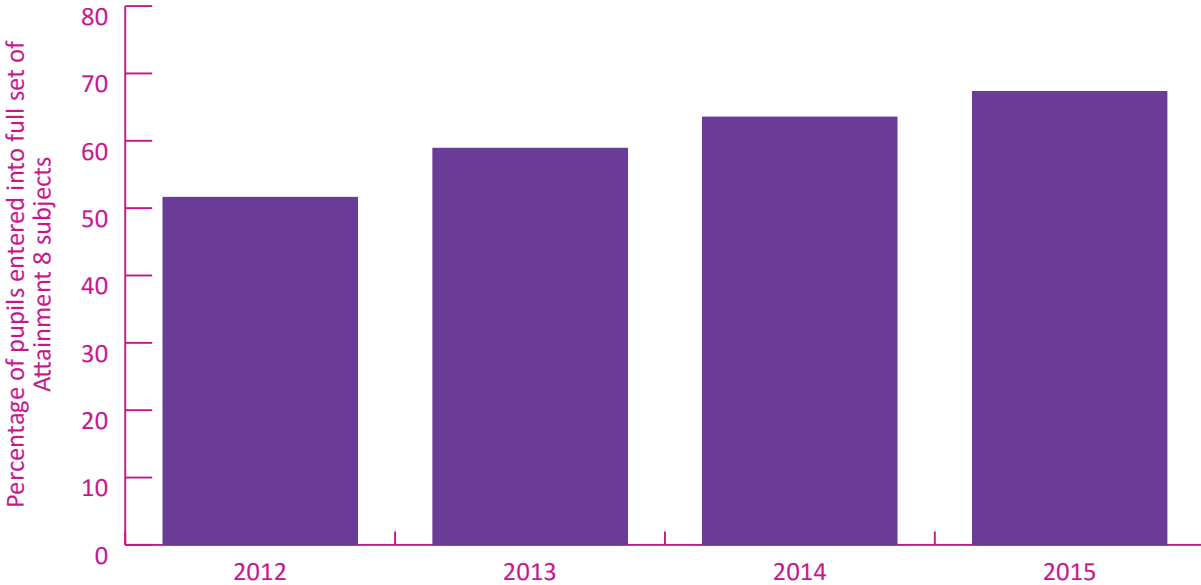


13 Department for Education, 'Revised GCSE and equivalents results in England, 2013 to 2014', January 2015, pp.8-9; Department for Education, 'Revised GCSE and equivalent results in England, 2014 to 2015', January 2016, p.4.  
 14 Figure 13, Appendix 1, in CentreForum's previous report, 'Education in England: progress and goals' (January 2016), identified a fall in 2013 in the percentage of pupils attaining 50+ points in Attainment 8. This is not found in Figures 1.1 and 1.2 of this report due to the use of a different methodology. The previous report was based on analysis which estimated the percentage of pupils who achieved 50+ points using a re-calculated GCSE grade, whereas the data here is based on actual Attainment 8 outcomes.  
 15 N. Perera, M. Treadaway and R. Johnes, 'Education in England: progress and goals', CentreForum, January 2016, pp.10-14, 30-34.  
 16 Ofqual, 'Your qualification, Our regulation', 2015.

### Entry into Attainment 8 subjects

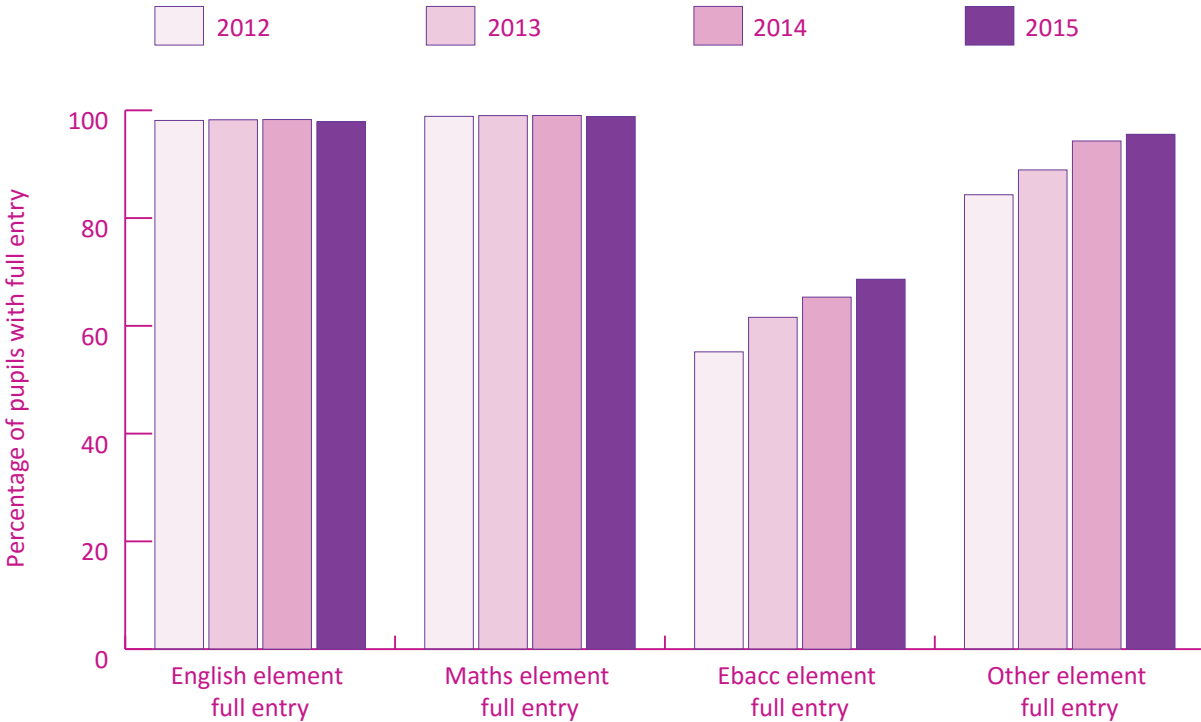
The proportion of pupils fulfilling the Attainment 8 entry requirements has increased each year since 2012, rising from 51.6 per cent of pupils in 2012 to 67.6 per cent in 2015.

**Figure 1.3: Percentage of pupils entered into full set of Attainment 8 subjects, 2012-15**



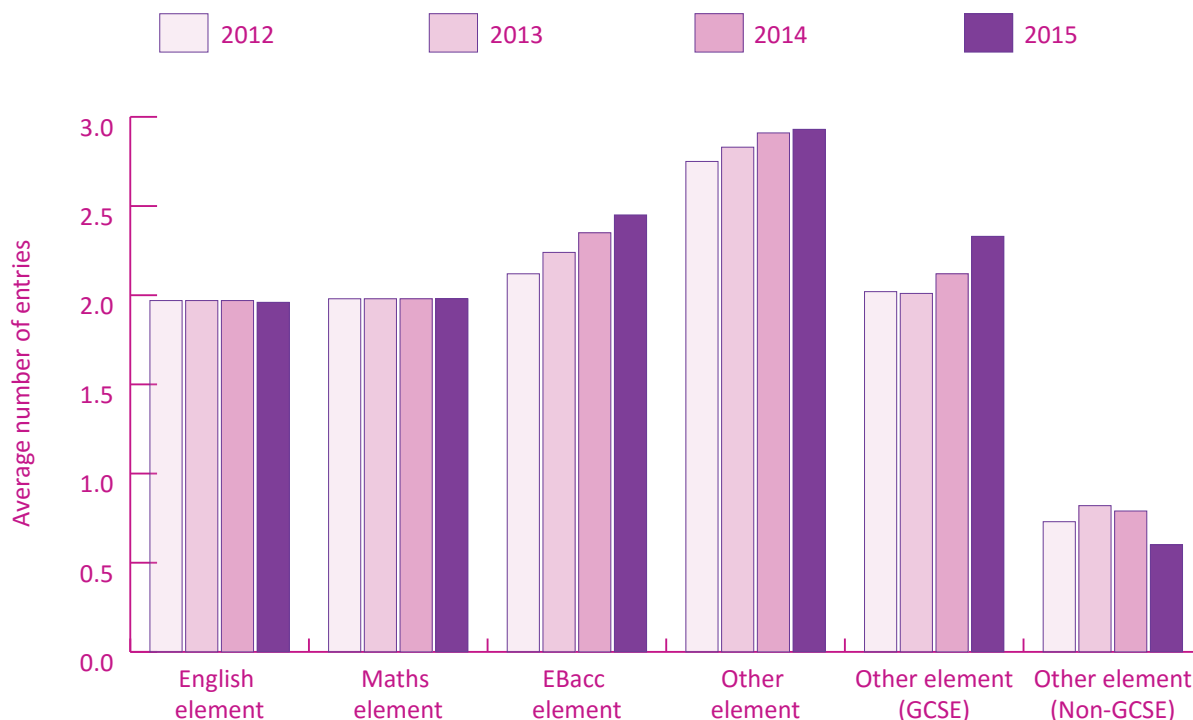
This increase in full entry to Attainment 8 subjects is driven by increases in full entry into the EBacc and Other elements of Attainment 8. The proportion of pupils with full entry to the EBacc element has increased from 55.2 per cent of pupils in 2012 to 68.6 per cent in 2015, and full entry for the Other element has risen from 84.3 per cent in 2012 to 95.6 per cent in 2015.

**Figure 1.4: Percentage of pupils with full entry into each subject element of Attainment 8, 2012-15**



Qualifications which are eligible to be counted in the Other element of Attainment 8 include both GCSE and non-GCSE qualifications. Full entry to the Other element has been caused specifically by a rise in Other GCSE entries, which has outweighed a decline since 2013 in Other non-GCSE entries.

**Figure 1.5: Average number of entries for each subject element in Attainment 8<sup>17</sup>**



The trends evident in Figures 1.4 and 1.5 are likely to be caused by specific policy changes:

- : **English Baccalaureate (EBacc)** was introduced in 2010 as a school performance measure. It is included in school league tables in order to demonstrate how many pupils at schools achieve a grade C or higher in core academic subjects at Key Stage 4. The EBacc consists of six slots: English; maths; History or Geography; Sciences (double-weighted); and a Language. A pupil must achieve a grade C or above in all six slots in order to achieve the EBacc. Although this measure is not linked to floor standards, its inclusion in school league tables has incentivised schools to increase entry to subjects which count towards it. This explains the rise in entries to the EBacc element of Attainment 8 and is a partial factor also in the increase in entries to GCSEs which are counted in the Other element of Attainment 8, as additional EBacc qualifications which are not put towards the English, maths and EBacc elements of Attainment 8 can be counted in the Other element.
- : **The Wolf review** of 2011 led to a number of reforms being implemented from 2014 which limited the contribution of vocational qualifications to school performance tables. Most notably, the number of qualifications eligible for inclusion in these tables was substantially reduced and no qualification could count as greater than one GCSE. The number of non-GCSE qualifications included in performance measures was also limited to a maximum of two per pupil.<sup>18</sup> These reforms prompted schools to reduce entry into non-GCSE qualifications and enter more pupils for GCSE exams. This explains the decline in entry to non-GCSE qualifications and has also contributed to the rise in entry to GCSE qualifications counted in the Other element of Attainment 8, as well entry to the EBacc element.

<sup>17</sup> Maximum number of entries per subject element are: English 2; Maths 2; EBacc 3; Other 3.

<sup>18</sup> This will change with the introduction of Attainment 8 and Progress 8, which allow for the inclusion of up to three non-GCSE qualifications.



The rise in entry to EBacc subjects between 2012 and 2015 has been driven by overall increases in the percentages of pupils entering Science, Humanities and Languages. The percentage of pupils entering EBacc Science rose particularly sharply between 2014 and 2015, from 68.7 per cent of pupils in state schools to 74.4 per cent. For Humanities, the percentage of pupils with entries for both History and Geography increased overall between 2012 and 2015, but from 2014 to 2015 the small rise was driven by an increase in the percentage of pupils entering Geography, as the proportion entering History fell very slightly.

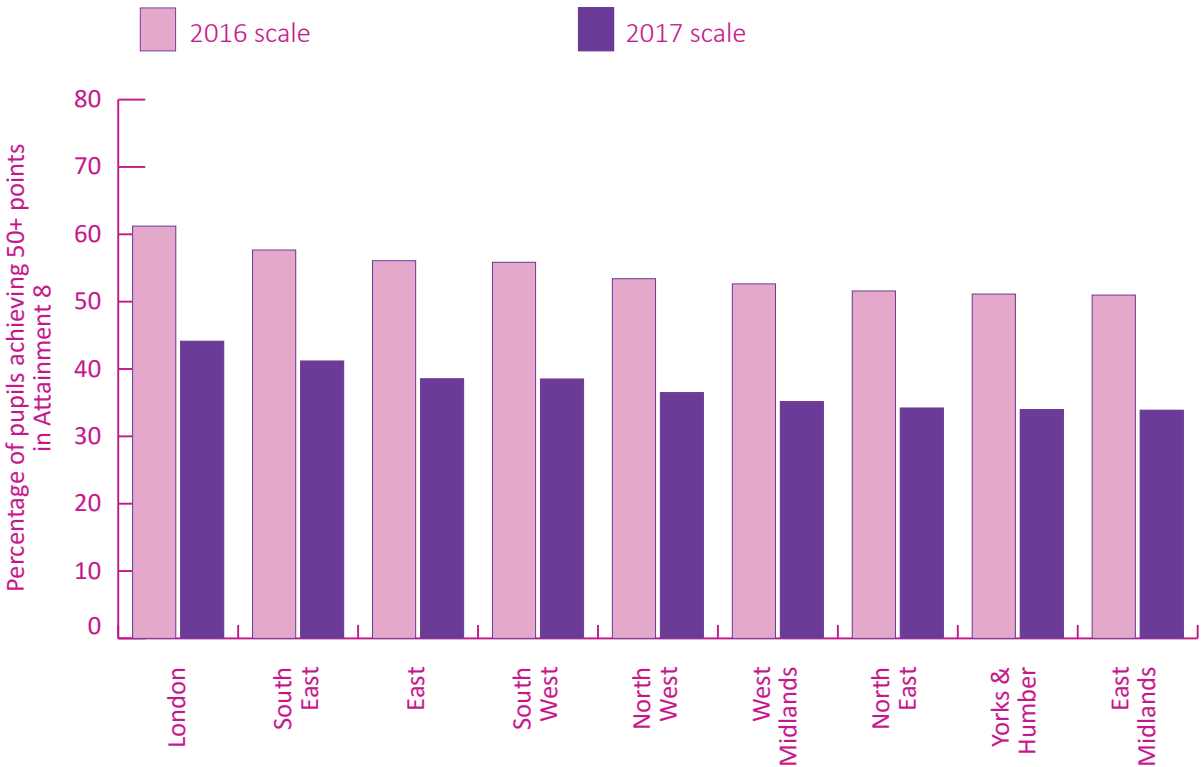
Between 2012 and 2015 the rise in entry to Other GCSE qualifications, was driven by increases in entries to: Religious Studies, Art and Design, Music, and Performing Arts.<sup>19</sup>

Entry rates to maths and English have remained largely static and close to 100 per cent since 2012. This is because the old headline measure of proportion of pupils achieving five GCSEs (grades A\* to C), including English and maths, already heavily incentivised entry to these subjects.

**Current regional performance**

London outperforms all other regions against our secondary benchmark. **In 2015, 44.1 per cent of pupils in London achieved 50 points or higher on the 2017 points scale, compared to the national average of 38.0 per cent.**

**Figure 1.6: Percentage of pupils achieving 50+ points in Attainment 8 across English regions, 2015**



Similarly, we find that over half of the top 20 highest performing local authorities at Key Stage 4 are located in London. Only two local authorities (Trafford and York) from outside London and the South feature on this list. Our tables of the top and bottom 20 local authorities also show the percentage of schools in those authorities that are classified as selective (or grammar). We see that many of the highest performing authorities also have relatively high proportions of selective schools (Kingston upon Thames, Sutton, Trafford, Buckinghamshire and Slough), which may well be skewing the data

<sup>19</sup> Department for Education, 'Revised GCSE and equivalent results in England, 2014 to 2015', January 2016, p.10.

as selective schools often attract pupils with high prior attainment and abilities from neighbouring authorities. However, it would be equally distorting to remove selective schools entirely from these tables. Instead, we show the proportion of schools that are selective in order to give some context for each authority.

**Figure 1.7: Top 20 highest performing local authorities for Key Stage 4 attainment, 2015<sup>20</sup>**

	<b>Local authority</b>	<b>Percentage of pupils achieving 50 points or higher in Attainment 8 (2017 points scale)</b>	<b>Percentage of schools which are selective</b>
1	Kingston upon Thames	60.2%	20.0%
2	Sutton	59.3%	35.7%
3	Barnet	56.7%	13.6%
4	Trafford	55.8%	38.9%
5	Buckinghamshire	55.5%	35.1%
6	Kensington and Chelsea	53.1%	0.0%
7	Slough	51.9%	36.4%
8	Richmond upon Thames	51.3%	0.0%
9	Hammersmith and Fulham	51.0%	0.0%
10	Wokingham	50.0%	0.0%
11	Redbridge	49.4%	11.1%
12	Westminster	49.4%	0.0%
13	Bromley	48.7%	11.8%
14	Hounslow	48.7%	0.0%
15	Southend	48.2%	33.3%
16	Harrow	48.0%	0.0%
17	Hertfordshire	47.8%	0.0%
18	Surrey	46.9%	0.0%
19	York	45.8%	0.0%
20	Brent	45.4%	0.0%

Conversely, the majority of the 20 local authorities with the lowest proportions of pupils achieving 50 points or higher in Attainment 8 are in the North and Midlands. No London local authorities appear in this list.

<sup>20</sup> Percentages of pupils achieving 50+ points in Attainment 8 are calculated according to the 2017 interim points scale.

**Figure 1.8: 20 lowest performing local authorities for Key Stage 4 attainment, 2015**

	Local authority	Percentage of pupils achieving 50 points or higher in Attainment 8 (2017 points scale)	Percentage of schools which are selective
1	Knowsley	16.8%	0.0%
2	Blackpool	21.0%	0.0%
3	Sandwell	23.3%	0.0%
4	Stoke-on-Trent	23.8%	5.9%
5	Isle of Wight	24.1%	0.0%
6	Nottingham City	24.3%	0.0%
7	City of Kingston-Upon-Hull	24.9%	0.0%
8	Barnsley	26.5%	0.0%
9	Doncaster	26.8%	0.0%
10	Salford	27.4%	0.0%
11	Bradford	28.2%	0.0%
12	North East Lincolnshire	28.5%	0.0%
13	Oldham	28.8%	0.0%
14	Sunderland	29.0%	0.0%
15	Wolverhampton	29.5%	5.6%
16	North Lincolnshire	29.7%	0.0%
17	City of Derby	29.9%	0.0%
18	Manchester	29.9%	0.0%
19	Portsmouth	30.0%	0.0%
20	Peterborough	30.1%	0.0%

Nationally, the majority of schools currently have only 25 to 50 per cent of pupils achieving 50 points or higher in Attainment 8. There are only 21 non-selective schools in which 75 per cent or more of pupils are already achieving 50 points or higher. Eight of these are in London and seven in the East of England. There are none in the North East, the East Midlands, the South West and Yorkshire and the Humber. When we add in selective schools, we see that there are 179 schools in which 75 per cent or more pupils achieve 50 points or higher. This results in greater spread across the regions and a particular increase in the number of high performing schools in the South East.

There are currently 97 schools across the country in which less than 10 per cent of pupils achieve 50 points or higher, meaning that over 90 per cent of pupils in these schools are failing to reach a world-class standard of attainment at Key Stage 4. 23 of these schools are in the South East, 17 in the East Midlands, 16 in the North West and only one in London. Given that the East Midlands has a relatively low total number of schools, it performs particularly poorly on this measure, with 6.5 per cent of schools in this region falling into this category.

There are over 800 secondary schools out of 3,065 in total across the country in which less than a quarter of pupils reach a world-class benchmark. Almost 40 per cent of schools in the East Midlands and a third of schools in Yorkshire and the Humber are failing to get 25 per cent or more of their pupils to this standard. Meanwhile in London, that figure drops to less than 10 per cent.

**Figure 1.9: Number of schools with grouped percentages of pupils achieving 50 points or higher in Attainment 8 across English regions (including selective schools), 2015<sup>21</sup>**

Region	No. schools with Key Stage 4 results	Less than 10% pupils achieving 50+ points		10-24% pupils achieving 50+ points		25-49% pupils achieving 50+ points		50-74% pupils achieving 50+ points		75-100% pupils achieving 50+ points	
East Midlands	260	17	6.5%	86	33.1%	123	47.3%	21	8.1%	13	5.0%
East of England	341	9	2.6%	72	21.1%	186	54.5%	59	17.3%	15	4.4%
London	425	1	0.2%	41	9.6%	252	59.3%	104	24.5%	27	6.4%
North East	147	8	5.4%	38	25.9%	84	57.1%	17	11.6%	0	0.0%
North West	444	16	3.6%	114	25.7%	232	52.3%	59	13.3%	23	5.2%
South East	475	23	4.8%	109	22.9%	217	45.7%	70	14.7%	56	11.8%
South West	303	5	1.7%	63	20.8%	182	60.1%	33	10.9%	20	6.6%
West Midlands	374	8	2.1%	108	28.9%	200	53.5%	39	10.4%	19	5.1%
Yorkshire and the Humber	296	10	3.4%	88	29.7%	161	54.4%	31	10.5%	6	2.0%
<b>National</b>	<b>3065</b>	<b>97</b>	<b>3.2%</b>	<b>719</b>	<b>23.5%</b>	<b>1637</b>	<b>53.4%</b>	<b>433</b>	<b>14.1%</b>	<b>179</b>	<b>5.8%</b>

**Figure 1.10: Number of schools with grouped percentages of pupils achieving 50+ points in Attainment 8 across English regions (non-selective schools only), 2015<sup>22</sup>**

Region	No. schools with Key Stage 4 results	Less than 10% pupils achieving 50+ points		10-24% pupils achieving 50+ points		25-49% pupils achieving 50+ points		50-74% pupils achieving 50+ points		75-100% pupils achieving 50+ points	
East Midlands	245	17	6.9%	86	35.1%	123	50.2%	19	7.8%	0	0.0%
East of England	333	9	2.7%	72	21.6%	186	55.9%	59	17.7%	7	2.1%
London	406	1	0.2%	41	10.1%	252	62.1%	104	25.6%	8	2.0%
North East	147	8	5.4%	38	25.9%	84	57.1%	17	11.6%	0	0.0%
North West	425	16	3.8%	114	26.8%	232	54.6%	59	13.9%	4	0.9%
South East	418	23	5.5%	109	26.1%	217	51.9%	68	16.3%	1	0.2%
South West	283	5	1.8%	63	22.3%	182	64.3%	33	11.7%	0	0.0%
West Midlands	355	8	2.3%	108	30.4%	200	56.3%	38	10.7%	1	0.3%
Yorkshire and the Humber	290	10	3.4%	88	30.3%	161	55.5%	31	10.7%	0	0.0%
<b>National</b>	<b>2902</b>	<b>97</b>	<b>3.3%</b>	<b>719</b>	<b>24.8%</b>	<b>1637</b>	<b>56.4%</b>	<b>428</b>	<b>14.7%</b>	<b>21</b>	<b>0.7%</b>

The top 20 non-selective, mainstream state schools with the highest proportions of pupils currently achieving 50 points or higher (on the 2017 points scale) are listed below.<sup>23</sup> Those highlighted in pink currently administer an entrance exam to assess pupils' aptitudes in certain subjects (such as music) or to place pupils into ability bands in order to achieve a specific distribution of pupils in their intake.

21 This table includes all mainstream state secondary schools in England, including selective schools. It excludes special schools and pupil referral units.

22 This table includes all mainstream, non-selective state secondary schools in England. It excludes selective schools, special schools and pupil referral units.

23 The names of schools which are performing poorly have not been published in this report. This is because schools will only be held accountable for their performance on Attainment 8 and Progress 8 from 2016 (only a small number of schools chose to opt in to the measures in 2015).

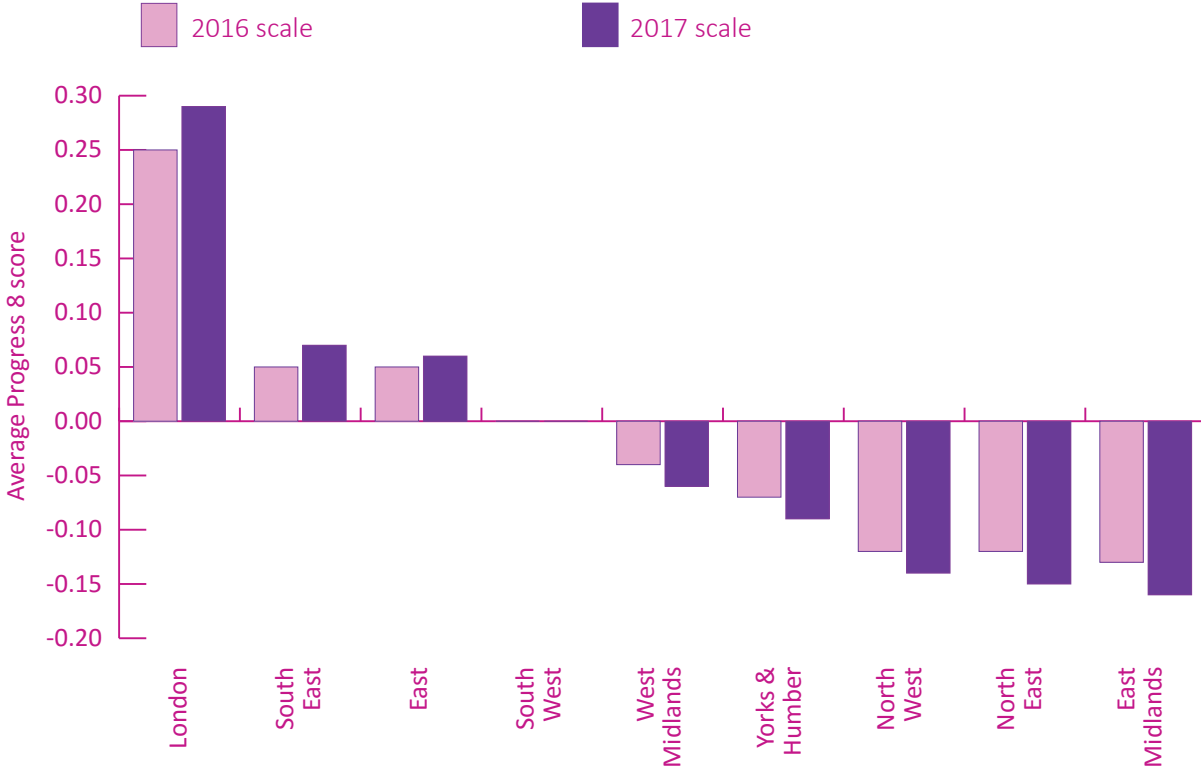
In addition to different admission practices, schools accommodate different pupils and function in different contexts. This list does not account for any of these contextual factors.

**Figure 1.11: Top 20 highest performing schools for Key Stage 4 attainment, 2015**

	School name	Percentage of pupils achieving 50+ points in Attainment 8 (2017 points scale)	School type	Local authority	Region
1	Dame Alice Owen's School	86.6%	Academy Converter	Hertfordshire	East
2	King Solomon Academy	83.3%	Academy Sponsor Led (Ark)	Westminster	London
3	Tauheedul Islam Girls High School	81.2%	Voluntary Aided	Blackburn	North West
4	Hockerill Anglo-European College	81.1%	Academy Converter	Hertfordshire	East
5	Parmiter's School	81.0%	Academy Converter	Hertfordshire	East
6	Coloma Convent Girls' School	80.0%	Voluntary Aided	Croydon	London
7	Watford Grammar School for Boys	79.4%	Academy Converter	Hertfordshire	East
8	Hasmonean High School	78.8%	Academy Converter	Barnet	London
9	The London Oratory School	78.8%	Academy Converter	Hammersmith and Fulham	London
10	Sacred Heart High School	77.4%	Academy Converter	Hammersmith and Fulham	London
11	Thomas Telford School	77.1%	City Technology College	Telford and Wrekin	West Midlands
12	The Hertfordshire and Essex High School and Science College	76.5%	Academy Converter	Hertfordshire	East
13	St John the Baptist Catholic Comprehensive School, Woking	76.3%	Voluntary Aided	Surrey	South East
14	Ursuline High School Wimbledon	76.0%	Voluntary Aided	Merton	London
15	Waldegrave School for Girls	75.4%	Academy Converter	Richmond upon Thames	London
16	The St Marylebone C of E School	75.0%	Academy Converter	Westminster	London
17	The King David High School	75.0%	Academy Converter	Manchester	North West
18	St Albans Girls' School	75.0%	Academy Converter	Hertfordshire	East
19	Wyndham College	74.7%	Academy Converter	Norfolk	East
20	Preston Muslim Girls High School	74.5%	Voluntary Aided	Lancashire	North West

Pupils in London also make substantially more progress between primary and secondary compared to other regions, as measured by average Progress 8 scores. The average Progress 8 score for all pupils at mainstream schools nationally is zero. With a Progress 8 score in 2015 of 0.29 according to the 2017 scale, London is far higher on this measure than both the national average and any other individual region. The East Midlands and the North East performed most poorly on this measure in 2015, with Progress 8 scores of -0.16 and -0.15 respectively.

**Figure 1.12: Average Progress 8 scores across English regions, 2015**



When we look at the 20 local authorities with the highest Progress 8 scores, it is no surprise then that, with the exception of Wokingham, they are exclusively found in London.

**Figure 1.13: Top 20 highest performing local authorities for Key Stage 4 progress, 2015<sup>24</sup>**

	Local authority	Average Progress 8 score (2017 points scale)	Percentage of schools which are selective
1	Barnet	0.65	13.6%
2	Westminster	0.59	0.0%
3	Kingston upon Thames	0.57	20.0%
4	Harrow	0.50	0.0%
5	Ealing	0.48	0.0%
6	Hackney	0.47	0.0%
7	Brent	0.45	0.0%
8	Hammersmith and Fulham	0.45	0.0%
9	Merton	0.45	0.0%

<sup>24</sup> Note that the Isles of Scilly have been excluded from this table as they have only one school with Key Stage 4 results for 2015. All other local authorities included in this table have at least five schools.



10	Hounslow	0.43	0.0%
11	Southwark	0.41	0.0%
12	Sutton	0.38	35.7%
13	Redbridge	0.37	11.1%
14	Islington	0.35	0.0%
15	Waltham Forest	0.35	0.0%
16	Haringey	0.33	0.0%
17	Kensington and Chelsea	0.32	0.0%
18	Tower Hamlets	0.32	0.0%
19	Wokingham	0.31	0.0%
20	Newham	0.30	0.0%

Conversely, we find no London authorities amongst the 20 authorities with the worst Progress 8 scores. We find instead that most of the bottom 20 authorities are in the North and the Midlands.

**Figure 1.14: 20 lowest performing local authorities for Key Stage 4 progress, 2015**

	Local authority	Average Progress 8 score (2017 points scale)	Percentage of schools which are selective
1	Knowsley	-0.82	0.0%
2	Blackpool	-0.53	0.0%
3	Stoke-on-Trent	-0.47	5.9%
4	Nottingham City	-0.42	0.0%
5	Barnsley	-0.38	0.0%
6	St Helens	-0.38	0.0%
7	Salford	-0.38	0.0%
8	Liverpool	-0.36	2.9%
9	Doncaster	-0.36	0.0%
10	Redcar and Cleveland	-0.35	0.0%
11	Isle of Wight	-0.33	0.0%
12	Oldham	-0.31	0.0%
13	Walsall	-0.30	8.3%
14	Sunderland	-0.30	0.0%
15	Bradford	-0.29	0.0%
16	Derbyshire	-0.27	0.0%
17	Darlington	-0.27	0.0%
18	Halton	-0.25	0.0%
19	Sandwell	-0.24	0.0%
20	Wigan	-0.23	0.0%

London schools likewise dominate the top 20 schools nationally according to Progress 8 scores, with eleven of the schools in this list located in London. Again, schools highlighted in pink administer a test as part of its admissions process.

**Figure 1.15: Top 20 highest performing schools for Key Stage 4 progress, 2015**

	<b>School name</b>	<b>Progress 8 score (2017 points scale)</b>	<b>School type</b>	<b>Local authority</b>	<b>Region</b>
1	King Solomon Academy	2.01	Academy Sponsor Led (Ark)	Westminster	London
2	Tauheedul Islam Girls High School	1.92	Voluntary Aided	Blackburn	North West
3	Bentley Wood High School	1.31	Academy Converter	Harrow	London
4	Hasmonean High School	1.26	Academy Converter	Barnet	London
5	Preston Muslim Girls High School	1.26	Voluntary Aided	Lancashire	North West
6	The City Academy, Hackney	1.24	Academy Sponsor Led (City of London Corporation and KPMG)	Hackney	London
7	Ursuline High School Wimbledon	1.24	Voluntary Aided	Merton	London
8	The Compton School	1.23	Academy Converter	Barnet	London
9	St Peter's Catholic School	1.16	Voluntary Aided	Surrey	South East
10	St Andrew's Catholic School	1.14	Voluntary Aided	Surrey	South East
11	Sexey's School	1.12	Academy Converter	Somerset	South West
12	Ark St Alban's Academy	1.10	Academy Sponsor Led (Ark)	Birmingham	West Midlands
13	Parkside Community College	1.09	Academy Converter	Cambridgeshire	East
14	Paddington Academy	1.08	Academy Sponsor Led (United Learning)	Westminster	London
15	Westminster Academy	1.04	Academy Sponsor Led (The Exilarch's Foundation)	Westminster	London
16	St Thomas More Catholic School	1.01	Academy Converter	Haringey	London
17	Uffculme School	1.00	Academy Converter	Devon	South West
18	The St Thomas the Apostle College	1.00	Voluntary Aided	Southwark	London
19	Beauchamp College	0.99	Academy Converter	Leicestershire	East Midlands
20	Harris Girls' Academy East Dulwich	0.97	Academy Sponsor Led (Harris)	Southwark	London

## Primary school performance

Measure	National 2025 Proposed Benchmark	National 2015 Results
Percentage of children attaining the new equivalent to Level 4b+ in each of reading, writing and maths.	85 per cent	58.5 per cent

### Proposed benchmark for 2025

#### Key Stage 2 attainment as basis for Key Stage 4 attainment

The Key Stage 2 proposed benchmark has been set by considering the prior attainment required on entry to secondary school in order to maximise a pupil's chances of achieving 50 points or higher in Attainment 8 at Key Stage 4. Until 2015, the official headline performance measure at Key Stage 2 was pupil attainment of Level 4c or above in each of reading, writing and maths. Analysis of 2014 performance data suggests that around 62 per cent of pupils who reach this threshold go on to achieve 50 points or higher in Attainment 8, compared with about 74 per cent who achieve a Level 4b or higher in all three skill areas.<sup>25</sup> Attainment of Level 4b therefore provides a more secure basis for subsequent attainment at secondary school.

CentreForum's proposed benchmark specifically includes attainment of Level 4b across *all three* of reading, writing and maths. As writing is teacher assessed according to whole levels rather than sub-levels, the Department for Education reports overall attainment of Level 4b+ at Key Stage 2 according to numbers of pupils who attain a Level 4b or above in both reading and maths, plus a Level 4c or above in writing. CentreForum instead estimates the number of pupils achieving a Level 4b in writing by using pupil prior attainment at Key Stage 1. Unless otherwise indicated, CentreForum's definition of attainment of Level 4b+ at Key Stage 2 is used throughout this report.

#### Key Stage 2 reforms

From 2016, national curriculum levels will no longer be used to measure attainment at Key Stage 2. Instead, pupil performance will be reported according to a system of scaled scores, where 100 will become the new national standard. The Department for Education has stated that this new national standard will be broadly comparable to the previous Level 4b; more precision will be provided after the data from the 2016 tests have been analysed.<sup>26</sup> CentreForum's benchmark will therefore be reviewed once more details about these changes become available.

#### Setting a proposed benchmark for 2025

CentreForum's proposed benchmark at Key Stage 2 is that 85 per cent of pupils should achieve the equivalent of a Level 4b or higher in each of reading, writing and maths by 2025. This would ensure that the majority of children begin secondary school with the prior attainment required to maximise their chances of achieving 50 points or higher at Key Stage 4 and is in line with current achievement at top performing non-selective primary schools.

<sup>25</sup> N. Perera, M. Treadaway and R. Johnes, 'Education in England: progress and goals', CentreForum, January 2016, p.16.

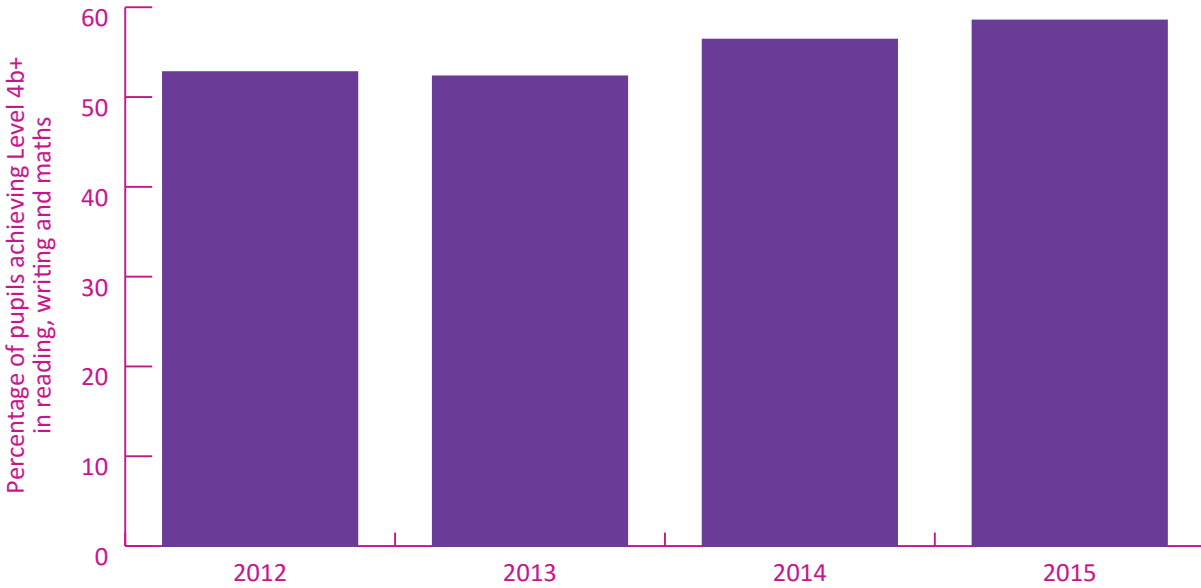
<sup>26</sup> Department for Education, 'Reforming assessment and accountability for primary schools: Government response to consultation on primary school assessment and accountability', March 2014, p.10; Standards and Testing Agency, 'Scaled scores: Guidance', July 2015, gov.uk: <https://www.gov.uk/guidance/scaled-scores>, accessed 17 March 2016.

### Current performance

In 2015, 58.5 per cent of pupils achieved the equivalent of Level 4b+ across all three of reading, writing and maths.<sup>27</sup> This represents an increase from 56.4 per cent in 2014.

Attainment at Key Stage 2 has generally been increasing over the past ten years. However, should the trends of the past decade continue at the same rate, then 74 per cent of pupils will achieve the equivalent of Level 4b or above in reading, writing and maths by 2025.<sup>28</sup> Again, the rate of improvement will need to increase if the 2025 benchmark is to be met.

Figure 1.16: Percentage of pupils achieving Level 4b+ in reading, writing and maths, 2012-15



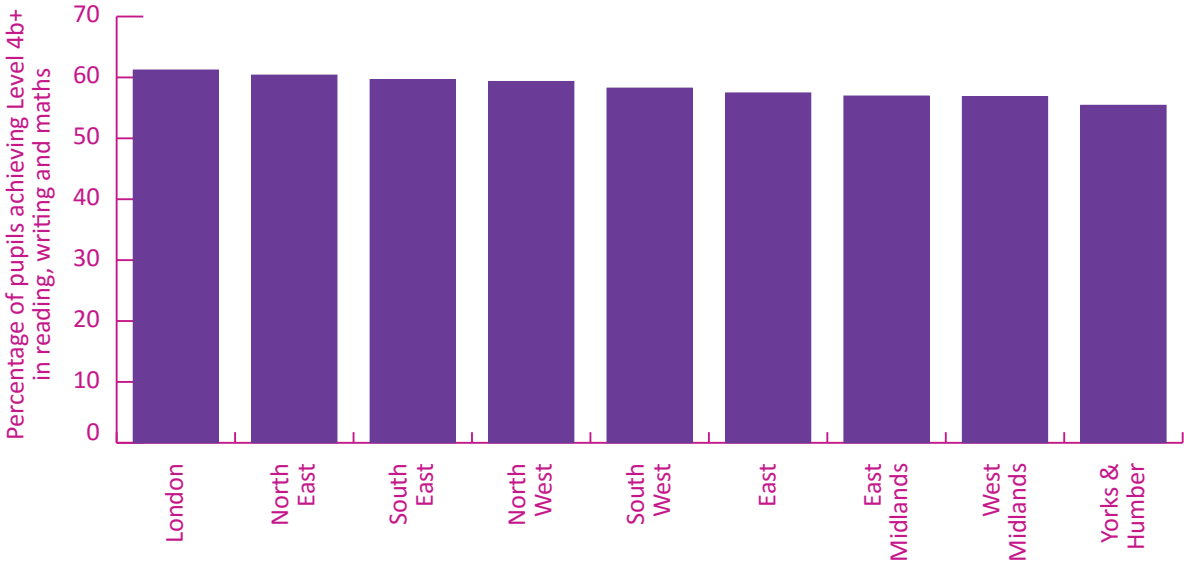
The percentage of pupils achieving Level 4b+ in reading, writing and maths dipped in 2013 to 52.3 per cent, from 52.8 per cent the previous year. This was caused specifically by a fall in the proportion of pupils achieving a Level 4b+ in reading. The percentage of pupils reaching Level 4b+ in reading, writing and maths has increased both years since 2013.

### Current regional performance

The proportion of pupils achieving a Level 4b+ in reading, writing and maths at Key Stage 2 is similar across the country. As at Key Stage 4, London is the top-performing region according to this measure. However, there is only a 5.8 percentage point gap between London (61.2 per cent of pupils) and the poorest performing region, Yorkshire and the Humber (55.4 per cent).

27 CentreForum’s previous report, ‘Education in England: progress and goals’ (January 2016) estimated that 57 per cent of pupils achieved a Level 4b or above in each of Reading, Writing and Maths in 2015. This figure was based on analysis of all state schools with Key Stage 2 results in England, whereas the data in this annual report excludes special schools and alternative provision.  
 28 N. Perera, M. Treadaway and R. Johnes, ‘Education in England: progress and goals’, CentreForum, January 2016, pp.15-19.

**Figure 1.17: Percentage of pupils achieving Level 4b+ in reading, writing and maths across English regions, 2015**



Of the top 20 local authorities with the highest proportion of pupils achieving a Level 4b or higher in reading, writing and maths, eleven are located in London.

**Figure 1.18: Top 20 highest performing local authorities for Key Stage 2 attainment, 2015**

	Local authority	Percentage of pupils achieving Level 4b+ in reading, writing and maths
1	Kensington and Chelsea	72.0%
2	Richmond upon Thames	70.3%
3	Sutton	67.3%
4	Greenwich	66.9%
5	Redcar and Cleveland	66.7%
6	Trafford	66.6%
7	Bromley	65.7%
8	Lewisham	64.5%
9	Solihull	64.0%
10	Camden	63.9%
11	Windsor and Maidenhead	63.9%
12	Hertfordshire	63.6%
13	Hammersmith & Fulham	63.6%
14	Wokingham	63.2%
15	Redbridge	63.0%
16	Surrey	62.9%
17	Lambeth	62.8%
18	Warrington	62.7%
19	Darlington	62.7%
20	Bexley	62.7%

Among the 20 local authorities with the lowest proportion of children achieving the Key Stage 2 benchmark, there is a greater regional spread than at secondary: although six of the local authorities are from Yorkshire and the Humber, the remaining fourteen are spread across all other regions in both the North and South, with the exception of the North East.

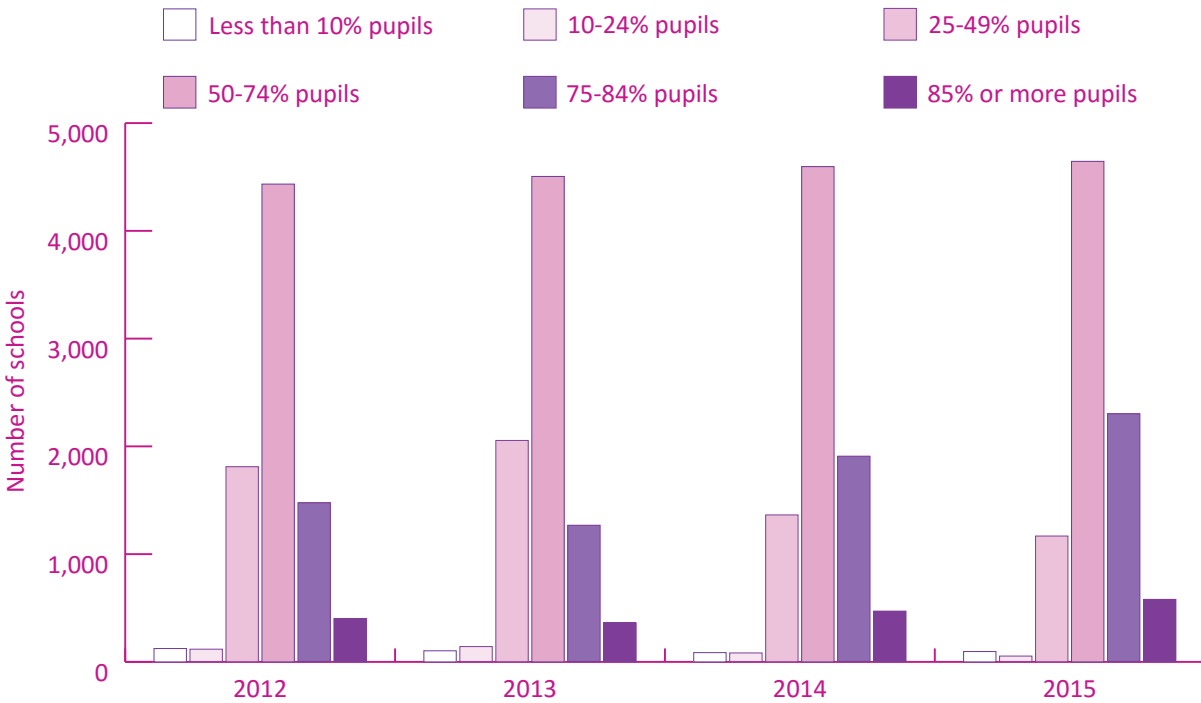
**Figure 1.19: 20 lowest performing local authorities for Key Stage 2 attainment, 2015**

	<b>Local authority</b>	<b>Percentage of pupils achieving Level 4b+ in reading, writing and maths</b>
1	Walsall	50.0%
2	Doncaster	50.0%
3	Peterborough	50.1%
4	Poole	50.2%
5	Medway	50.6%
6	Bradford	50.7%
7	Nottingham City	50.7%
8	Leicester City	51.6%
9	North East Lincolnshire	53.7%
10	Norfolk	53.8%
11	Thurrock	53.9%
12	Portsmouth	54.3%
13	Blackpool	54.3%
14	Kirklees	54.4%
15	Plymouth	54.5%
16	Croydon	54.6%
17	Wakefield	54.7%
18	Sandwell	54.7%
19	Leeds	54.7%
20	Coventry	54.7%

In 2015, 580 primary schools in England already had 85 per cent of pupils achieving Level 4b or higher in reading, writing and maths. With the exception of 2013, this number has been increasing each year since 2012.



**Figure 1.20: Number of schools with grouped percentages of pupils achieving Level 4b+ in reading, writing and maths, 2012-15**



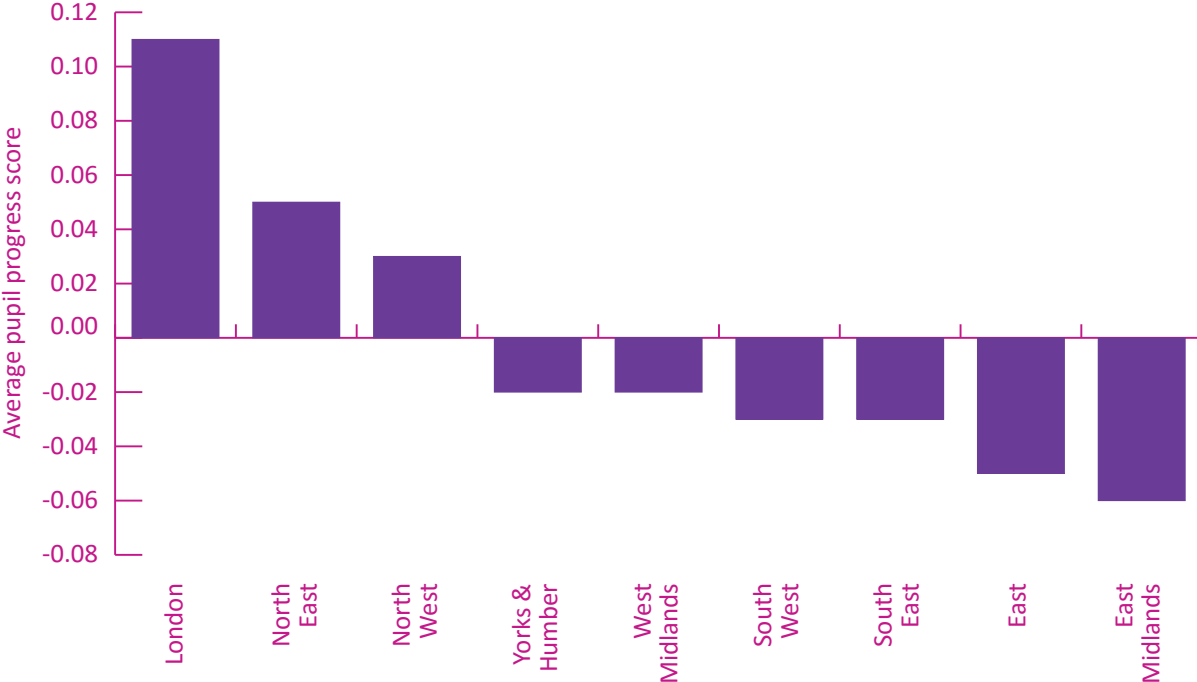
As explained above, writing is teacher assessed by whole levels and so we have had to estimate the proportion of pupils achieving the equivalent of a Level 4b or higher in writing. These estimates work well at national, regional and local authority level, but, due to the small cohorts involved, we could not confidently apply these estimates to individual schools. This report therefore lists the top 20 highest attaining primary schools according to the percentage of pupils achieving Level 5 or above in each of reading, writing and maths.

**Figure 1.21: Top 20 highest performing schools for Key Stage 2 attainment, 2015**

	<b>School name</b>	<b>Percentage of pupils achieving Level 5+ in reading, writing and maths</b>	<b>School type</b>	<b>Local authority</b>	<b>Region</b>
1	Fox Primary School	92.9%	Community School	Kensington and Chelsea	London
2	St Peter's Catholic Primary School	82.8%	Voluntary Aided	Greenwich	London
3	St Faith's C of E Primary School	82.6%	Voluntary Aided	Hampshire	South East
4	Great Tew County Primary School	81.8%	Community School	Oxfordshire	South East
5	Park Road Sale Primary School	81.3%	Academy Converter	Trafford	North West
6	Barnes Primary School	78.9%	Community School	Richmond upon Thames	London
7	Betley C of E VC Primary School	78.6%	Voluntary Controlled	Staffordshire	West Midlands
8	Combe C of E Primary School	77.8%	Voluntary Controlled	Oxfordshire	South East
9	Singleton C of E VA Primary School	76.5%	Voluntary Aided	Lancashire	North West
10	Newton Ferrers C of E Primary School	73.7%	Academy Converter	Devon	South West
11	Helmdon Primary School	73.7%	Community School	Northamptonshire	East Midlands
12	Ethelbert Road Primary School	73.3%	Community School	Kent	South East
13	Stoke Row C of E School	72.7%	Voluntary Aided	Oxfordshire	South East
14	St Therese of Lisieux Primary School	72.4%	Voluntary Aided	Stockton on Tees	North East
15	St Oswald's C of E Aided Primary School	72.2%	Voluntary Aided	Cheshire West and Chester	North West
16	Freckleton Strike Lane Primary School	72.0%	Community School	Lancashire	North West
17	Tyntesfield Primary School	72.0%	Community School	Trafford	North West
18	Ide Hill C of E Primary School	71.4%	Voluntary Aided	Kent	South East
19	Chalfont Valley E-ACT Primary Academy	71.4%	Academy Sponsor (E-ACT)	Buckinghamshire	South East
20	St Joseph's RC Primary School	70.9%	Voluntary Aided	Brent	London

As at Key Stage 4, there is also considerable variation between regions in progress made by pupils between Key Stage 1 and Key Stage 2.<sup>29</sup> Although London outperforms all other regions on pupil progress at both primary and secondary level, the North East and North West both perform above the national average in terms of pupil progress from Key Stage 1 to Key Stage 2, whereas these regions fall below the national average on Progress 8 at secondary school. Conversely, the South East and East both have Progress 8 scores which are above the national average at secondary level, but fall below the national average for pupil progress at primary school. The East Midlands performs particularly poorly on pupil progress measures at both Key Stage 2 and Key Stage 4.

**Figure 1.22: Average pupil progress Key Stage 1 to Key Stage 2 across English regions, 2015**



In line with the strong performance of London at a regional level, eighteen of the top 20 local authorities measured by pupil progress from Key Stage 1 to Key Stage 2 are located in London. None of the 20 local authorities which perform most poorly on this measure are found in London. As well as being the fourth poorest performing authority on attainment, Poole has the lowest average progress at Key Stage 2.

<sup>29</sup> Progress made by pupils between Key Stage 1 and Key Stage 2 has been measured in this report by averaging pupils' value-added scores. These averages have been obtained by first calculating average national curriculum level across Reading, Writing and Maths for each pupil. This is compared to the average attainment of all pupils nationally with the same Key Stage 1 attainment. The difference (residual) is then calculated for each pupil. Finally, the residuals are averaged in order to produce a progress score.

**Figure 1.23: Top 20 highest performing local authorities for Key Stage 2 progress, 2015**

	<b>Local authority</b>	<b>Average progress score</b>
1	Kensington and Chelsea	0.24
2	Redcar and Cleveland	0.21
3	Greenwich	0.20
4	Camden	0.19
5	Lambeth	0.18
6	Newham	0.17
7	Westminster	0.16
8	Waltham Forest	0.15
9	Islington	0.15
10	Southwark	0.15
11	Lewisham	0.14
12	Hounslow	0.13
13	Haringey	0.13
14	Harrow	0.13
15	Brent	0.12
16	Wandsworth	0.12
17	Richmond upon Thames	0.11
18	Tower Hamlets	0.11
19	Manchester	0.11
20	Hammersmith and Fulham	0.11

**Figure 1.24: 20 lowest performing local authorities for Key Stage 2 progress, 2015**

	<b>Local authority</b>	<b>Average progress score</b>
1	Poole	-0.20
2	Isle of Wight	-0.16
3	Central Bedfordshire	-0.15
4	Dorset	-0.13
5	Suffolk	-0.11
6	Worcestershire	-0.11
7	Rutland	-0.11
8	Northamptonshire	-0.10
9	Kirklees	-0.10
10	West Sussex	-0.10
11	Leicestershire	-0.10
12	Doncaster	-0.10
13	Bedford Borough	-0.09
14	Luton	-0.09
15	Walsall	-0.09
16	Norfolk	-0.08
17	Portsmouth	-0.08
18	Bath and North East Somerset	-0.08
19	West Berkshire	-0.07
20	Solihull	-0.07

Finally, the top 20 highest performing school in England at Key Stage 2, as measured by average pupil progress between Key Stage 1 and Key Stage 2, are listed below.

**Figure 1.25: Top 20 highest performing schools for Key Stage 2 progress, 2015**

	<b>School name</b>	<b>Progress score</b>	<b>School type</b>	<b>Local authority</b>	<b>Region</b>
1	Evelyn Street Community Primary School	0.86	Community School	Warrington	North West
2	Whitefriars School	0.83	Academy Converter	Harrow	London
3	Edward Pauling Primary School	0.77	Community School	Hounslow	London
4	Lower Kersal Community Primary School	0.74	Community School	Salford	North West
5	St Patrick's Catholic Primary School	0.74	Voluntary Aided	Wigan	North West
6	St Antony's RC Primary School	0.73	Voluntary Aided	Newham	London
7	Webster Primary School	0.73	Academy Converter	Manchester	North West
8	St Mary's RC Primary School	0.73	Academy Converter	Redcar and Cleveland	North East
9	Holden Lane Primary School	0.71	Community School	Stoke-on-Trent	West Midlands
10	Crowland Primary School	0.71	Community School	Haringey	London
11	West Cornforth Primary School	0.69	Community School	Durham	North East
12	St Joseph's RC Primary School	0.69	Voluntary Aided	Brent	London
13	Totley Primary School	0.69	Academy Converter	Sheffield	Yorkshire and the Humber
14	St Joseph's Catholic Primary School, Withnell	0.69	Voluntary Aided	Lancashire	North West
15	John Donne Primary School	0.67	Academy Converter	Southwark	London
16	Well Lane Primary School	0.67	Community School	Wirral	North West
17	St John Vianney RC Primary School	0.65	Voluntary Aided	Hartlepool	North East
18	Ernesettle Community School	0.65	Community School	Plymouth	South West
19	Roman Road Primary School	0.64	Community School	Gateshead	North East
20	Holy Trinity C of E Dobcross Primary School	0.64	Voluntary Controlled	Oldham	North West

## Early Years performance

Measure	National 2020 Proposed Benchmark	National 2015 Results
Percentage of children achieving a 'good' level of development.	90 per cent	67.2 per cent

### Proposed benchmark for 2020

#### Early Years attainment as basis for Key Stage 2 attainment

The Early Years proposed benchmark has been set according to evidence that attainment of a good level of development in the EYFSP is a suitable basis for subsequent attainment of Level 4b+ across reading, writing and maths at Key Stage 2. In 2015, 77 per cent of children who had previously achieved a good level of development at age 5 went on to attain Level 4b+ in reading, writing and maths at Key Stage 2, as opposed to only 44 per cent who had not reached the good threshold at age 5.<sup>30</sup>

#### Early Years reforms

The Early Years Foundation Stage Profile was introduced in 2012-13, replacing the Foundation Stage Profile. The FFT have developed a methodology which enables EYFSP scores to be converted into a total FSP score and allows for comparison of attainment under the two systems of assessment.

The EYFSP will no longer be compulsory from September 2016. The new reception baseline assessment is currently being implemented. Although a non-statutory measure, it is intended to provide a basis from which pupil progress can be measured across the primary years; any school which chooses not to use it will not have a progress measure from 2023 and will be assessed solely on attainment. Whilst there is therefore a high incentive for schools to opt into the reception baseline assessment, it will serve as a school accountability measure and not as a national dataset that can be used to track trends over time. CentreForum will therefore review the best way of continuing to measure attainment in the Early Years as the full impact of these changes becomes clearer.

#### Setting the 2020 Goal

CentreForum's proposed benchmark for the Early Years is that 90 per cent of pupils should achieve the equivalent of a good level of development in the Early Years Foundation Stage Profile by 2020. If current trends continue at the same rate, then 94 per cent of children can be expected to achieve a good level of development by 2019. CentreForum's benchmark for 2020 has been set with the expectation that the proportion of children achieving a good level of development will taper off as it nears 100 per cent.

### Current performance

**In 2015, 67.2 per cent of pupils achieved a good level of development in the Early Years Foundation Stage Profile.** This represents a considerable increase from 62.1 per cent in 2014.<sup>31</sup>

According to current trends, 94 per cent of children should achieve a good level of development in the EYFSP by 2019.<sup>32</sup> Therefore CentreForum's more cautious proposed benchmark of 90 per cent of children reaching this threshold by 2020 is on course to be met.

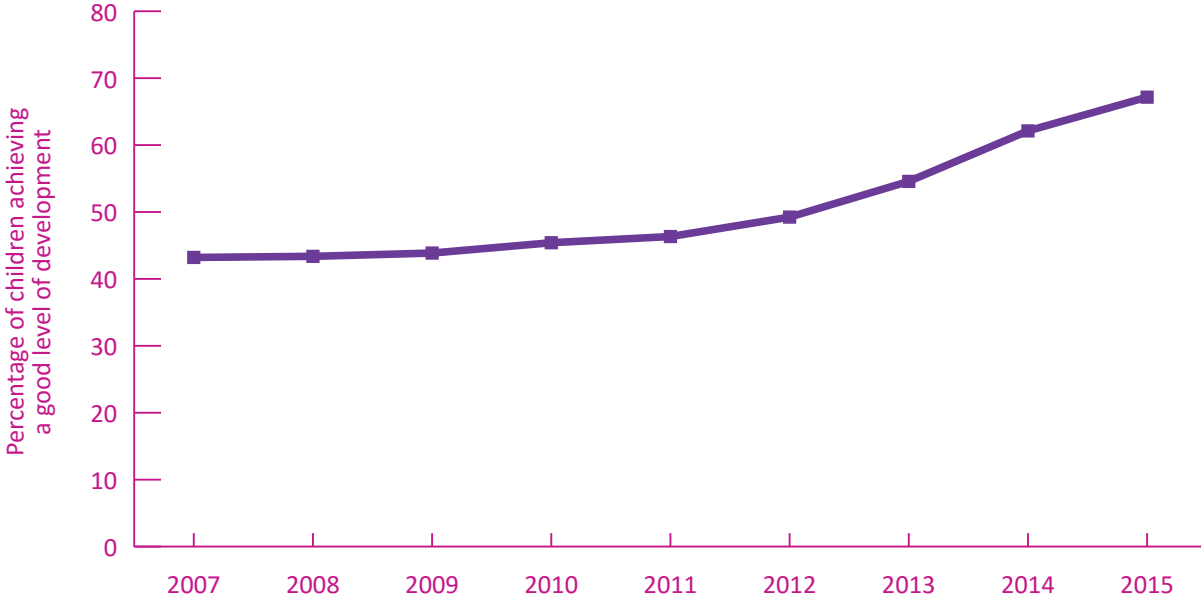
30 N. Perera, M. Treadaway and R. Johnes, 'Education in England: progress and goals', CentreForum, January 2016, pp.22, 24.

31 These figures differ from those published by the Department for Education, which states that the proportion of children who achieved a good level of development in the EYFSP was 66.3 per cent in 2015 and 60.4 per cent in 2014. This is because the Department for Education includes all English providers of state-funded early years education, whereas this report includes only mainstream settings; it excludes special schools and alternative provision. For the Department for Education's analysis of EYFSP results, see: Department for Education, 'Early years foundation stage profile results in England, 2015', October 2015.

32 N. Perera, M. Treadaway and R. Johnes, 'Education in England: progress and goals', CentreForum, January 2016, pp.20-24.

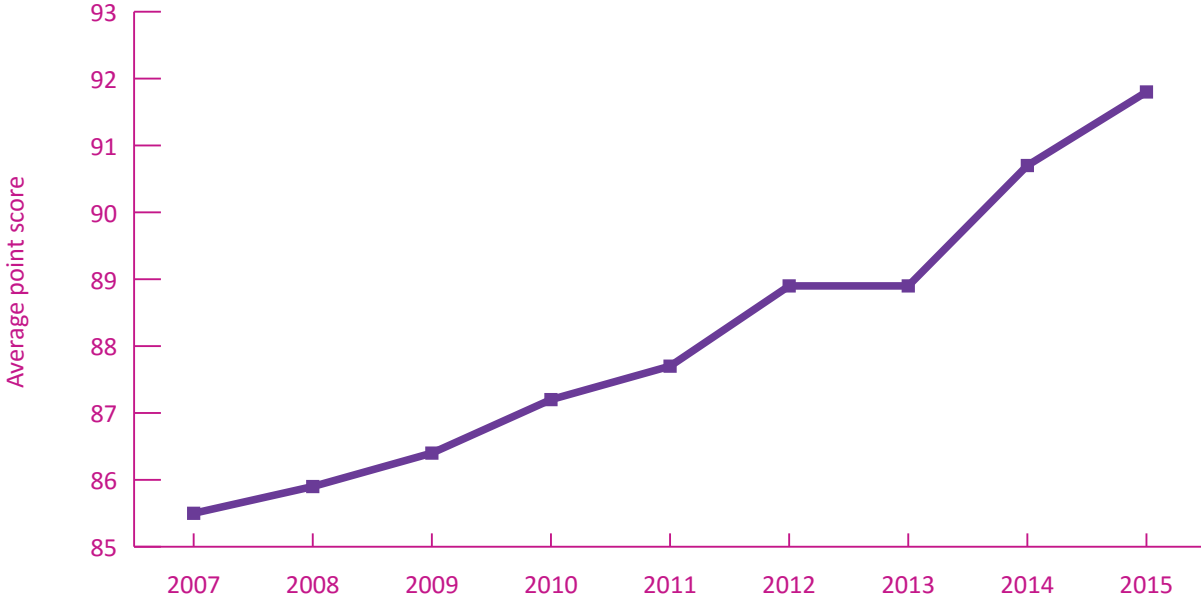
The proportion of children achieving a good level of development by age 5 has been rising since 2007. The speed of this increase has been accelerated since the replacement of the FSP with the EYFSP in 2012-13. This is partly because the EYFSP is less finely grained than the FSP, so that as children achieve a higher point score, the proportion of children increases faster (relative to the progression on the FSP).<sup>33</sup> Some of the post-2012 increase can also be attributed to the existing trend of a steady increase in the proportion of children achieving a good level of development even before the introduction of the EYFSP.

**Figure 1.26: Percentage of children achieving good level of development at age 5, 2007-15**



The national average point score in assessment at age 5 has also increased most years since 2007. Average point score remained static at 88.9 between 2012 and 2013; this is likely to be due to a redistribution of scores following the introduction of the EYFSP in 2012-13, which, as explained above, is much less finely grained than was the FSP.

**Figure 1.27: Average point score in assessment at age 5, 2007-15**

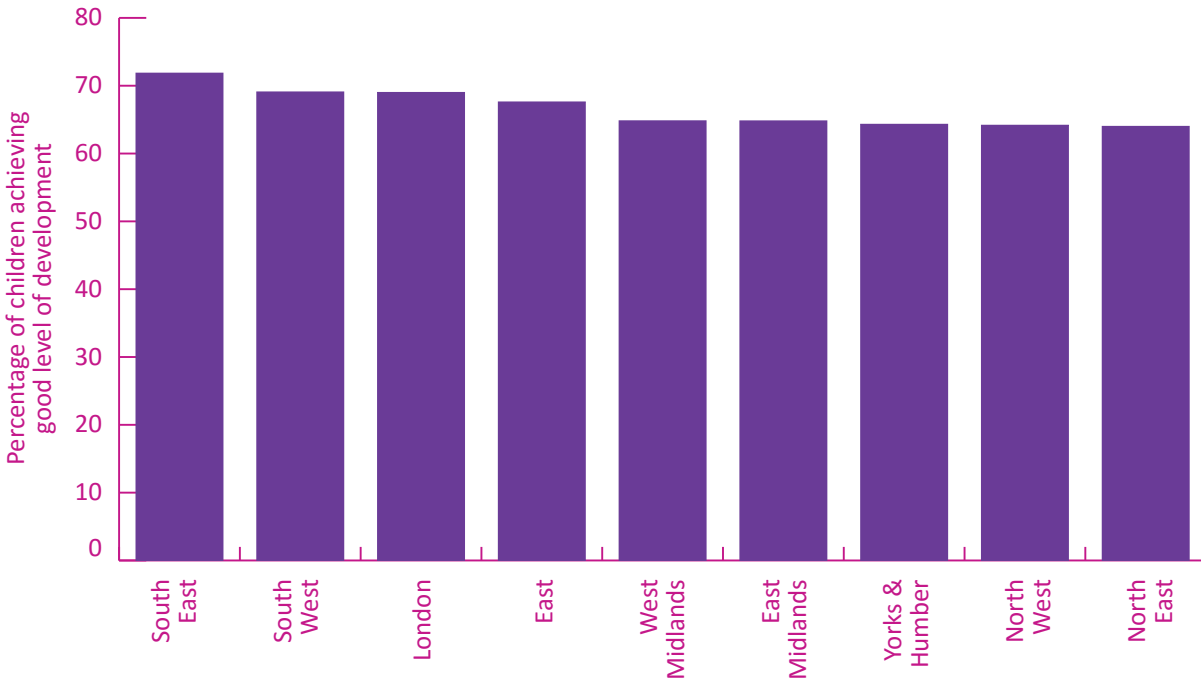


<sup>33</sup> The total number of points a child could score under the FSP was 117, as opposed to 51 under the EYFSP.

### Current regional performance

Across England, the proportion of children who achieved a good level of development at age 5 in 2015 ranges from 71.9 per cent in the South East to 64.0 per cent in the North East. In contrast to the attainment at Key Stage 2 and Key Stage 4, London is not the highest performing region, but, with 69.0 per cent of pupils reaching a good level of development 2015, it is still above the national average of 67.2 per cent. There is a clear North-South divide, with the highest performing regions located in the South and the lowest performing located in the North of England.

**Figure 1.28: Percentage of children achieving good level of development in EYFSP across English regions, 2015**



Of the 20 local authorities with the highest percentages of pupils achieving a good level of development in the EYFSP in 2015, eighteen are located in London, the South West, South East and East of England.

**Figure 1.29: Top 20 highest performing local authorities for Early Years attainment, 2015<sup>34</sup>**

	Local authority	Percentage of pupils achieving good level of development in EYFSP
1	Bexley	78.2%
2	Rutland	77.4%
3	Lewisham	77.3%
4	East Sussex	76.8%
5	Greenwich	76.6%
6	Trafford	76.3%
7	Bournemouth	76.3%

<sup>34</sup> The Isles of Scilly and City of London have been excluded from this table as they contain only one and three schools respectively.



8	South Gloucestershire	75.7%
9	Surrey	75.5%
10	Windsor and Maidenhead	75.4%
11	Kent	75.4%
12	Richmond upon Thames	74.8%
13	Bromley	74.4%
14	North Somerset	74.1%
15	Southend	73.9%
16	Hampshire	73.9%
17	Wokingham	73.7%
18	Kingston upon Thames	73.7%
19	West Berkshire	73.4%
20	Bracknell Forest	73.1%

None of the 20 local authorities with the lowest proportions of 5-year-olds reaching a good level of development in the EYFSP are located south of the Midlands. The North West performs particularly poorly, with nine of the 20 local authorities located in this region.

**Figure 1.30: 20 lowest performing local authorities for Early Years attainment, 2015**

	<b>Local authority</b>	<b>Percentage of pupils achieving good level of development in EYFSP</b>
1	Leicester City	49.1%
2	Halton	52.7%
3	Oldham	55.4%
4	Sandwell	55.5%
5	Rochdale	55.6%
6	Nottingham City	57.2%
7	Blackburn	57.5%
8	Tameside	57.6%
9	Middlesbrough	58.0%
10	City of Kingston-Upon-Hull	58.0%
11	Walsall	58.6%
12	Liverpool	58.7%
13	Salford	59.7%
14	Bolton	59.9%
15	Manchester	60.0%
16	Bradford	60.3%
17	City of Derby	60.4%
18	Wolverhampton	60.4%
19	Stockton on Tees	60.5%
20	Stoke-on-Trent	60.6%

## Conclusion

Assessing educational performance against CentreForum's proposed benchmarks for world-class standards indicates that attainment is improving nationally at Key Stage 4, Key Stage 2 and in the Early Years on our measures. However, it is only in the Early Years that the country is on course to meet CentreForum's ambitious benchmark. The rate of improvement must be increased at both Key Stage 2 and Key Stage 4 if the benchmarks at these levels are to be achieved.

Regionally, London is leading the way on both attainment and progress measures at Key Stage 2 and Key Stage 4. It also performs above the national average for attainment in the Early Years. There is a North-South divide for attainment and progress at Key Stage 4 and for attainment in the Early Years, with the Southern regions performing better than the North and Midlands on these measures according to regional and local authority rankings. The picture is more mixed at Key Stage 2 for both attainment and particularly for progress.

## Chapter 2: Closing the disadvantage gap

The outcomes for disadvantaged<sup>35</sup> pupils, when compared with their peers, remain significantly lower on every measure. In this chapter we find that as a typical disadvantaged pupil progresses through school, he or she falls further behind non-disadvantaged pupils. However, the good news is that the size of these gaps is falling over time.

While primary schools (in particular during Key Stage 2) have had some success in slowing down the growth of the progress gap, over half of the gap that we see at the end of primary is inherited from the Early Years.

During secondary, the gap is much wider with the result that, in 2015, disadvantaged pupils were just over 19 months, on average, behind their peers by the end of Key Stage 4.

Proportionally, the overall gap in attainment is closing more quickly in primary than in secondary and we find that it has done so at a faster rate since 2011, when the Pupil Premium was introduced, compared with the five years prior. The pattern for secondary schools is not as clear-cut. The rate at which the gap has closed has been slightly slower post 2011, but for the most persistently disadvantaged secondary pupils, the gap continues to widen, albeit at a slower rate than it did between 2007 and 2011.

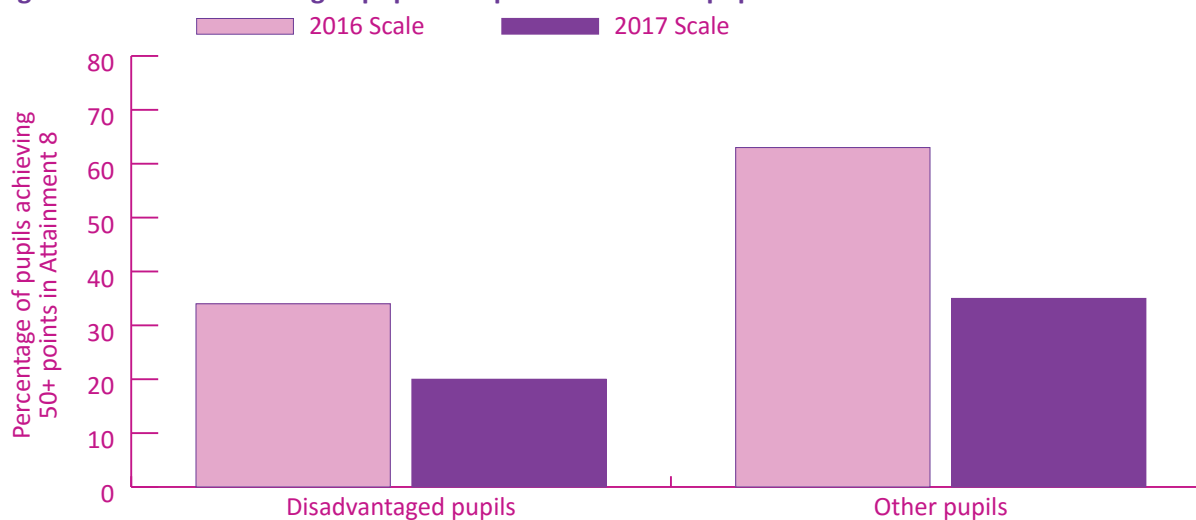
There are also wide regional variations in the gap. In the Early Years, the gap between disadvantaged pupils and the rest in London is 2.7 months. In the North East it is 5.1 months. This means that after only one academic year (at most) of school, the gap between poor children and the rest is twice as large in the North East than it is in London.

### The performance of disadvantaged pupils against our secondary and primary benchmarks

Our analysis shows that **only 20 per cent of disadvantaged pupils are currently meeting our proposed secondary benchmark**. This compares with 45 per cent of non-disadvantaged secondary pupils.

That means that only around one in five disadvantaged pupils is expected to reach our definition for a good standard of achievement against the new GCSE expectations, based on current levels of achievement. There are 569 schools in which more than 90 per cent of disadvantaged pupils fail to achieve 50 points.<sup>36</sup>

Figure 2.1: Disadvantaged pupils compared with other pupils: Attainment 8 Benchmark

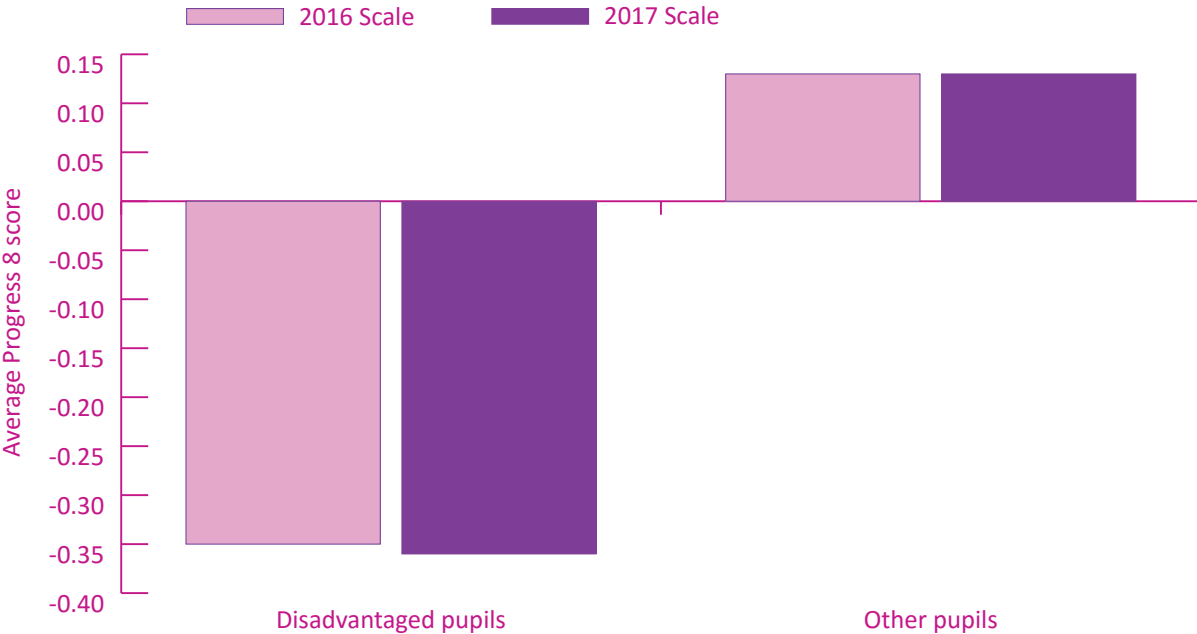


35 We define disadvantaged pupils as those who are eligible for the Pupil Premium, i.e. those who have been eligible for Free School Meals during in at least one of the last six years.

36 Including selective and non-selective schools where there are at least 10 disadvantaged or non-disadvantaged pupils.

Disadvantaged pupils also make significantly less progress than their peers within the secondary phase. They scored on average -0.36 Progress 8 points compared with 0.13 points for non-disadvantaged pupils in 2015. This means that compared with other pupils with similar Key Stage 2 test scores, disadvantaged pupils made almost half a grade less progress on average during secondary school.

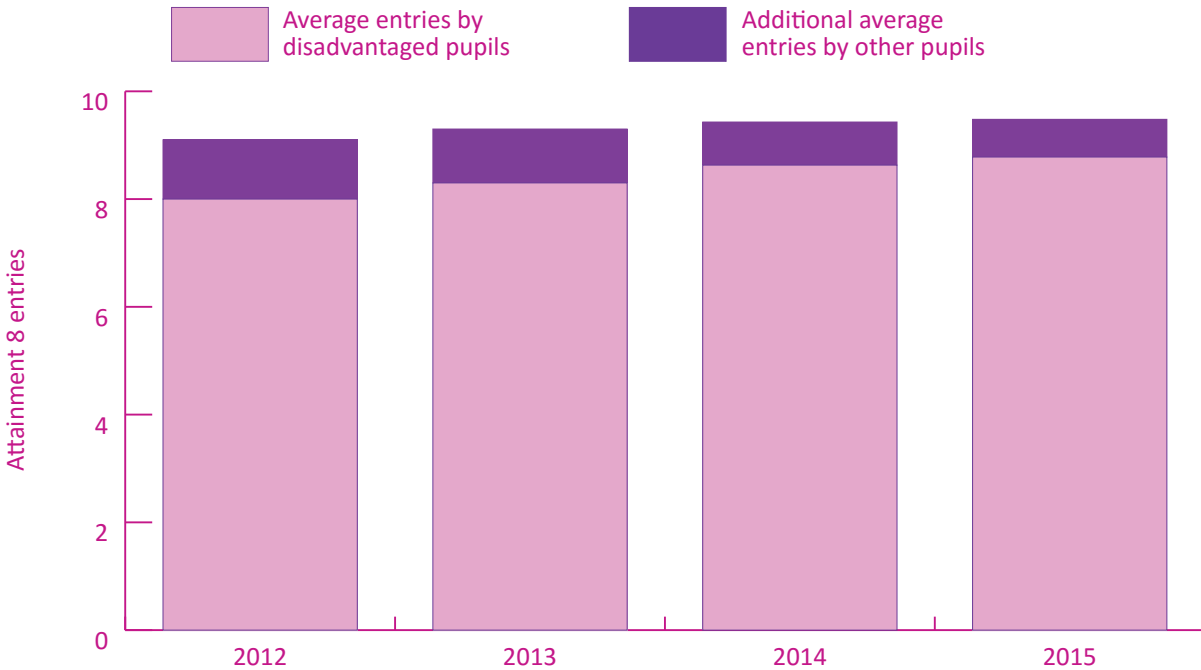
**Figure 2.2: Key Stage 4 disadvantaged pupils compared with others: Progress 8 scores**



Part of the gap in Progress 8 scores can be explained by differences in GCSE and equivalent entry patterns and in the number of Attainment 8 subject slots that are “filled”, enabling the highest Progress 8 scores to be achieved. However, the entry gap is a fairly minor component of the total progress gap for disadvantaged pupils, and one which is getting smaller because the gap in entries between disadvantaged pupils and their peers is narrowing over time. Schools have increased Attainment 8 entries for both disadvantaged pupils and others since 2012, and the gap in the number of these entries has reduced from 1.1 in 2012 to 0.7 of a GCSE by 2015.

In fact, if we assume that the average number of Progress 8 entries will catch up with current levels for non-disadvantaged pupils, and that this will not result in lower average grades for disadvantaged pupils, the progress gap might only reduce from 0.49 to around 0.45 of a grade per subject. On a longer-term assumption that disadvantaged pupils will eventually, on average, enter all ten Progress 8 slots without reducing their average grade, the effect on the progress gap as a result (without any additional improvements in attainment), would be to reduce to around 0.42 of a grade.

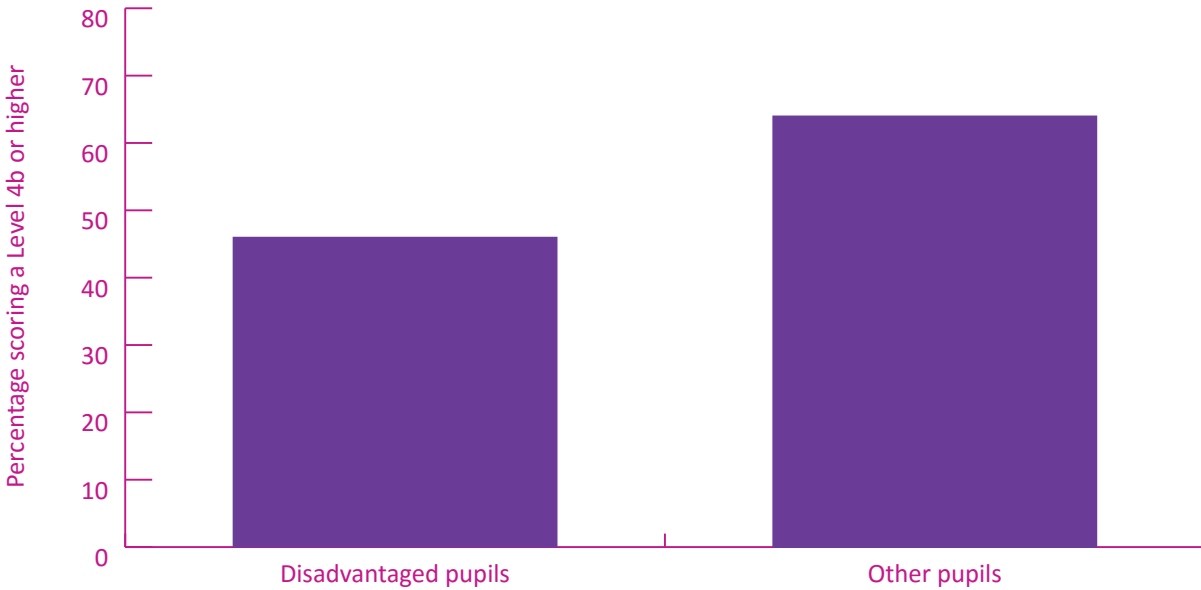
**Figure 2.3: The gap in Progress 8 entries between disadvantaged pupils and others**



On leaving primary school, there was a gap of almost 20 percentage points between the proportion of disadvantaged pupils achieving our proposed benchmark in 2015 (46 per cent reached Level 4b compared with 64 per cent of other pupils).

This means that in a class of 30 non-disadvantaged pupils, 19 would achieve our standard on average, whereas in a class of 30 disadvantaged pupils, only 14 would reach this standard.

**Figure 2.4: Key Stage 2 disadvantaged pupils compared with others: Level 4b+ benchmark**



### Setting benchmarks for closing the gap

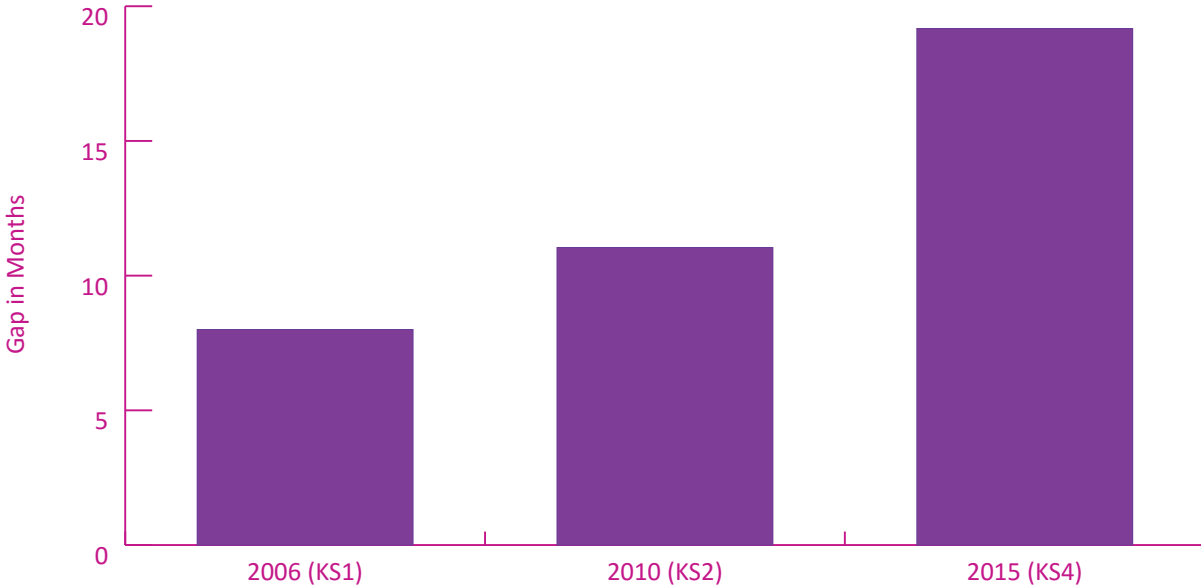
In January, CentreForum and Education DataLab introduced a new way of measuring the gap between disadvantaged pupils and the rest which allows us to track whether the gap is narrowing or widening over time. First, we look at the relative position of pupils within the national distribution each year based on scaled scores<sup>37</sup> at each Key Stage, and compare the average position of disadvantaged pupils with the average position of non-disadvantaged pupils.

Second, this gap in scaled scores is converted into months of development.<sup>38</sup> This enables us to assess the size of the gap at each Key Stage on a comparable scale, and to discern whether the gap changes as a pupil progresses through school.

Using this method, we consider how wide the gap is when a pupil starts each Key Stage (the prior attainment gap) and how much it increases or decreases by the end of each Key Stage (the progress gap). The benchmarks that we have set are based on our judgement about how far the gap should close in overall attainment and in the progress made during each Key Stage.

As we see from Figure 2.5, the gap widens as a disadvantaged child progresses through school (i.e., he or she falls further behind non-disadvantaged children at every Key Stage). When the 2015 GCSE cohort began Key Stage 2 at age seven, disadvantaged pupils were around eight months behind their peers. Over the course of Key Stage 2, they fell behind by a further three months, and during secondary school they fell behind by another eight months. These additional components of the gap, represented by the difference between the sizes of the bars in Figure 2.5, are the progress gaps.

**Figure 2.5: Development of the 2015 GCSE cohort attainment gap during Key Stages 1-4**



As a challenging yet important first step, our proposed benchmark for success is to eliminate the progress gap for each Key Stage in education – so that disadvantaged pupils do not fall further behind their peers as they progress through school. This means that, by the time pupils sit their GCSEs in 2030, there should be no progress gap between the ages of 5 to 16.

37 The scaling process converts each raw attainment score into standard deviations measuring distance above or below the mean for each pupil’s attainment; the mean is then centred on a scaled score of 100. This standardises the scores so that they can be compared more easily over time and for different attainment measures. An alternative approach to standardisation is taken by the Department for Education in its Attainment Gap Index, which uses the rank order of pupils’ English and maths attainment to determine the gap between disadvantaged pupils and their peers in the form of a mean rank difference.

38 Dividing the national mean score for all pupils by their age in months gives the number of months equivalent to one scaled score point, and enables the score gap to be expressed in months of development.

This ambition, to prevent the gap from worsening as pupils get older, may sound modest in principle, but it involves schools working to compensate for the many advantages enjoyed by the children of more affluent parents during their school years, either exclusively, or to a much greater extent than is the case for disadvantaged children. Advantages such as private tuition, cultural and educational experiences and paid-for extra-curricular activities are clearly less affordable for disadvantaged families, and the depth of support with homework and learning outside of school that is provided by parents is necessarily influenced by their own level of education.

Eliminating the progress gap for pupils aged 5-16 means that by 2030, the overall attainment gap should be no greater than 4.1 months at each Key Stage. This requires the current gap at the end of primary to reduce by 5.5 months and the gap at the end of secondary school to reduce by 15.1 months.

The benchmarks we propose are phased in order to eliminate the age 5-11 progress gap (in Key Stage 2 attainment) by 2025, and then eliminate the full 5-16 progress gap (in GCSE attainment) by 2030. The benchmark of 4.1 months, representing no increase in the disadvantage gap after the primary reception year, is derived by estimating the age 5 attainment gap in 2019, as this year group will become the 2030 GCSE cohort. This 2019 estimation is based on current trends over time in the disadvantage gap for the Early Years Foundation Stage Profile.

**Figure 2.6: Benchmarks for closing the gap between disadvantaged pupils and the rest**

Measures	Proposed benchmarks	2015 Results
Gap between disadvantaged pupils and the rest in <b>overall attainment by the end of Key Stage 4</b> , measured according to months of development.	4.1 months by 2030	19.2 months
Gap between disadvantaged pupils and the rest in <b>overall attainment by the end of Key Stage 2</b> , measured according to months of development.	4.1 months by 2025	9.6 months
Gap between disadvantaged pupils and the rest in <b>progress made between ages 5 and 16</b> , measured according to months of development. <sup>39</sup>	0 months by 2030	

**Trends in the disadvantage gap**

The following figures present trends in the disadvantage gap, which has generally narrowed at each Key Stage in recent years (except for the last two years at Key Stage 4 where the national gap in 2015 was fractionally larger than in 2013).<sup>40</sup> Figure 2.7 provides an overview of trends for the total attainment gap in recent years.

39 National Early Years Foundation Stage Profile data do not date back far enough to calculate a total age 5-16 progress gap for the 2015 KS4 cohort.  
 40 The attainment gap time series presented here, and the subsequent progress gap analysis later in the chapter, have both been updated since our January report. The figures here differ from the previous ones because they only include pupils in mainstream state-funded schools, and do not include pupils in special schools.

**Figure 2.7: Changes in the attainment gap for disadvantaged pupils since 2007 (months)**

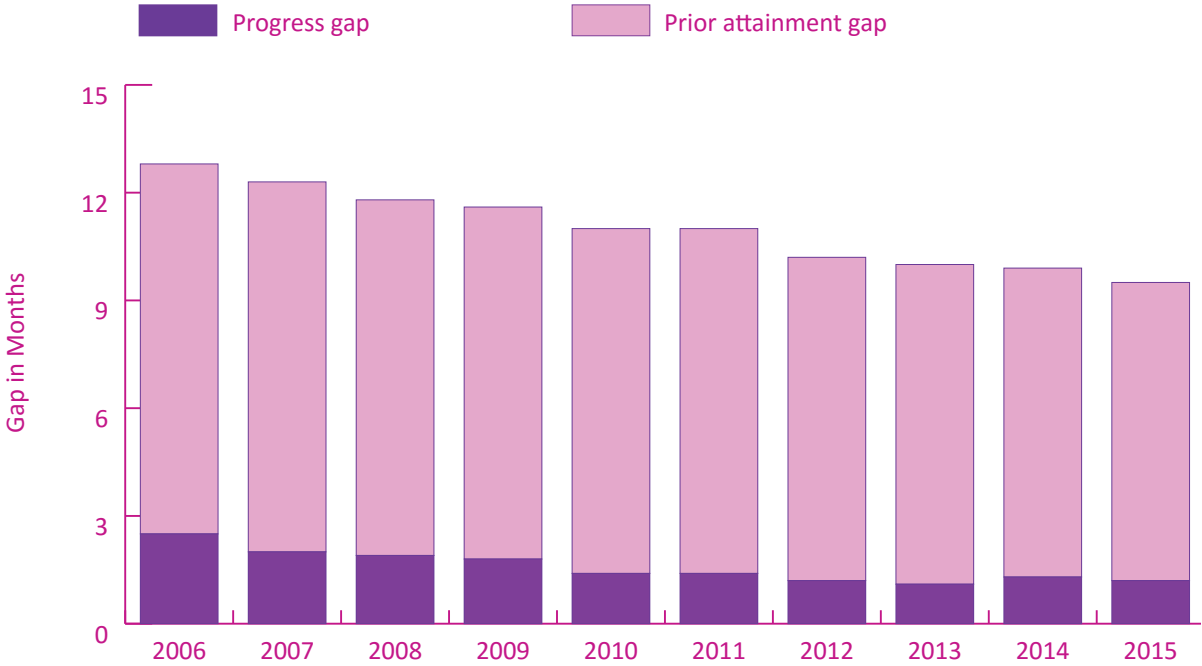
	Early Years	Key Stage 1	Key Stage 2	Key Stage 4
2007	5.5	8.0	12.3	21.9
2008	5.3	7.8	11.8	21.8
2009	5.2	7.6	11.5	21.7
2010	5.0	7.4	11.0	20.7
2011	4.9	7.2	11.1	20.2
2012	4.9	6.9	10.2	19.6
2013	4.7	6.8	10.0	19.0
2014	4.6	6.6	9.9	19.0
2015	4.3	6.2	9.6	19.2
2007-2015 gap change (months)	-1.2	-1.8	-2.7	-2.7
2007-2015 gap change (percentage)	-22%	-22%	-22%	-12%

**Primary gap trends**

In 2015, the gap between disadvantaged pupils and the rest at Key Stage 2 narrowed by 0.3 months compared with 2014. This was consistent with a trend for reductions in the overall attainment gap since 2006, which has seen the gap decrease by a total of 3.2 months since 2006, from 12.8 months to 9.6 months.

The progress component of the Key Stage 2 gap, which measures how much further behind their peers disadvantaged pupils have fallen between the ages of seven and eleven, has roughly halved from 2.5 months to 1.2 months over the same period. Over the last two years, however, primary schools have struggled to decrease the progress gap to below just over a month in size (although the progress gap at Key Stage 2 is smaller than at any other Key Stage, leaving less scope for improvement).

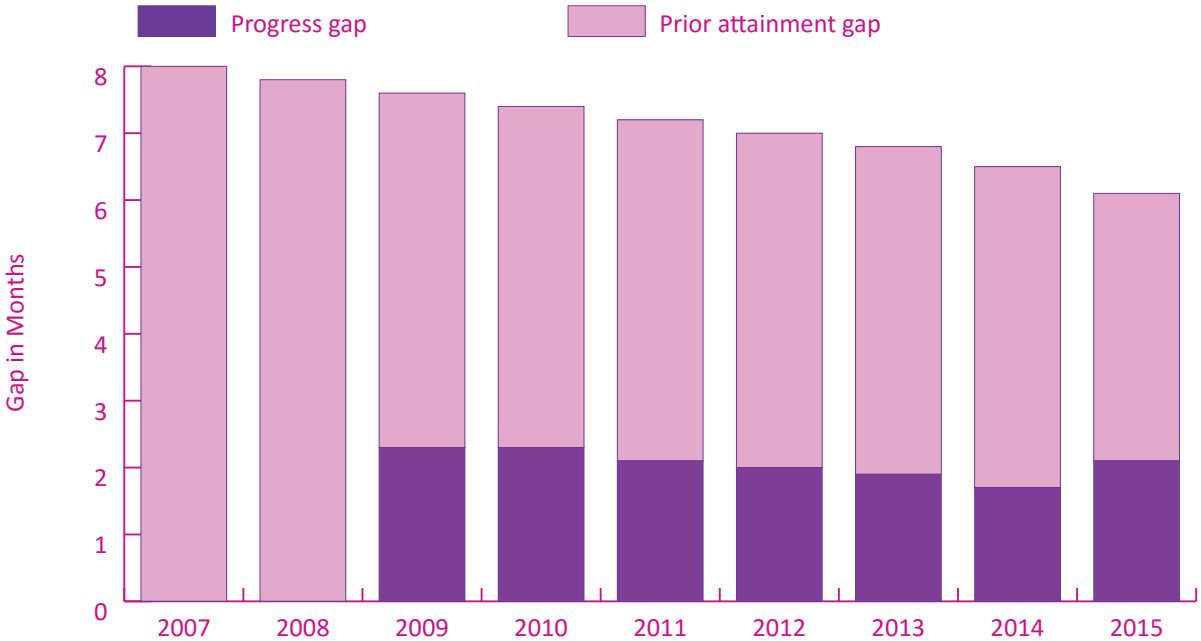
**Figure 2.8: Changes in the Key Stage 2 attainment and progress gaps since 2006**





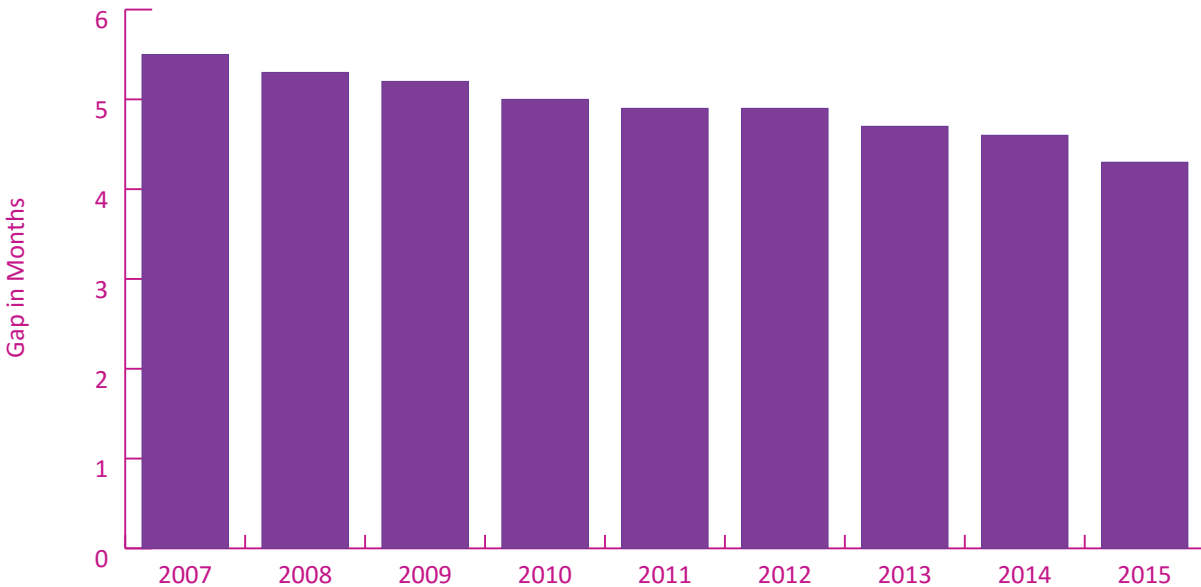
To understand the main driver of the gap that we see at the end of Key Stage 2, we looked at what happens earlier on in primary. Over the course of Key Stage 1, disadvantaged pupils fall around 2 months further behind other pupils, and this progress gap between ages five and seven has barely changed in size over the last seven years.<sup>41</sup> This two month gap generated during Key Stage 1 represents roughly one third of the Key Stage 2 gap, while over half is inherited from the Early Years.

**Figure 2.9: Changes in the Key Stage 1 attainment and progress gaps since 2007**



The gap at the end of the Early Years stood at just over four months in 2015, having decreased from five and a half months in 2007. However, this Early Years gap on entry to school remains the largest single component of the gap by the end of primary school and the second largest by the end of secondary school.

**Figure 2.10: Changes in the Early Years attainment gap since 2007**



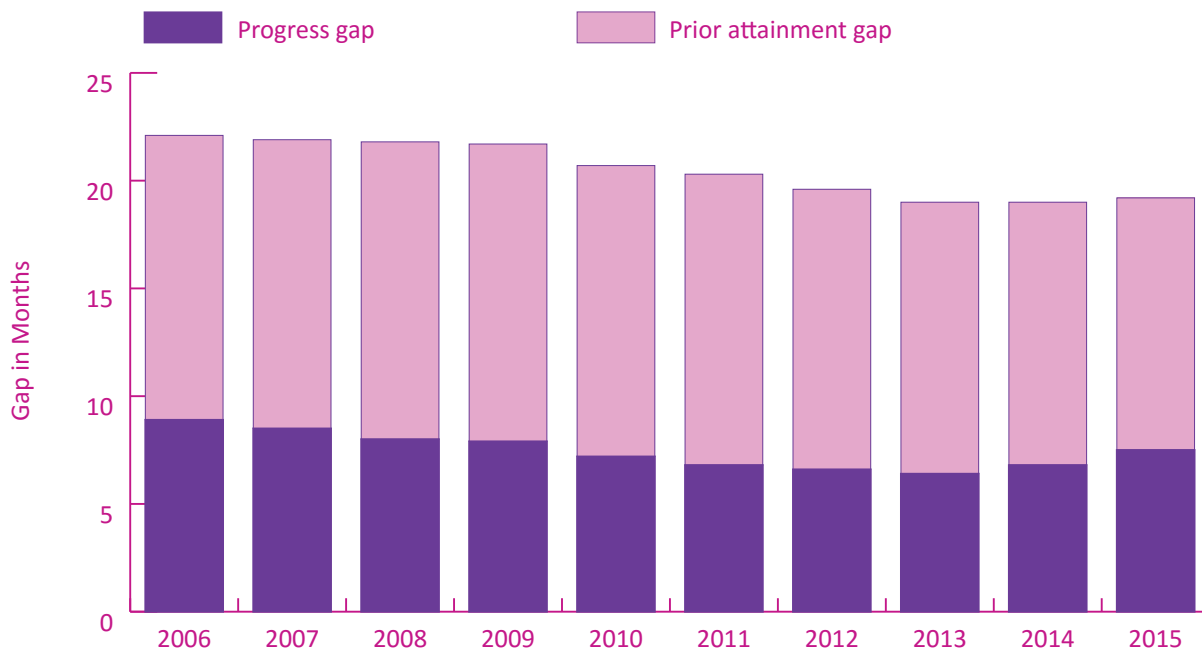
41 Early years data is not available to separate out attainment and progress gaps prior to 2009.

## Secondary gap trends

At Key Stage 4, the disadvantage gap actually widened slightly by 0.2 months in 2015 compared with 2014. This follows a consistent narrowing of the gap between 2006 and 2013, which saw it reduce by just over three months from 22.1 months in 2006 to 19.0 months in 2013. A number of factors including the change to counting first entries rather than best entries in 2014 mean that the last two years may turn out to be a short-term anomaly; further analysis in future years will be needed to understand this more clearly.

Between 2006 and 2013, the disadvantaged pupils continued to fall behind their peers over the course of secondary school but at a progressively slower rate. In 2006, disadvantaged pupils fell behind by 8.9 months over the course of secondary school but this had reduced to 6.4 months by 2013. However, in the last two years, the progress gap has increased, to 6.8 months in 2014 and 7.5 months in 2015.

**Figure 2.11: Changes in the Key Stage 4 attainment and progress gaps since 2006**



## Gap trends for more or less persistently deprived pupils

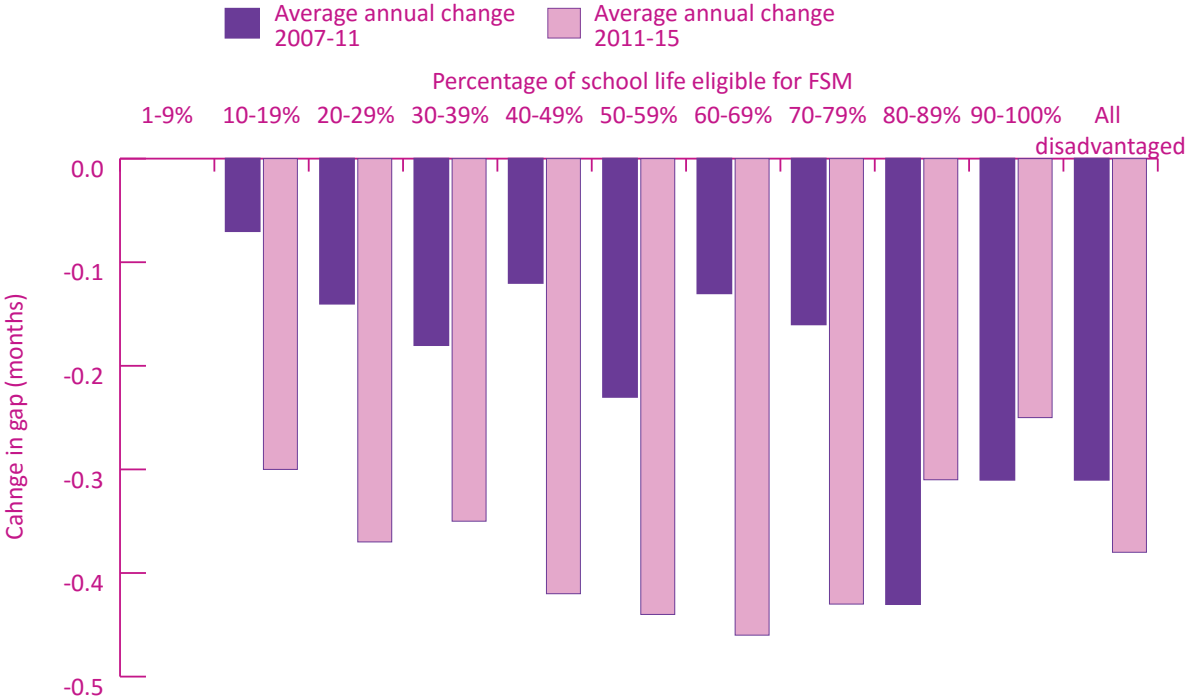
We wanted to determine whether things have improved more or less for the most acutely disadvantaged pupils, and whether this has changed over recent years. We have defined pupils as more or less disadvantaged according to the proportion of each pupil's school life for which they have been eligible for FSM.

To do this, disadvantaged pupils were separated into ten groups based on the proportion of school terms<sup>42</sup> in which they have been eligible for free school meals. The groups are those who had been eligible for FSM for 1-9 per cent, 10-19 per cent, 20-29 per cent, 30-39 per cent, 40-49 per cent, 50-59 per cent, 60-69 per cent, 70-79 per cent, 80-89 per cent or 90-100 per cent of their school lives up to the end of the relevant Key Stage.

**At Key Stage 2, while the total attainment gap for all disadvantaged pupils has narrowed more quickly in recent years (by 0.3 months per year for 2006-11 compared with 0.4 months per year for 2011-15), for the most acutely disadvantaged pupils, it has narrowed more slowly in recent years, by around 0.3 months per year.**

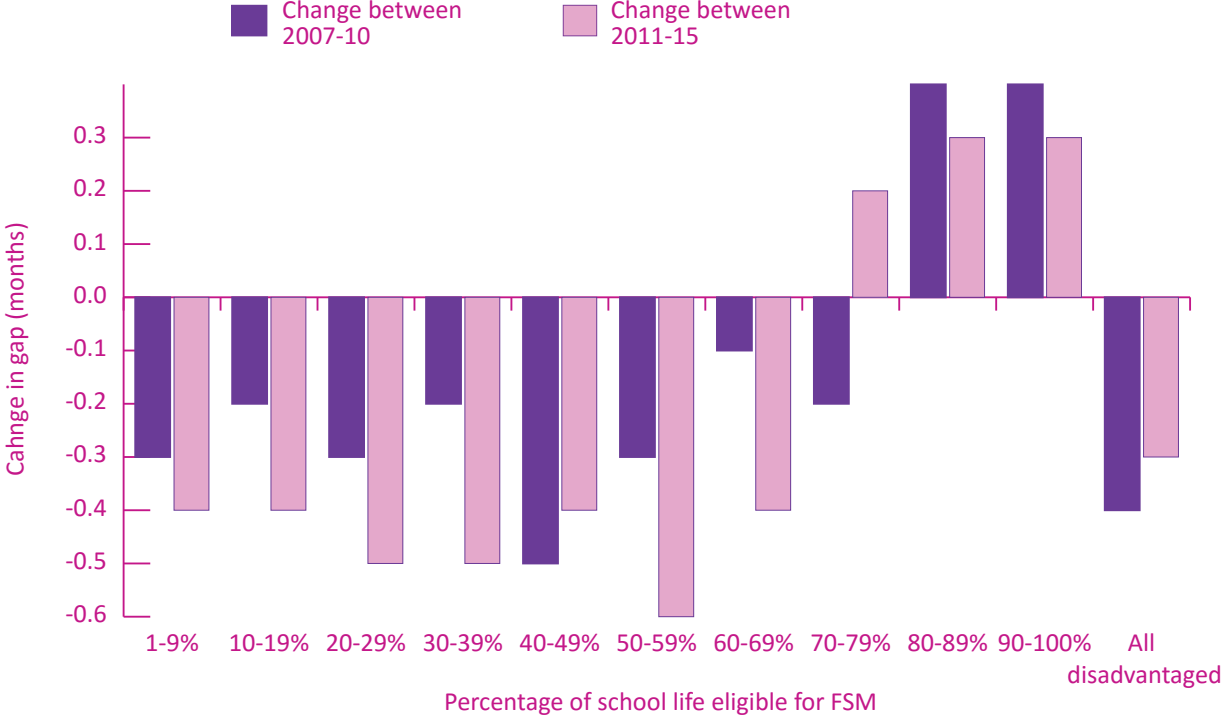
<sup>42</sup> FSM eligibility data were first collected on a termly basis in 2005/06; data for earlier years was annual rather than termly.

**Figure 2.12: Average yearly change in the Key Stage 2 gap by deprivation persistence**



For secondary pupils however, we found that the total attainment gap was slower to narrow during 2011-15 than during 2007-10 (by 0.3 months per year compared with 0.4 months per year). During both periods the gap actually widened for the most acutely disadvantaged pupils but, since 2011, it did so at a slightly slower rate (increasing by 0.3 months per year, down from 0.4 months per year).

**Figure 2.13: Average yearly change in the Key Stage 4 gap by deprivation persistence**



Our analysis highlights the long-standing difficulty in boosting or even maintaining the relative achievement of the most persistently disadvantaged pupils during secondary school. This has contributed to proportionally smaller reductions in the gap at Key Stage 4 than at Key Stage 2.

Since 2010-11, a number of policy changes have taken place that may have an impact on the size and trend of the gap. It is too early to say with any certainty whether interventions such as the Pupil Premium, large-scale academisation or preparations for the introduction of new floor-standards have had a discernible and consistent effect on the gap. It is important to consider the timescales over which we might expect to see improvements.

For example, although the Pupil Premium has been in place since 2011, children reaching the end of Key Stage 2 have not yet had the chance to benefit from it all the way through from Reception year, therefore the policy cannot be expected to have reached its full potential in primary schools, let alone in secondary schools.

The 2015 Key Stage 2 cohort of disadvantaged pupils will have benefited from the Pupil Premium for just over half of their schooling, with the first money received as they were nearing the end of year 2. Secondary pupils completing their GCSEs in 2015 will have benefited since year 8 at the earliest, amounting to only a third of their school lives. This means that it will take until at least 2018 for Key Stage 2 pupils to have received the maximum impact of Pupil Premium and until 2023 for this to reach Key Stage 4.

### Regional variations in the disadvantage gap

When we look at the gap between disadvantaged pupils and the rest in each region we see that, **at the end of the Reception year, the gap ranges from 2.7 months in London to 5.1 months in the North East**. Differences in the composition of school intakes across regions account for some but not all of the stark difference between London and the North East.

The proportion of pupils who have English as an additional language (EAL) in a given region is one factor contributing to regional variation in attainment gaps, and this is closely linked to the ethnic composition of the school population. This occurs because the breadth of the attainment distribution for a given group of pupils is linked to the breadth of the income and wealth distribution.

The income and wealth of white British families is spread across the full breadth of the national distribution, whereas for black and minority ethnic pupils and those with EAL, income and wealth are concentrated towards the lower and middle parts of the national distribution. The wider income scale for white British pupils is reflected in a correspondingly wider attainment distribution.

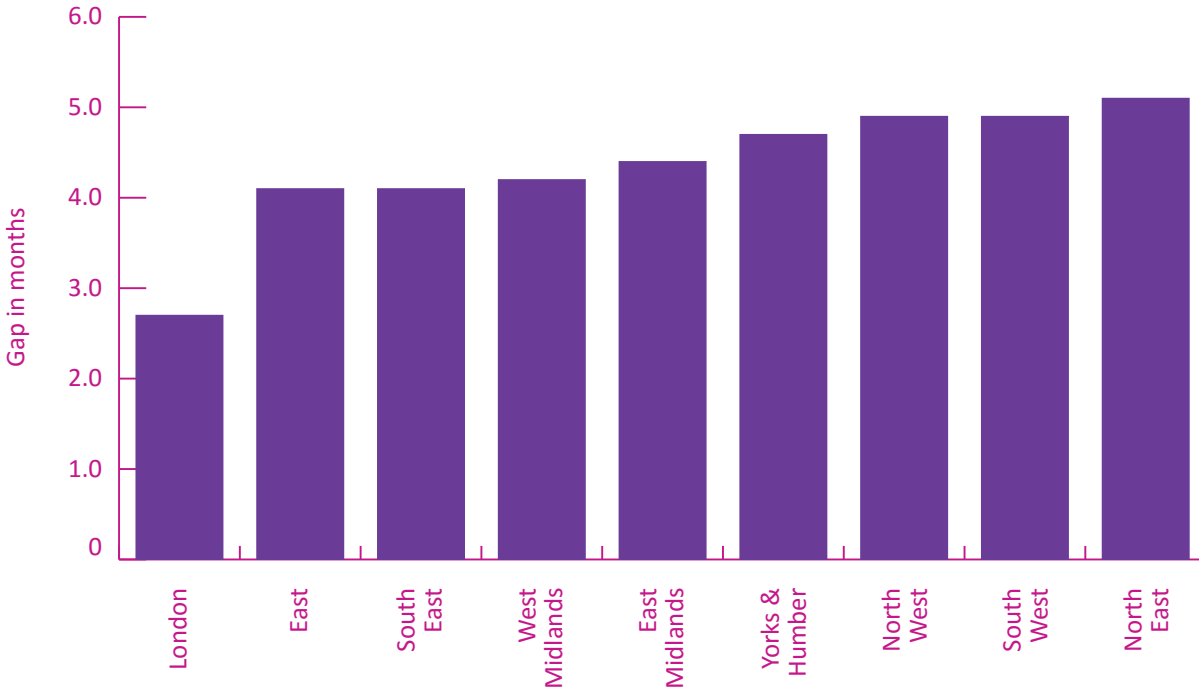
The binary nature of eligibility for free school meals and for the Pupil Premium, whereby a pupil either is or is not eligible, masks variations in how affluent a given non-disadvantaged pupil is likely to be. A typical non-disadvantaged pupil with black or minority ethnic heritage will be from a less affluent family than a typical white British non-disadvantaged pupil, and this is reflected in the levels of attainment, with smaller gaps for EAL and BME pupils and larger gaps for white British pupils.

The implication of smaller gaps for BME and EAL pupils is that smaller gaps are to be expected in London, and this partially explains the large difference between London and the North East at Reception age. In London around two fifths of children starting school have English as an additional language, compared with fewer than one tenth in the North East. This contributes towards the larger disadvantage gap in the North East.

Another contributory factor is the background level of attainment in different regions. Early Years attainment is generally higher than average in London, and particularly so for children who are disadvantaged and those with EAL. School starters in the North East have lower than average attainment for all children, especially the disadvantaged and those with EAL, leaving room for a larger gap between the highest and lowest attainers.<sup>43</sup>

<sup>43</sup> See SFR 36/2015: <https://www.gov.uk/government/statistics/early-years-foundation-stage-profile-results-2014-to-2015> additional tables by pupil characteristics tables 5 and 6.

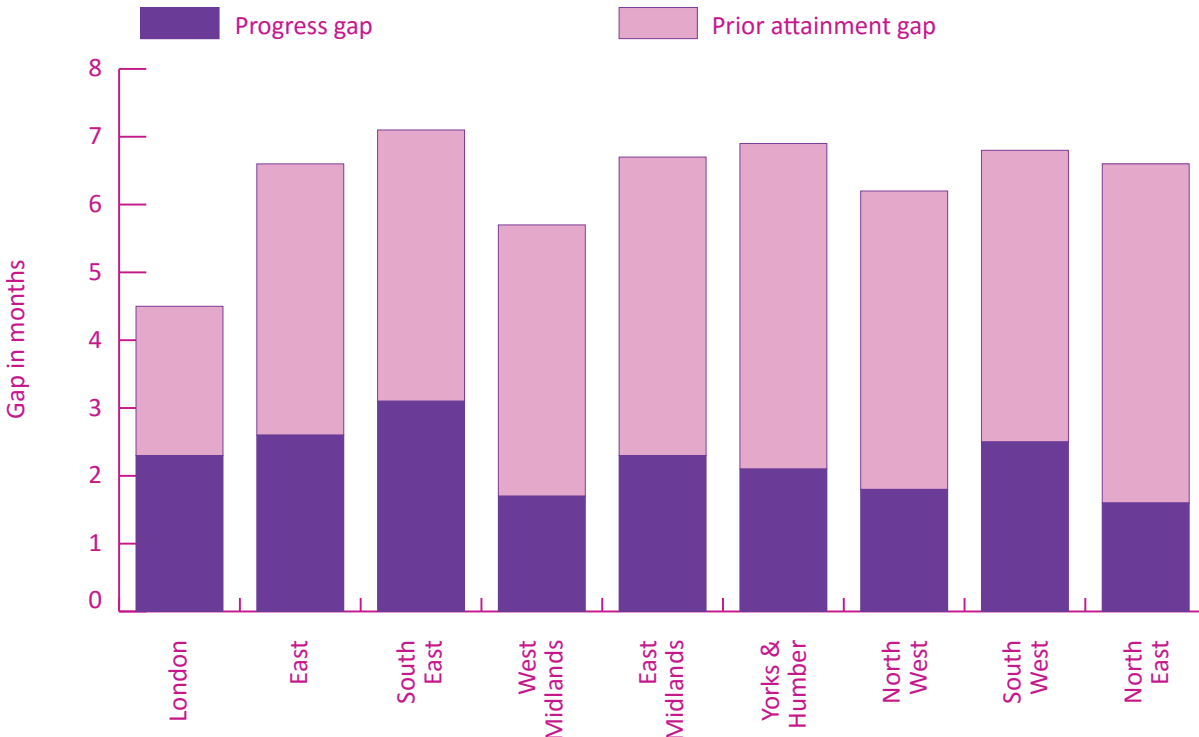
**Figure 2.14: Early Years gap differences by region 2015**



By the end of Key Stage 1, the gap has widened everywhere, but London still has the smallest gap at 4.5 months (of which 2.3 months are Key Stage 1 progress gap), and the South East now has the largest gap at 7.1 months (of which 3.1 months are Key Stage 1 progress gap).

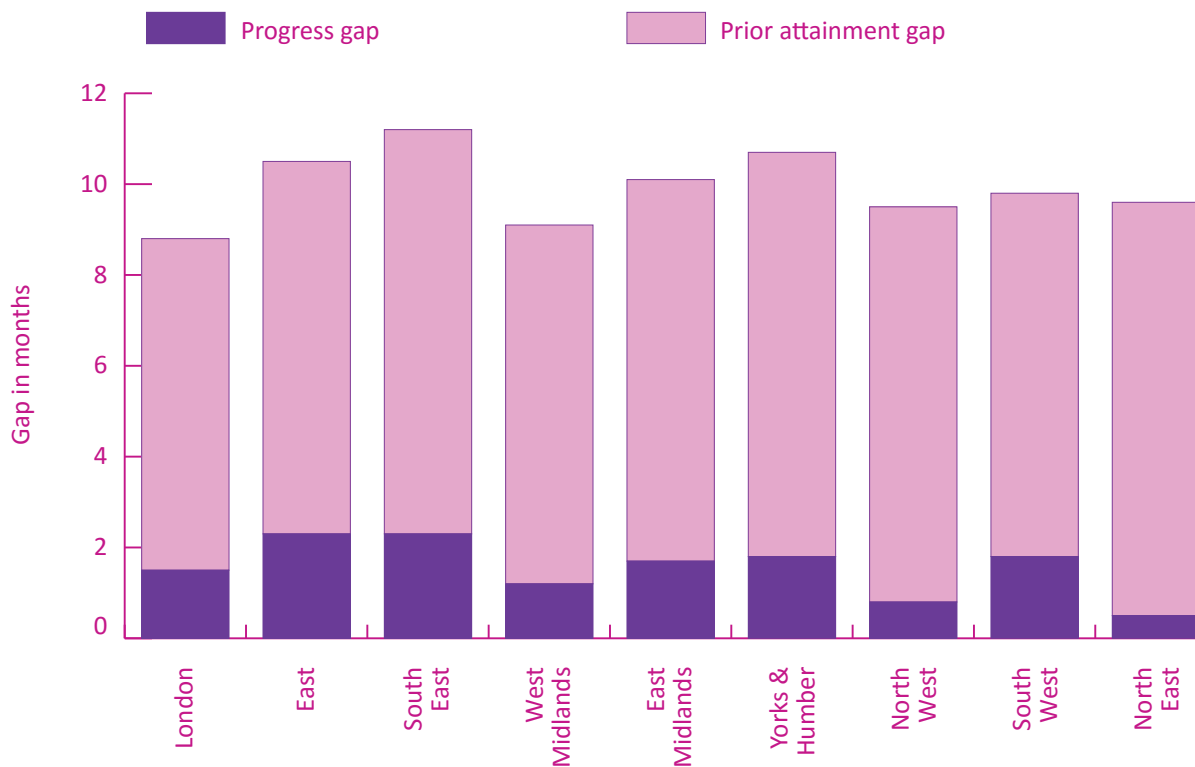
We can see that London’s smaller Key Stage 1 gap results from its advantage during the Early Years, and that the smallest gaps in progress during Key Stage 1 are in the North East, West Midlands and North West.

**Figure 2.15: Key Stage 1 gap differences by region 2015**



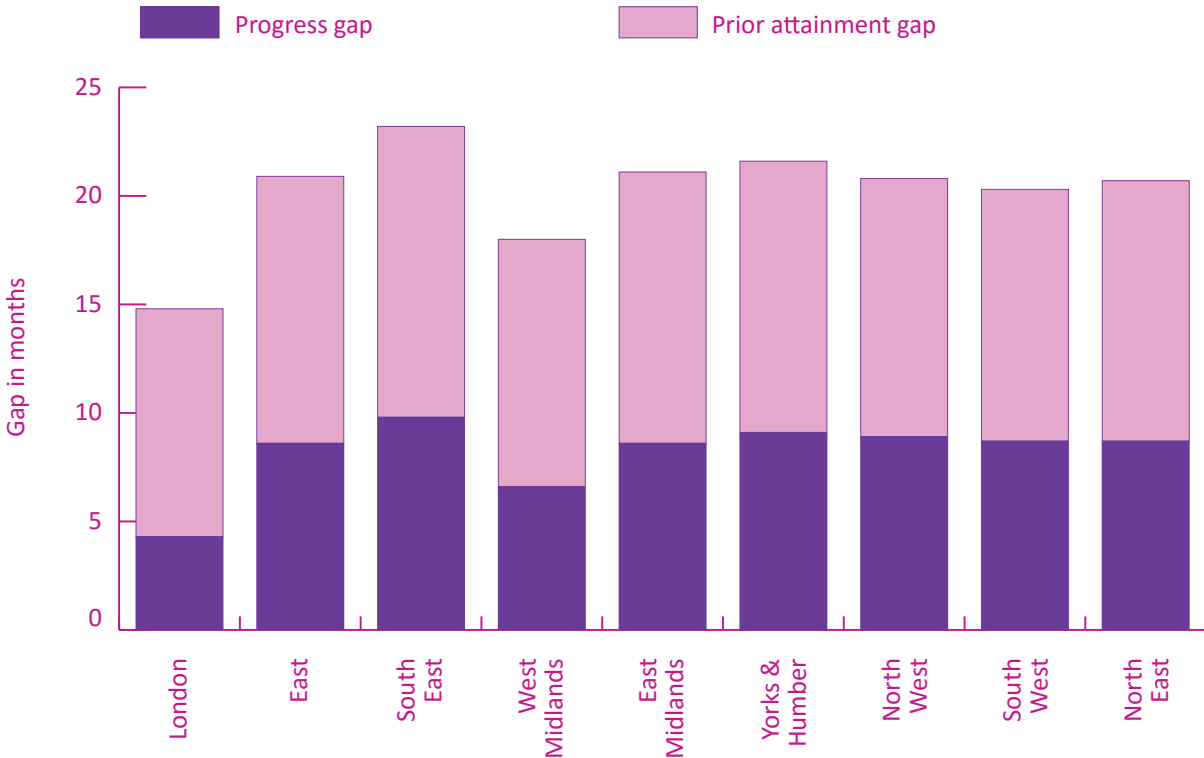
By the end of Key Stage 2, the gap is larger again in all regions, but the progress gaps at Key Stage 2 are smaller than those for Key Stage 1. London’s gap stands at 8.8 months (of which 1.1 months are Key Stage 2 progress gap) while the South East continues to have the largest gap at 11.1 months (of which 2.3 months are Key Stage 2 progress gap). Yorkshire and the Humber, the East of England and the East Midlands also have total attainment gaps in excess of ten months by this stage. Again, the smallest progress gaps are in the North East, the North West and the West Midlands.

**Figure 2.16: Key Stage 2 gap differences by region 2015**



Over the course of secondary school, the disadvantage gap grows again substantially in all regions. Disadvantaged pupils in London fall 4.3 months further behind non-disadvantaged pupils on average (out of a total attainment gap of 14.7 months). But the London Key Stage 4 progress gap is more than doubled just a few miles away in the South East, where our analysis shows that disadvantaged pupils fall nearly ten months further behind their peers on average (9.8 months Key Stage 4 progress gap out of a total attainment gap of 23.2 months). During the secondary phase, London has the smallest progress gap, followed by the West Midlands. The East of England and East Midlands follow some way behind.

Figure 2.17: Key Stage 4 gap differences by region 2015



All regions other than London and the East Midlands have total gaps of over twenty months by the time disadvantaged pupils sit their GCSEs. Looking at why the South East does so poorly, EAL may be part of the explanation, as was the case for the North East at Reception age. This can be illustrated by analysing the regional disadvantage gaps for EAL and non-EAL pupils separately, to compare like with like, and see if regional differences remain as large when differences in the proportion of pupils with EAL are accounted for.

We see that at Key Stage 4, disadvantage gaps are smaller within the EAL group (11.0 months in London, 15.1 months in the South East) than for pupils with English as their first language (19.0 months in London and 24.0 months in the South East), and that gap differences between the two regions are much smaller when considered for the two separate groups (4.1 months for EAL pupils, and 5.0 months for non-EAL pupils, versus 8.5 months for all pupils).

This suggests that again at Key Stage 4, smaller gaps are to be expected in London, and at this Key Stage the largest gap is seen in the South East, where there are fewer BME and EAL pupils.

Smaller gap differences between London and the South East still remain if we consider the secondary progress gap (1.4 months for EAL pupils and 3.0 months for non-EAL pupils), suggesting that the regional difference is not entirely explained by population differences in English as an additional language nor by differences in prior attainment proxying for socio-economic status among non-disadvantaged pupils.

**Figure 2.18: Key Stage 4 gap differences by region for EAL and non-EAL pupils, 2015**

	All pupils gap (months)	Gap for EAL pupils (months)	Gap for non-EAL pupils (months)
North East	20.7	12.8	21.1
South West	20.3	18.3	20.4
North West	20.8	10.1	22.2
Yorkshire and the Humber	21.6	11.9	22.9
East Midlands	21.1	14.8	21.8
West Midlands	18.0	10.0	20.2
South East	23.2	15.1	24.0
East	20.8	14.0	21.6
London	14.7	11.0	19.0
<b>National</b>	<b>19.2</b>	<b>10.9</b>	<b>21.4</b>

At local authority level, the twenty areas with the smallest attainment gaps at the end of Key Stage 4 were heavily dominated by London authorities. All of the top ten authorities are in London and only three of the top twenty are found outside of the capital (Luton, Sandwell and Bury).

**Figure 2.19: 20 local authorities with the smallest total attainment gaps at Key Stage 4, 2015**

		Total attainment gap (months)	Progress gap component (months)
1	Tower Hamlets	7.6	1.2
2	Newham	8.8	1.7
3	Islington	9.1	3.4
4	Kensington & Chelsea	10.2	4.0
5	Westminster	10.8	0.5
6	Southwark	11.2	4.6
7	Barking & Dagenham	11.2	5.2
8	Waltham Forest	11.6	3.7
9	Lambeth	12.4	4.0
10	Brent	12.6	4.8
11	Luton	12.7	6.7
12	Hackney	12.8	3.4
13	Wandsworth	13.2	1.6
14	Lewisham	13.7	6.2
15	Sandwell	13.8	5.0
16	Greenwich	13.9	7.0
17	Croydon	14.6	5.1
18	Harrow	14.7	3.1
19	Hounslow	14.8	6.2
20	Bury	15.0	5.4



Only two London authorities appear among the 20 local authorities with the largest gaps.

To illustrate the extent of the variation between different local authority areas, notice that the total attainment gap for disadvantaged pupils in Reading, of more than two years (28.3 months), is approaching four times the size of the gap in Tower Hamlets.

As discussed previously in relation to our regional analysis, the size of any sub-national gap is influenced by how high the attainment of non-disadvantaged pupils is, in addition to how far behind disadvantaged pupils have fallen; this in turn will be influenced by the composition of the area, and particularly by the degree to which pupils outside the disadvantaged group are more affluent than those within it (i.e. how rich the rich are).

**Figure 2.20: 20 local authorities with the largest total attainment gaps at Key Stage 4, 2015**

		<b>Total attainment gap (months)</b>	<b>Progress gap component (months)</b>
1	Reading	28.3	11.4
2	Southend	27.9	11.5
3	Buckinghamshire	27.8	10.8
4	Leeds	25.7	12.2
5	City of Bristol	25.6	8.8
6	Northumberland	25.1	10.7
7	Kent	24.7	9.9
8	Lincolnshire	24.1	10.7
9	Cheshire West and Chester	24.0	9.4
10	Trafford	23.9	8.8
11	Gateshead	23.7	11.3
12	Gloucestershire	23.7	11.4
13	Cumbria	23.6	10.5
14	Surrey	23.6	10.0
15	Kingston upon Thames	23.5	10.3
16	Wiltshire	23.5	10.1
17	Cambridgeshire	23.5	10.5
18	Poole	23.3	10.4
19	Sutton	23.3	8.0
20	Hartlepool	23.3	10.2

We see a similar picture when we consider the smallest and largest *progress* gaps at Key Stage 4, which are less affected by differences in the composition of the disadvantaged and non-disadvantaged groups between areas. Of the 20 authorities with the smallest progress gaps (meaning that disadvantaged children are falling behind less over the course of secondary school) only four are outside London (Slough, Rutland, Birmingham and Sandwell).

In Tower Hamlets, disadvantaged pupils fell 1.2 months further behind their peers during the course of secondary school. At the other end of the scale, the worst Key Stage 4 progress gap in the country was in Knowsley, where disadvantaged pupils fell more than a year further behind their peers between Key Stages 2 and 4.

**Figure 2.21: 20 local authorities with the smallest progress gaps at Key Stage 4, 2015**

	Local authority	Progress gap (months)	Total attainment gap (months)
1	Westminster	0.5	10.8
2	Tower Hamlets	1.2	7.6
3	Slough	1.4	18.9
4	Wandsworth	1.6	13.2
5	Newham	1.7	8.8
6	Rutland	2.2	15.1
7	Harrow	3.1	14.7
8	Hackney	3.4	12.8
9	Islington	3.4	9.1
10	Birmingham	3.4	15.4
11	Waltham Forest	3.7	11.6
12	Enfield	3.8	16.5
13	Haringey	3.9	18.1
14	Kensington & Chelsea	4.0	10.2
15	Camden	4.0	16.4
16	Lambeth	4.0	12.4
17	Southwark	4.6	11.2
18	Brent	4.8	12.6
19	Sandwell	5.0	13.8
20	Croydon	5.1	14.6

**Figure 2.22: 20 local authorities with the largest progress gaps at Key Stage 4, 2015**

	Local authority	Progress gap	Overall gap
1	Knowsley	12.4	21.7
2	Leeds	12.2	25.7
3	Southend	11.5	27.9
4	West Sussex	11.4	22.6
5	Gloucestershire	11.4	23.7
6	Reading	11.4	28.3
7	Gateshead	11.3	23.7
8	Bath & NE Somerset	11.2	21.2
9	Brighton and Hove	11.1	23.0
10	Buckinghamshire	10.8	27.8
11	Northumberland	10.7	25.1
12	Redcar and Cleveland	10.7	21.2
13	Lincolnshire	10.7	24.1
14	St Helens	10.7	21.7
15	York	10.6	21.5
16	Cambridgeshire	10.5	23.5

17	Cumbria	10.5	23.6
18	Poole	10.4	23.3
19	Walsall	10.4	22.9
20	North East Lincolnshire	10.4	20.4

Many schools are narrowing the gap between their disadvantaged pupils and others, and doing so without compromising the progress or attainment of non-disadvantaged pupils. The top 20 primary and top 20 secondary schools achieving this are set out below.<sup>44</sup>

**Figure 2.23: Top 20 schools with most reduced progress gaps for disadvantaged pupils at Key Stage 2**

	School	Region	Type	Change in progress gap (months)
1	Bentinck Primary and Nursery School	East Midlands	Community School	-15.3
2	King Street Primary School	North East	Community School	-12.6
3	Barnsole Primary School	South East	Community School	-11.5
4	Hythe Primary School	South East	Community School	-10.8
5	Greasbrough Primary School	Yorkshire and the Humber	Community School	-10.7
6	Sturry CofE Primary School	South East	Academy Converter	-10.6
7	Kemsley Primary Academy	South East	Academy Sponsor Led	-10.3
8	Intack Primary School	North West	Community School	-10.0
9	John Perryn Primary School	London	Community School	-10.0
10	Furness Primary School	London	Foundation School	-9.9
11	Horsted Junior School	South East	Community School	-9.7
12	Burnt Ash Primary School	London	Community School	-9.6
13	Woodhall Primary School	East	Community School	-9.5
14	Copperfield Academy	South East	Academy Sponsor Led	-9.4
15	Colville Primary School	London	Community School	-9.3
16	St Thomas' Catholic Primary School, Canterbury	South East	Voluntary Aided School	-9.3
17	Stewart Fleming Primary School	London	Academy Converter	-9.1
18	Lache Primary School	North West	Community School	-9.1
19	Churchfields Primary School	London	Community School	-9.1
20	Brockworth Primary Academy	South West	Academy Sponsor Led	-9.0

<sup>44</sup> This analysis is based on aggregated three-cohort progress data for 2013, 2014 and 2015 compared with 2008, 2009 and 2010. Schools were excluded if their non-disadvantaged pupils experienced a drop in progress (unless remaining significantly above average at both time points), or if changes to the prior attainment of pupil intakes fully explained the reduction in the progress gap.

**Figure 2.24: Top 20 schools with most reduced progress gaps for disadvantaged pupils at Key Stage 4**

	School	Region	Type	Change in progress gap (months)
1	Hasmonean High School	London	Academy Converter	-14.1
2	Carlton Academy	East Midlands	Academy Sponsor Led	-13.4
3	North Chadderton School	North West	Academy Converter	-12.3
4	Brookfield Community School	South East	Community School	-10.6
5	Darwen Aldridge Community Academy	North West	Academy Sponsor Led	-10.5
6	Bishop's Hatfield Girls' School	East	Academy Converter	-10.4
7	Ash Green School	West Midlands	Academy Converter	-10.1
8	Mossley Hollins High School	North West	Community School	-10.1
9	Ken Stimpson Community School	East	Community School	-10.0
10	Bishop Rawstone CofE Academy	North West	Academy Converter	-9.7
11	Wilmington Academy	South East	Academy Sponsor Led	-9.6
12	Colne Community School and College	East	Academy Converter	-9.6
13	West Lakes Academy	North West	Academy Sponsor Led	-9.5
14	Sale Grammar School	North West	Academy Converter	-9.4
15	Windsor Girls' School	South East	Community School	-9.3
16	Birkbeck School and Community Arts College	East Midlands	Foundation School	-9.2
17	Wickersley School and Sports College	Yorkshire and the Humber	Academy Converter	-9.2
18	St Wilfrid's RC College	North East	Voluntary Aided School	-9.1
19	Heathside School	South East	Foundation School	-9.0
20	The Warwick School	South East	Community School	-8.9

## Conclusions

Overall the gap is closing for pupils finishing primary school, and until 2013, the gap was closing for those leaving secondary school as well. Since 2006, primary schools have been successfully slowing down the rate at which the gap grows over the course of Key Stage 2. But in the last two years, schools have struggled to reduce this to less than around 1 month. In order for the gap to close much faster by the end of primary, schools need to focus more on narrowing the gap in the Early Years and sustaining and improving that during Key Stage 1.

Up until 2013, we have seen a consistent reduction in the growth of the gap during the secondary phase but since then, the component of the gap that emerges during secondary school has widened by around 0.7 months. Secondary schools therefore need to do more to reverse this and reduce the progress gap.

Both primary and secondary schools should reinforce efforts to increase the progress made by the most persistently disadvantaged pupils, for whom gap improvements have slowed at Key Stage 2, and the gap at the end of Key Stage 4 continues to widen.

# Chapter 3: Pupil characteristics

This chapter looks at how pupil characteristics, such as ethnicity, having English as an additional language (EAL) and poverty affect academic performance. As well as findings that support already well established trends, such as the relative performance of ethnic groups, our results show new patterns, such as the significantly greater progress made by pupils we might consider to be newly arrived to England. This study provides a statistical assessment of the performance of pupils with different characteristics. CentreForum will conduct further analysis to investigate the underlying reasons for these results.

## Ethnicity

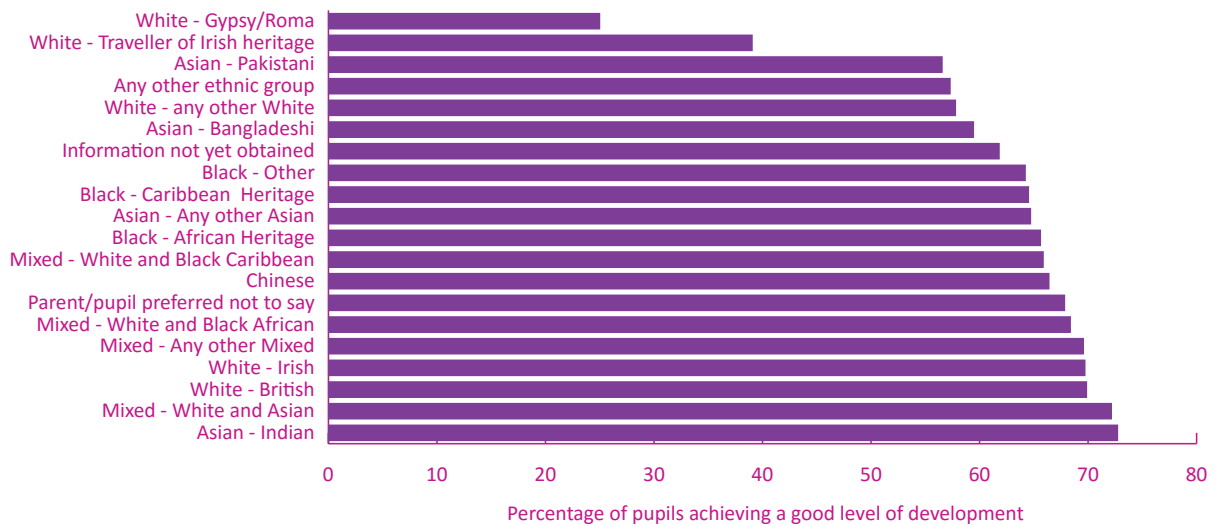
Attainment by ethnic group follows a similar pattern to historic trends. Chinese and Indian pupils continue to outperform other groups on all measures by the end of secondary school. In fact, Chinese pupils are very close already to achieving our benchmark of 75 per cent of pupils achieving scores of 50 points or higher in Attainment 8.

Considering attainment of ethnic groups across the Early Years, and primary and secondary schooling further patterns emerge. There are some ethnic groups which perform consistently throughout school. These are Indian, Irish, white/Asian mixed and black African pupils. There are then groups whose relative attainment improves as they progress through school and overtake other ethnic groups. These include Chinese, Bangladeshi, Asian (any other), and white (any other) pupils. Finally, there are ethnic groups such as white British, black Caribbean, white/black Caribbean mixed and white/black African mixed, that perform relatively worse as they get older.

Certain ethnicities showed a significant change<sup>45</sup> in their relative position between Early Years and Key Stage 4. Bangladeshi (+7 in position), Chinese (+7), and Asian (any other) (+8) are among the most improved. White British (-10) and white/black Caribbean mixed (-8) have been overtaken by others the most. For those groups who have progressed the most, almost all of this progress occurred between the Early Years and Key Stage 2.

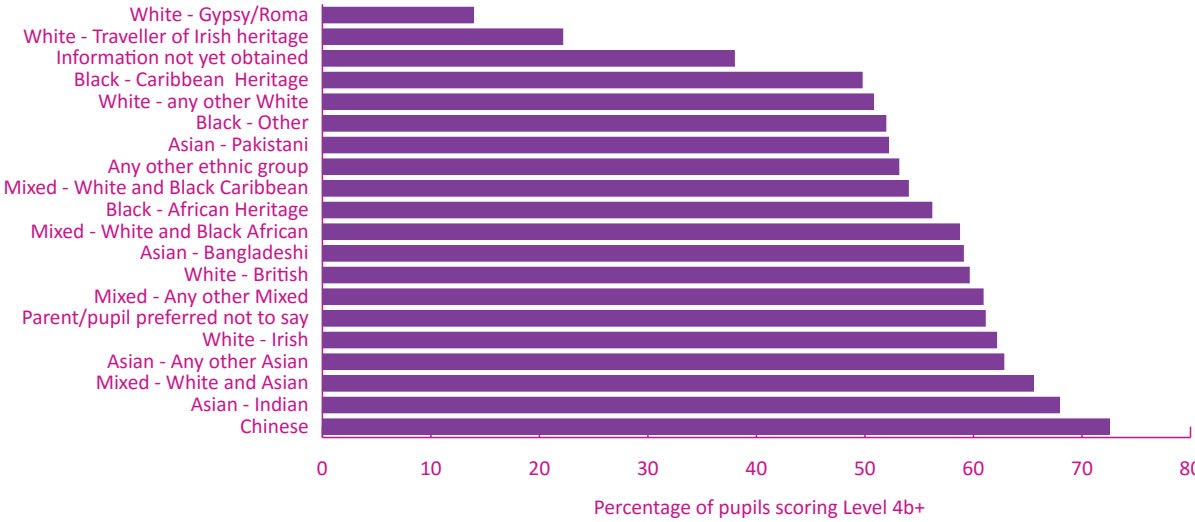
Our data shows that when an ethnic group has fallen in the rankings from the Early Years to Key Stage 2, that group’s relative performance at Key Stage 4 will either stay the same or become worse. This demonstrates again the importance of Key Stage 2 performance to later outcomes.

**Figure 3.1: Percentage of pupils achieving a good level of development at age 5, across ethnic groups**



<sup>45</sup> Significant is defined as a rise or fall of seven or more positions between EY and KS4. Calculated based on figures 3.1, 3.4 and 3.5.

**Figure 3.2: Percentage of pupils achieving a Level 4b+ in reading, writing and maths at Key Stage 2, across ethnic groups**



White British pupils are among the highest achievers in the Early Years. By the end of secondary school, they drop ten places in the table (the largest out of any group) to perform just below average as shown in Figure 3.3. The dotted line represents our benchmark for world-class performance (75 percent of pupils scoring 50+ in Attainment 8). It shows that at present no ethnic groups achieve this benchmark. The current trend suggests that while the top performing ethnic groups will almost certainly achieve our benchmark by 2030, groups further down the table are likely to struggle.

Figure 3.3 shows that Chinese pupils are twice as likely to score 50 points or higher than white British pupils and approximately ten times more likely than pupils of a Gypsy/Roma or Irish traveller heritage. Chinese pupils average just over 6 points per subject in Attainment 8 as shown in Figure 3.4. They achieve, on average, two grades higher in every subject at GCSE compared with white British pupils.

**Figure 3.3: Percentage of pupils scoring 50 points or higher in Attainment 8, across ethnic groups**

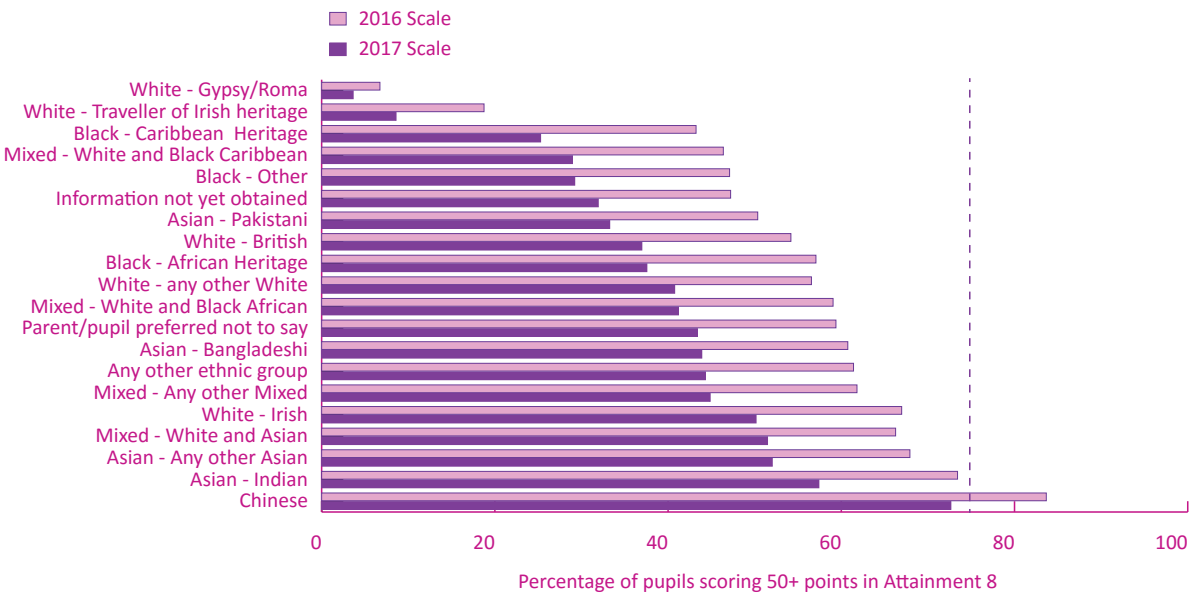
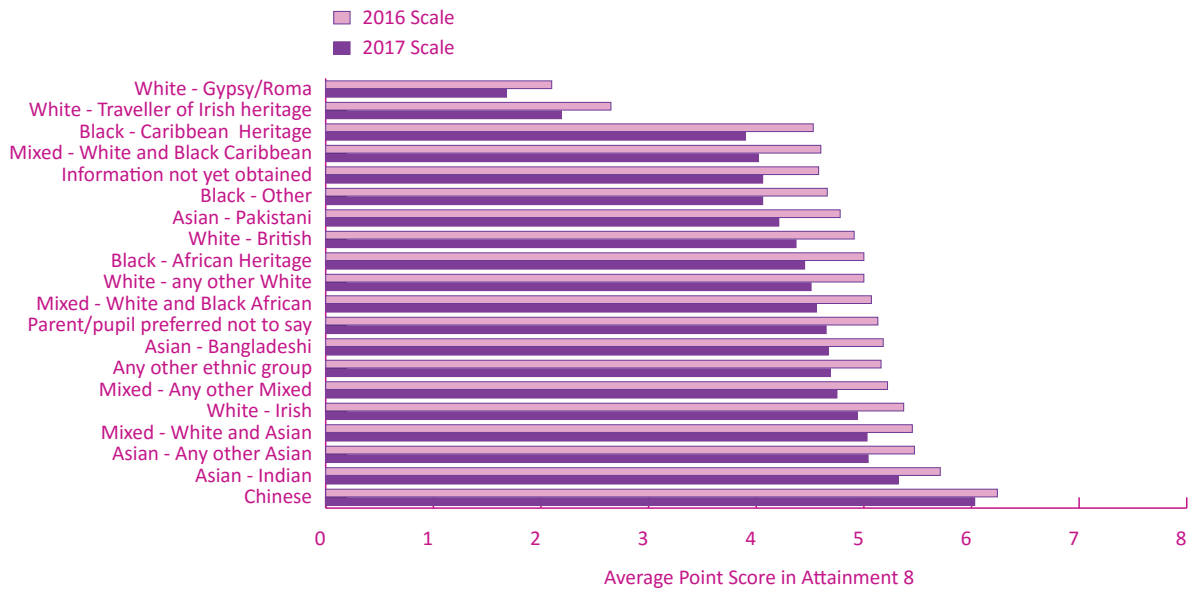
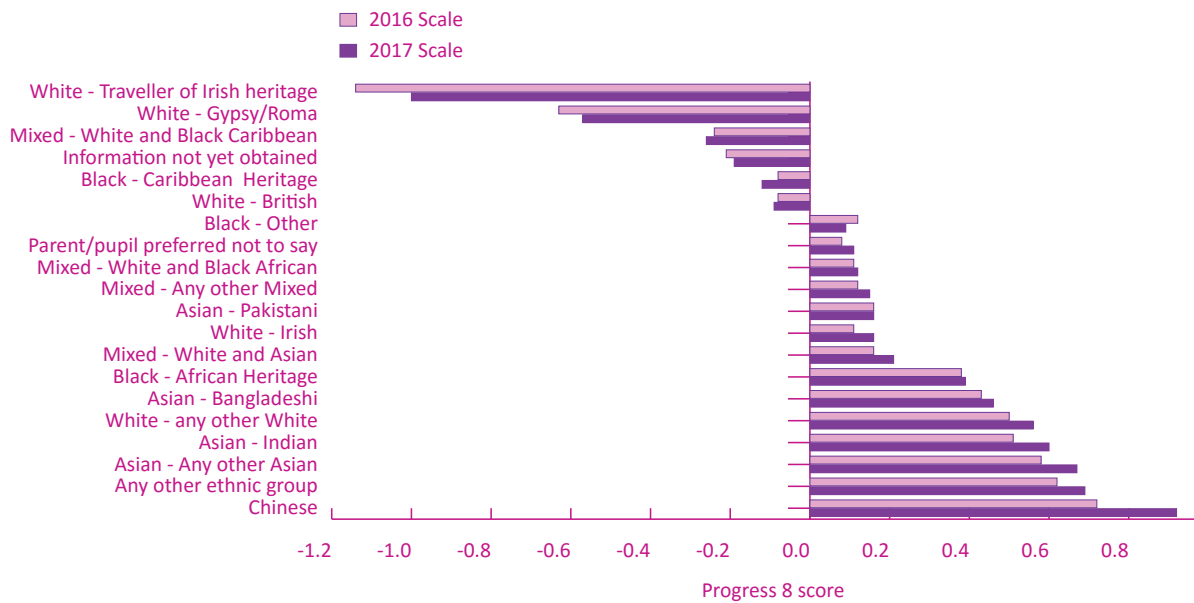


Figure 3.5 shows the Progress 8 score by ethnic group, representing the performance of pupils in comparison to pupils with similar prior attainment. Some groups are achieving lower results than similar pupils nationally – Gypsy/Roma, traveller of Irish heritage, mixed white/black Caribbean, black Caribbean, and white British pupils.

**Figure 3.4: Average point score in Attainment 8, across ethnic groups**



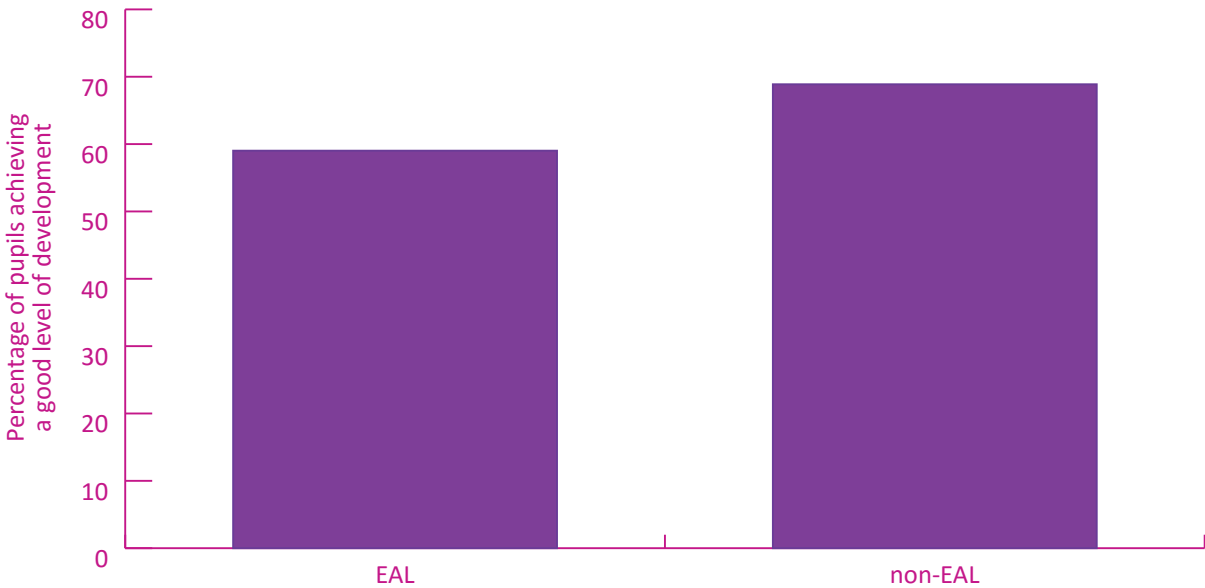
**Figure 3.5: Average Progress 8 score, across ethnic groups**



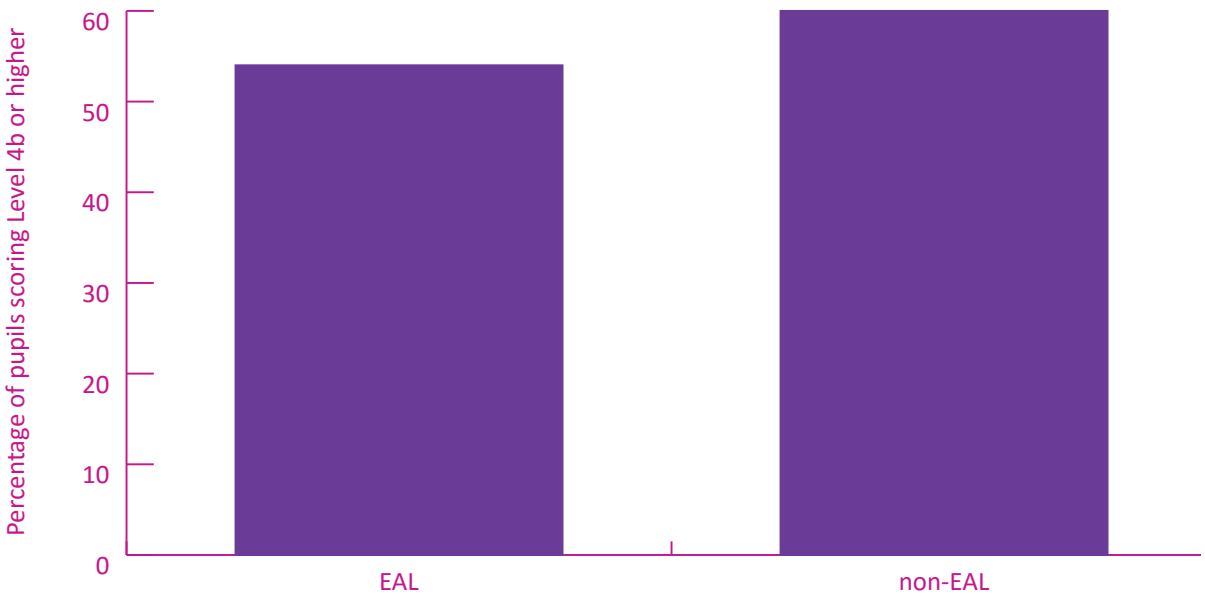
### English as an additional language

Pupils for whom English is an additional language (EAL) are a success story in educational progress and performance. Although their attainment is lower compared with their non-EAL peers at the end of Reception (Figure 3.6) and Key Stage 2 (Figure 3.7), they make much faster progress between the two stages, as set out in Figure 3.8. The graph shows the relative progress made by EAL pupils between the end of Key Stage 1 and end of Key Stage 2 compared with the national average (which by definition is zero).

**Figure 3.6** Percentage of pupils achieving a good level of development at age 5, comparing EAL with non-EAL pupils

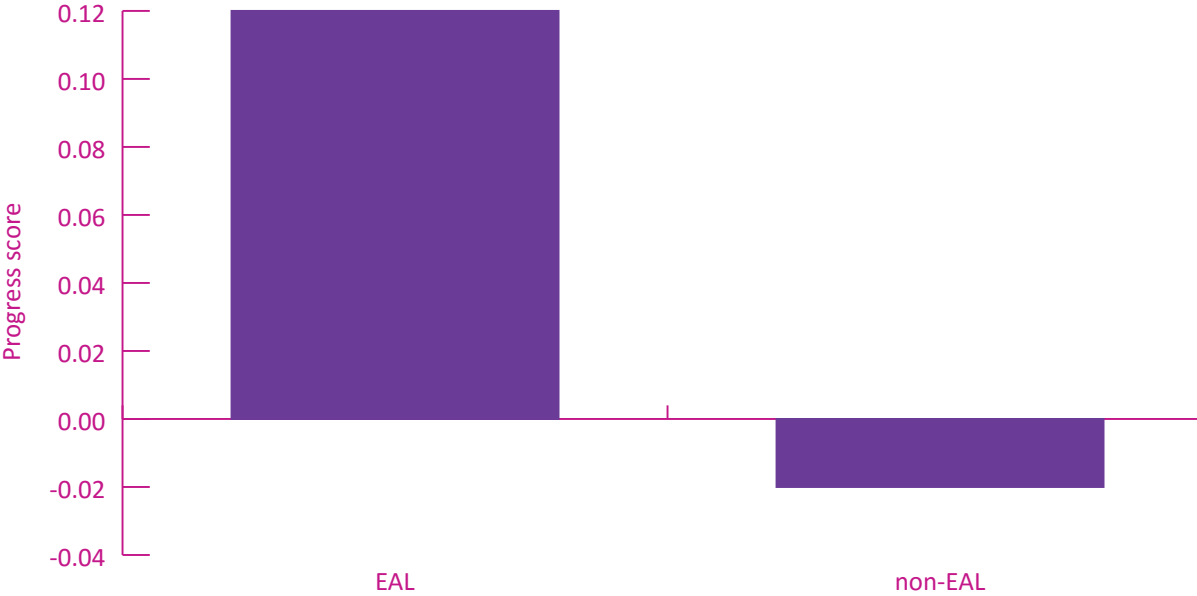


**Figure 3.7:** Percentage of pupils achieving Level 4b+ in reading, writing and maths at Key Stage 2, comparing EAL with non-EAL pupils





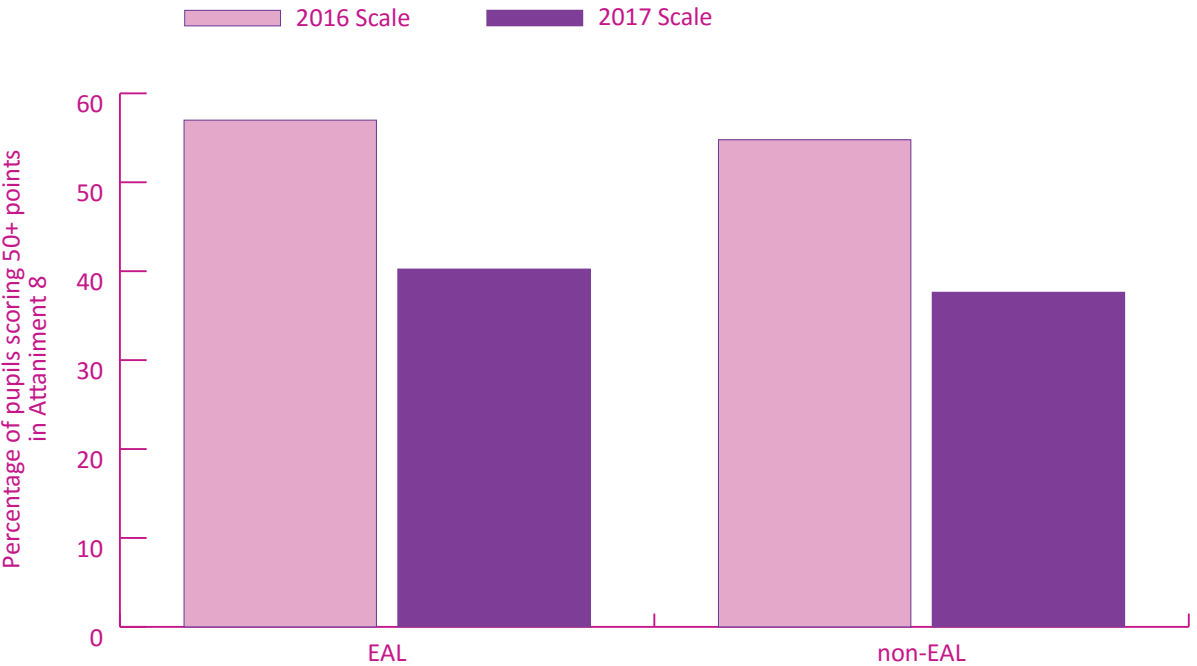
**Figure 3.8** Average progress score from Key Stage 1 to Key Stage 2, comparing EAL with non-EAL pupils



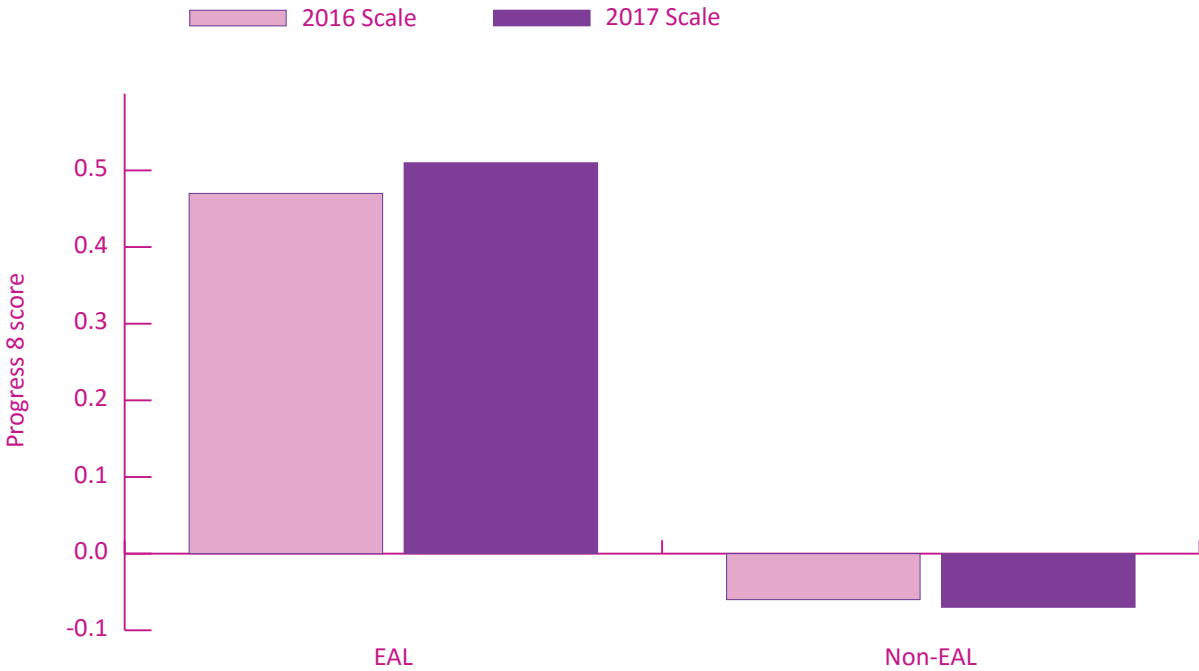
The greater progress of EAL pupils relative to their peers continues beyond Key Stage 2. This is displayed in Figure 3.10, which shows the striking progress made by EAL pupils during Key Stage 4. EAL pupils progressed an average of 0.58 points per subject more than their peers. This is over half a grade in every subject.

By the time they take their GCSEs, EAL pupils have overtaken their peers in terms of overall attainment, not just progress made. 40 per cent achieve the 50 points benchmark on the 2017 scale, compared with 38 per cent of non-EAL pupils.

**Figure 3.9:** Percentage of pupils achieving 50 points or higher in Attainment 8, comparing EAL with non-EAL pupils



**Figure 3.10: Average Progress 8 score, comparing EAL with non-EAL pupils**



**Newly arrived pupils to England**

We also looked at how the achievement of pupils who arrive in England from other countries during their schooling compares with those who started school in England. The available data does not identify migrant status explicitly or with certainty but it does tell us when a pupil first joined the English state education system and whether that pupil’s first language is English or not.

From these data we have inferred which pupils are most likely to have arrived in English schools from overseas. This method will inevitably capture some children who moved from independent schools or home schooling, or from other parts of the UK. However, this remains the best proxy we have from the data available.

For Key Stage 2, we looked at pupils who entered the English state school system<sup>46</sup> in Year 2 and assumed that those with English as an additional language were newly arrived in England, and those with English as their first language were not new to England. We then tracked the progress and attainment of each group between Key Stage 1 and Key Stage 2 and compared it with that of pupils who started school in Reception.

We found that EAL pupils who started school in Year 2 had attainment that was around three National Curriculum levels<sup>47</sup> lower at Key Stage 2 than pupils who started school in Reception. For pupils who started school in Year 2 but with English as their first language, the difference is negligible (0.1 National Curriculum levels).

However, progress during Key Stage 2 for pupils assumed to be newly arrived in England at Year 2 is very large, reflecting the inability of those pupils to express what they know in the English language when they first arrive in the English school system, which is then remedied as schools help them to catch up and become fluent in English for their age. **This results in measured progress of 15 additional months compared with non-EAL pupils who started in reception, and 12 additional months compared with non-EAL pupils who joined later in Year 2.**

<sup>46</sup> Defined as having acquired a unique identifying number.  
<sup>47</sup> On a scaled score measure where a score of 0 denotes the national average.

**Figure 3.11 Key Stage 2: Attainment and progress comparison between four groups of pupils based on EAL status and joining the state school system in Reception or Year 2**

	Key Stage 2 attainment	Key Stage 2 progress	Difference in months compared with those who started in reception with English as their first language
Started in reception; English as first language	0.4	-0.4	0.0
Started in reception; English as an additional language	<b>0.1</b>	<b>1.9</b>	<b>3.1</b>
Started in Year 2; English as first language	0.5	2.2	3.6
Started in Year 2; English as an additional language	<b>-3.0</b>	<b>10.9</b>	<b>15.4</b>

We see a similar pattern for secondary aged pupils. EAL pupils who joined the English state school system in Year 6 made around 26 extra months of progress compared with those who did not have English as an additional language and started school in Reception. Again, this reflects low measured prior attainment, this time at Key Stage 2.

Pupils who were new to the school system in Year 6 but had English as their first language also made extra progress (12.9 months); some of these pupils may well also have been new to the English school system having arrived from international schools overseas, or may have experienced challenging home circumstances that resulted in a move from the independent school sector at a non-standard transition point, either of which could have negatively affected their performance in Key Stage 2 tests resulting in extra measured progress by the time they had settled in to the English state system by Key Stage 4.

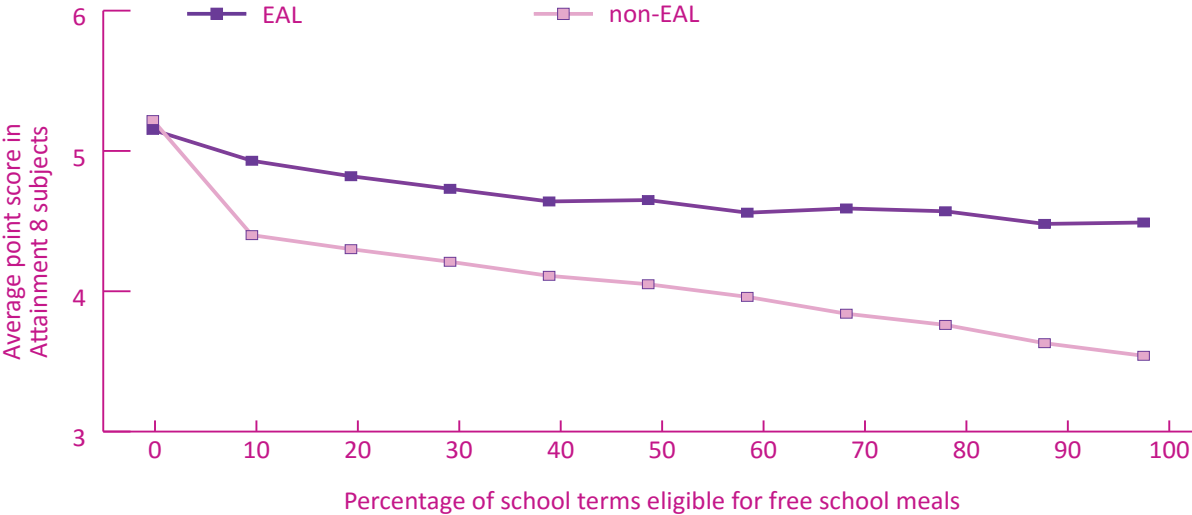
**Figure 3.12 Key Stage 4: Attainment and progress comparison between four groups of pupils based on EAL status and joining the state school system in Reception or Year 6**

	Key Stage 4 attainment	Key Stage 4 progress	Difference in months compared with those who started in reception with English as their first language
Started in reception; English as first language	0.0	-0.6	0.0
Started in reception; English as an additional language	<b>2.2</b>	<b>3.1</b>	<b>7.2</b>
Started school in Year 6; English as first language	4.2	6.0	12.9
Started school in Year 6; English as an additional language	<b>-1.9</b>	<b>12.9</b>	<b>26.4</b>

**The relationship between poverty and EAL status**

Our analysis has also found that poverty has a smaller effect on EAL pupils. This is shown in Figure 3.13, where an extended period of disadvantage (measured by eligibility for free school meals) has a smaller detrimental effect on EAL pupils than others. Disadvantaged pupils with English as their first language achieved an average grade for Attainment 8 between a high D grade and a C grade, depending on how persistently disadvantaged they were. For disadvantaged pupils with English as an additional language this ranged between a C grade and a low B grade. Not only was attainment lower for non-EAL disadvantaged pupils, but the gradient of the line depicting the strength of the effect of persistent disadvantage was also steeper than was the case for EAL pupils.

**Figure 3.13: The effect on attainment of persistent disadvantage, comparing EAL with non-EAL pupils**



**Conclusion**

This chapter highlights the significant progress that pupils from certain ethnic backgrounds and those for whom English is an additional language make throughout school, resulting in those children outperforming white British pupils by the end of secondary school despite lower average attainment at earlier ages. At the end of Key Stage 4, 40 per cent of EAL pupils achieve 50 points or higher in Attainment 8, compared with 38 per cent of other pupils.

Our analysis estimating attainment and progress for children newly arrived in England suggests that they achieve close to the national average in terms of overall attainment, having typically made over a year of progress during Key Stage 2 or over two years of progress during secondary school, reflecting both catch-up in English language proficiency and improvements in underlying attainment.

While disadvantage has a detrimental impact on EAL pupils, this is less acute than for those with English as their first language. Disadvantaged EAL pupils do better in Attainment 8 by over half a grade per subject compared with other disadvantaged pupils. This signals that belonging to certain minority ethnic groups is a protective factor associated with greater resilience against low achievement at all levels of deprivation than is observed for white British pupils.

## Chapter 4: Regional trends

As chapter 1 shows, educational performance is not evenly distributed across England, and improving standards in low performing areas will have to form part of any strategy for improving outcomes for disadvantaged pupils. The Government’s latest education white paper, published in March this year, has a focus on “intensively tackling areas of the country that have lagged behind for too long”.<sup>48</sup>

In recent years, a key aspect of the debate has been the relative success of London pupils. As our analysis shows, certain ethnic groups and those who are registered as having English as an additional language do better than others, so perhaps it is no wonder that London with its large ethnic mix does better than anywhere else in the country. Research by Simon Burgess at the University of Bristol suggests that London’s success in GCSE scores and progress from the end of Key Stage 2 is largely attributable to its ethnic composition.<sup>49</sup> However, another recent report by the LSE attributes London’s success to a gradual improvement in performance quality dating back to the mid-1990s, particularly in primary schools.<sup>50</sup>

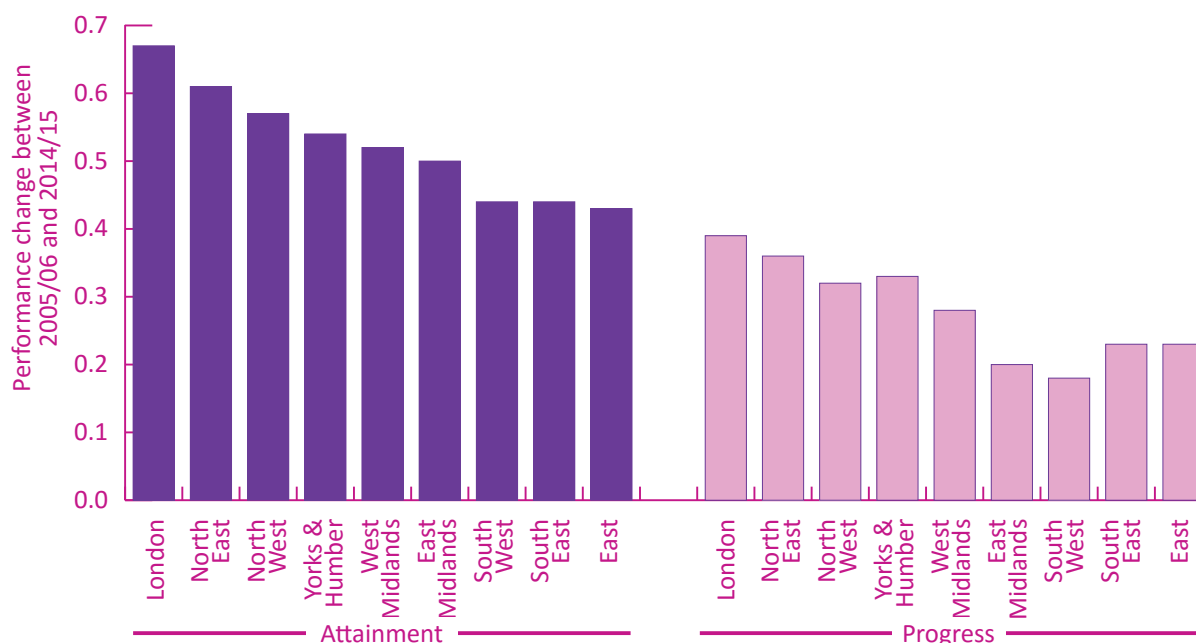
To shed more light on these debates, we have compared recent trends in performance across different parts of the country and different groups of pupils within them. Technical details on how we did this can be found in the Annex, with the important caveat being that it is not possible with this data to account for all potential sources of grade inflation.

### Which regions have improved most in attainment and progress overall?

As Figure 4.1 shows, London has improved Key Stage 4 attainment the most since 2005/06 – **by two-thirds of a grade on average across all GCSE entries**. There have also been relatively large gains in both the North West and North East, with improvements of 0.61 and 0.57 of a grade respectively. In contrast, the South West, South East and the East of England have all secured improvements of 0.44 or less.

Pupils in London made almost two-fifths (0.39) of a grade more progress in 2014/15 than they did in 2005/06, but pupils in the North East also do 0.36 of a grade better compared with ten years ago. The East Midlands and South West lag behind, having improved by only 0.20 and 0.18 of a grade respectively.

**Figure 4.1: Regional improvement since 2005/06, Key Stage 4**



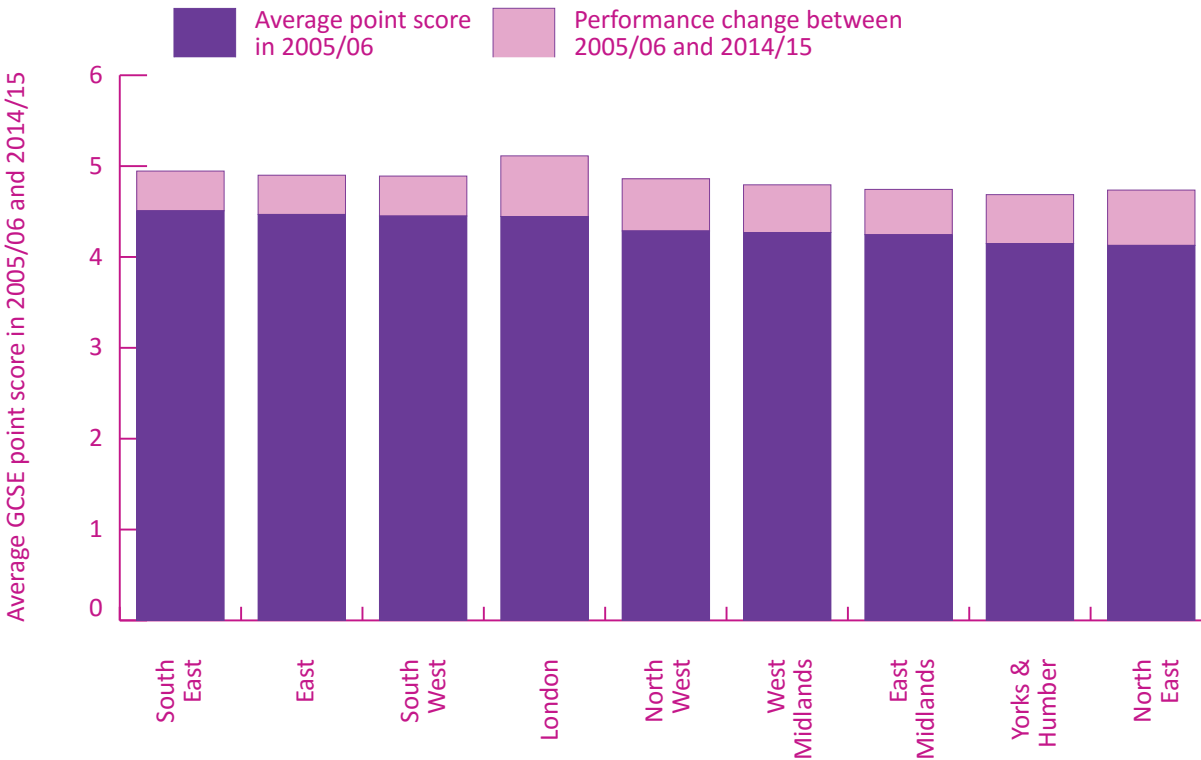
48 Department for Education (2016) ‘Educational Excellence Everywhere’

49 Burgess, S. (2014) ‘Understanding the success of London’s schools’ CMPO Working Paper No. 14/333

50 Blanden, J. Greaves, E., Gregg, P., Macmillan, L., Sibieta, L. (2015) ‘Understanding the improved performance of disadvantaged pupils in London’ Social Policy in a Cold Climate Working Paper 21

The implications of this for today’s variation in performance are shown in Figure 4.2, where attainment in 2005/06 and increases in it since then are illustrated, with regions ordered by their starting points. Those starting with lower performance have tended to see the highest growth since. These trends have not been radical enough to change rankings of performance but, ignoring London, the range in attainment has reduced from 0.38 to 0.26. London is the key exception, though, and has jumped from being the fourth highest performing region to the highest.

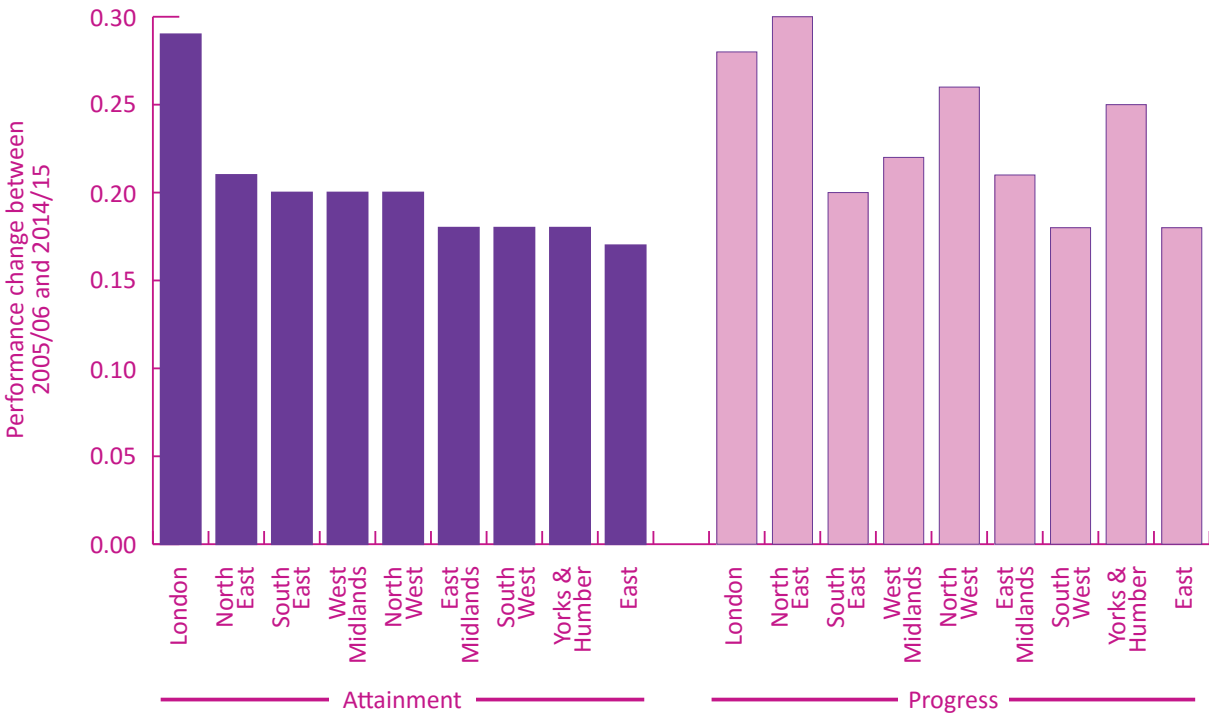
**Figure 4.2: Regional attainment in 2005/06 and 2014/15**



Looking at Key Stage 2 improvement in Figure 4.3, we see that London has again improved the most in overall attainment (by 0.29, almost a third of a National Curriculum Level) and it has raised pupils’ progress similarly strongly. The next biggest increase is in the North East, with an improvement of 0.21 in attainment; only 0.04 of a level separates the areas outside of London.

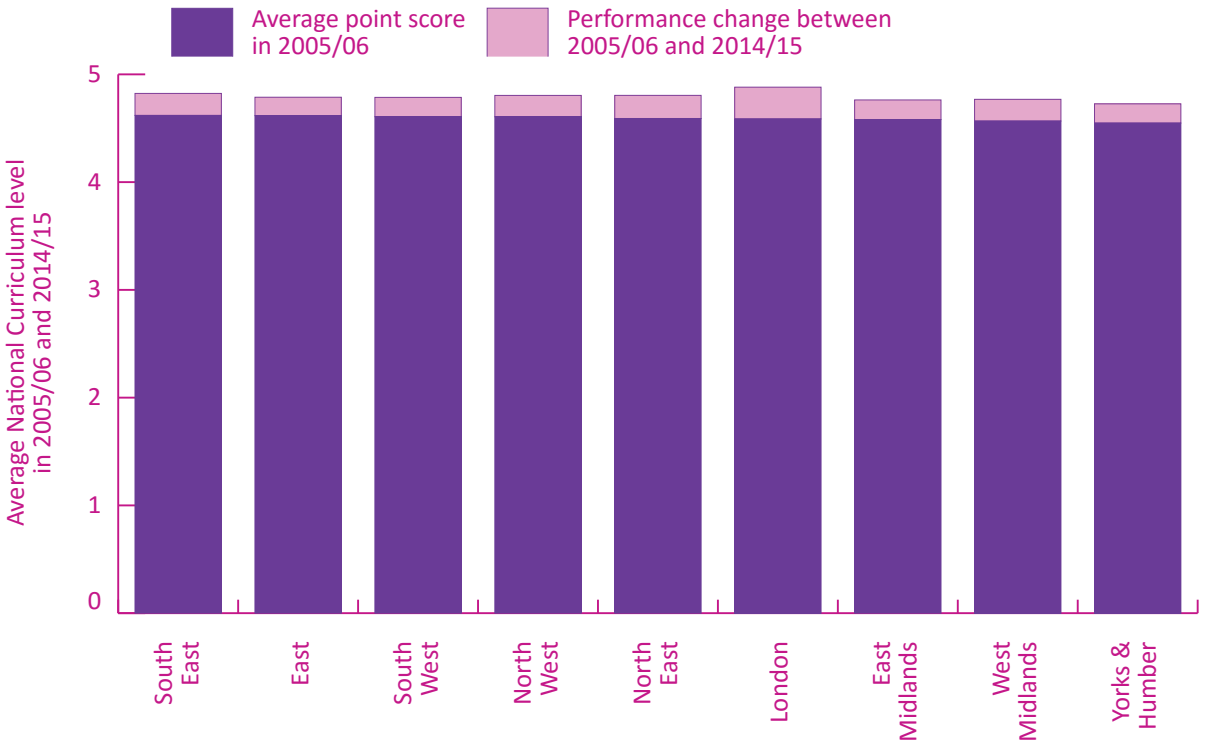
The pattern across regions for progress is different to that for attainment and there is more variation outside of the capital. The North East surpasses London very slightly, with an improvement of 0.30. The North West and Yorkshire and the Humber also show improvements of over 0.25 of a National Curriculum Level. The South West and East of England have had the smallest changes, improving progress by just 0.18 in both cases.

**Figure 4.3: Regional improvement since 2005/06, Key Stage 2**



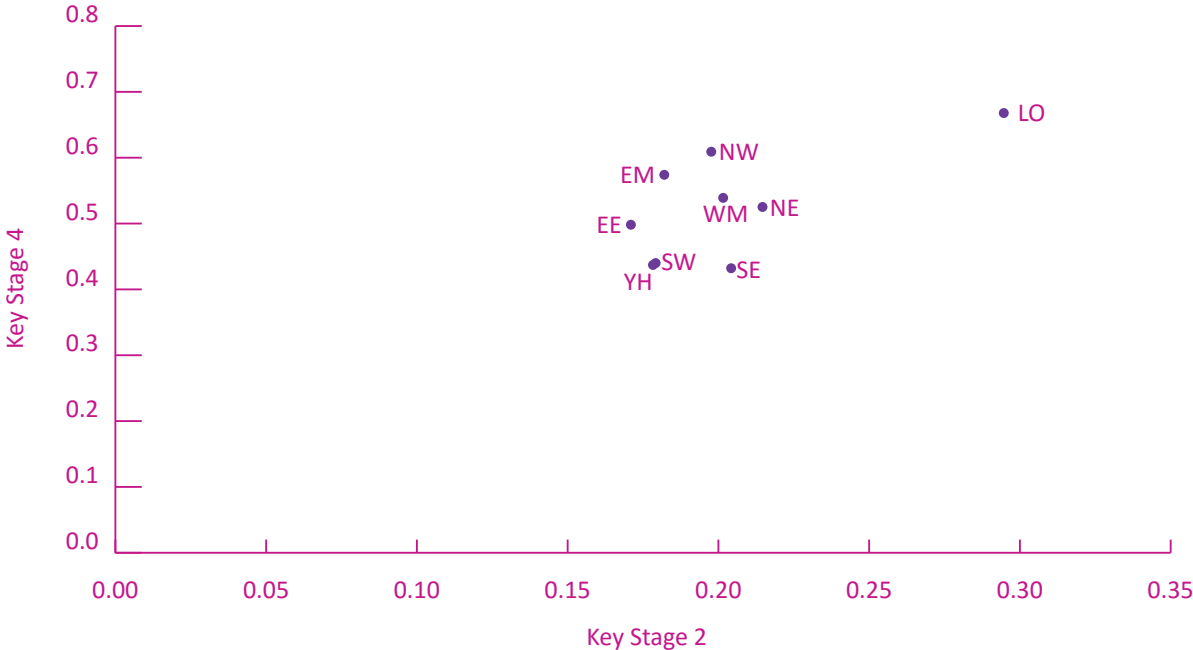
These trends have not produced a noticeable change in regional patterns for Key Stage 2 results, save for London moving from having the sixth highest attaining pupils to the highest (Figure 4.4). In fact, the range across regions outside London has widened very slightly (from 0.07 to 0.15 of a National Curriculum Level).

**Figure 4.4: Regional attainment in 2005/06 and 2014/15, Key Stage 2**



Figures 4.5 and 4.6 show that, for attainment, there is little obvious correlation between improvements made in the two phases, beyond London seeing relatively large increases for both. In contrast, for progress it is more obvious that those who have raised performance relatively strongly in Key Stage 2 have also tended to do so in Key Stage 4. The North East and Yorkshire and the Humber have had strong improvements in Key Stage 2 relative to their position for Key Stage 4.

**Figure 4.5: Regional improvement in attainment between 2005/06 and 204/15 by Key Stage**



**Figure 4.6: Regional improvement in progress between 2005/06 and 204/15 by Key Stage**





Overall:

- : Over the last decade, London has made the biggest gains in attainment at Key Stages 2 and 4, and by a clearer margin in the former;
- : The North East, North West and Yorkshire and the Humber have made the next biggest strides, while the southern regions and the East of England have shown relatively small improvements in attainment;
- : However, comparisons of gains in progress show some different patterns, particularly for Key Stage 2, where the North East has made faster improvements than London; and
- : These trends have slightly narrowed the range in attainment across regions at Key Stage 4, but not at Key Stage 2, and the most noticeable impact has been in moving London's position to the top of attainment rankings over the last ten years.

### How have regional trends affected different groups of pupils?

We then looked at whether certain groups of pupils have seen bigger improvements in performance in each region. We focused on those eligible for free school meals and those who are classed as having English as an additional language as we know from our earlier analysis and other research that these two groupings can have a significant impact on results.

Figures 4.7 and 4.8 break down Key Stage 4 attainment and progress changes into four groups of pupils: those with and without EAL, and those claiming free school meals or otherwise, with the regions ordered by their overall levels of improvement.

All regions have seen larger improvements in attainment and progress for those on FSM who are not EAL pupils than for the largest group who are not EAL or claiming FSM. The North East, Yorkshire and the Humber and East Midlands have seen the fastest improvement in attainment for these pupils.

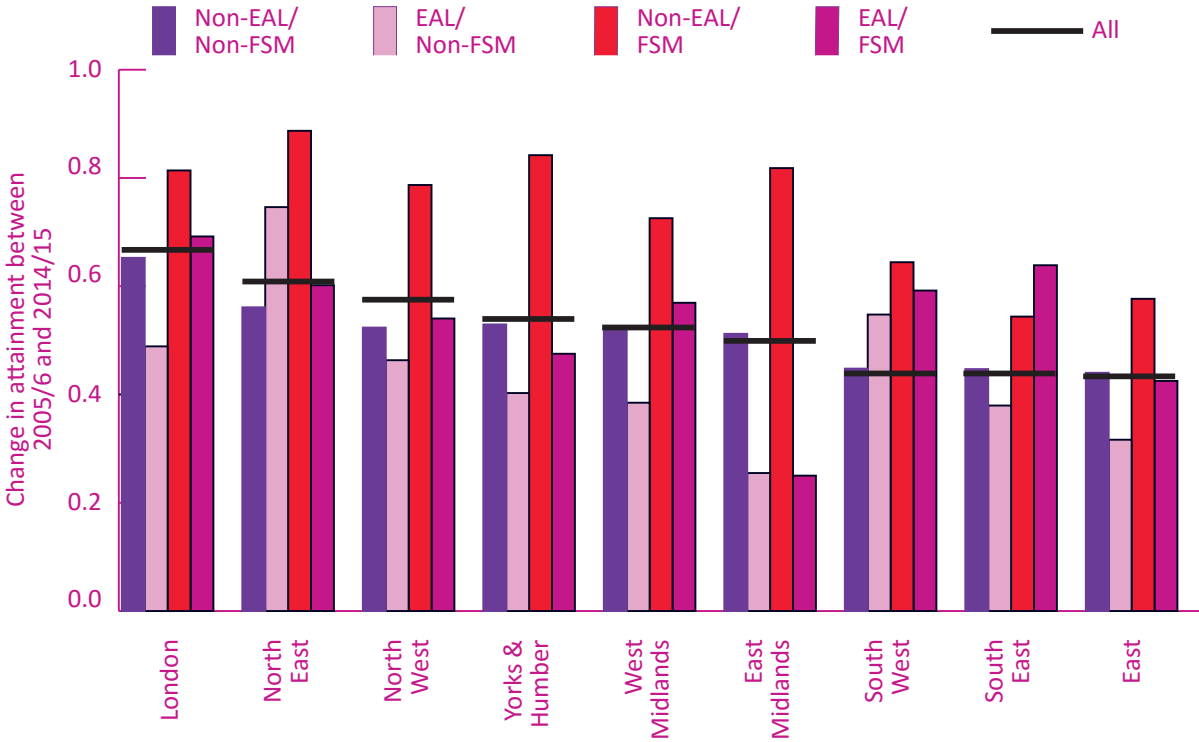
The East and South East have made the smallest improvements in attainment for pupils who are FSM but not EAL, improving by 0.58 and 0.54 GCSE grades respectively, compared with 0.89 in the North East. Whilst it could be argued that it will always be harder for areas to improve when their pupils had higher levels of attainment at the start, these regions have also achieved less in improving attainment for disadvantaged pupils.

For progress, **improvements for non-EAL pupils on FSM have been bigger in the North East and Yorkshire and the Humber than in London.** This suggests that progress gaps have closed more strongly in these two regions (for those without EAL) than in London and elsewhere, even if London has improved the fastest overall.

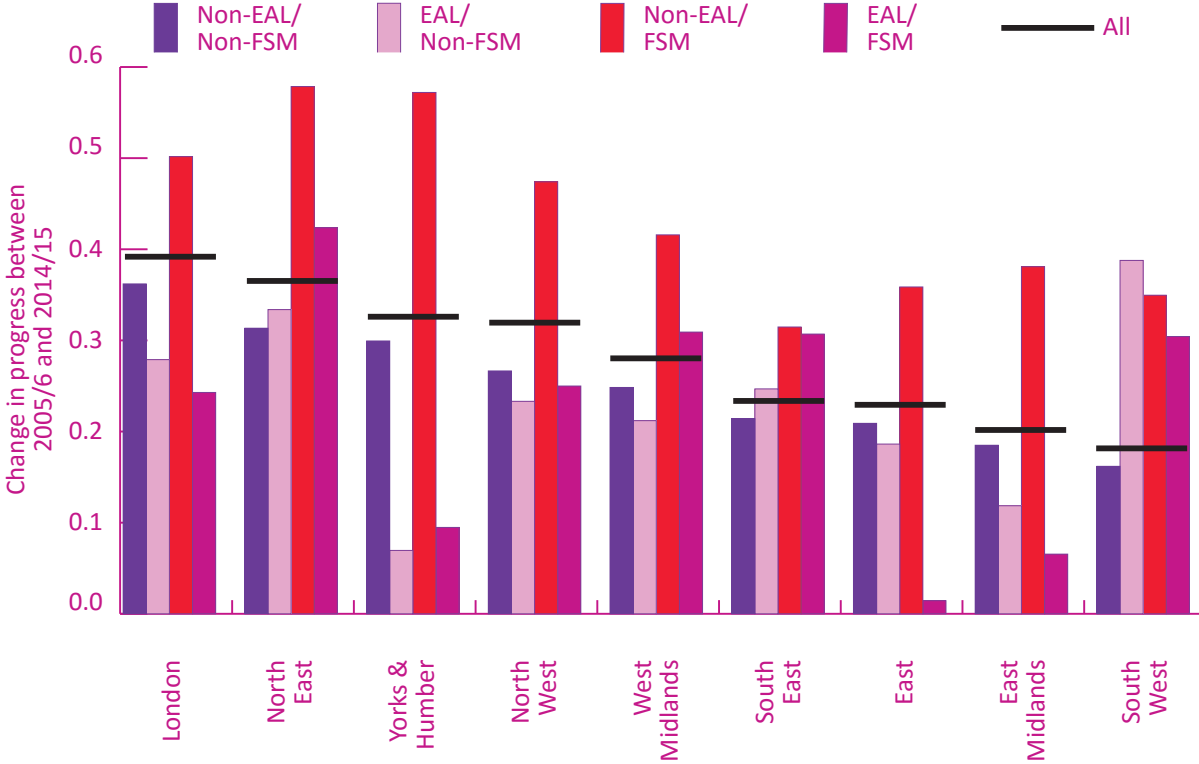
But when we look at pupils who are both FSM and EAL, improvements are far less consistent. **Pupils in the North East have improved by 0.42 of a GCSE grade, compared with no change in the East of England.**

In the North East, West Midlands, South East and South West has progress improved faster for those who are FSM and EAL than for pupils overall. The South West shows improvement in progress of 0.30 of a GCSE grade for this group, compared with 0.16 for those neither FSM nor EAL.

**Figure 4.7: Regional performance changes in Key Stage 4 attainment between 2005/06 and 2014/15 by pupil background**



**Figure 4.8: Regional performance changes in Key Stage 4 progress between 2005/06 and 2014/15 by pupil background**

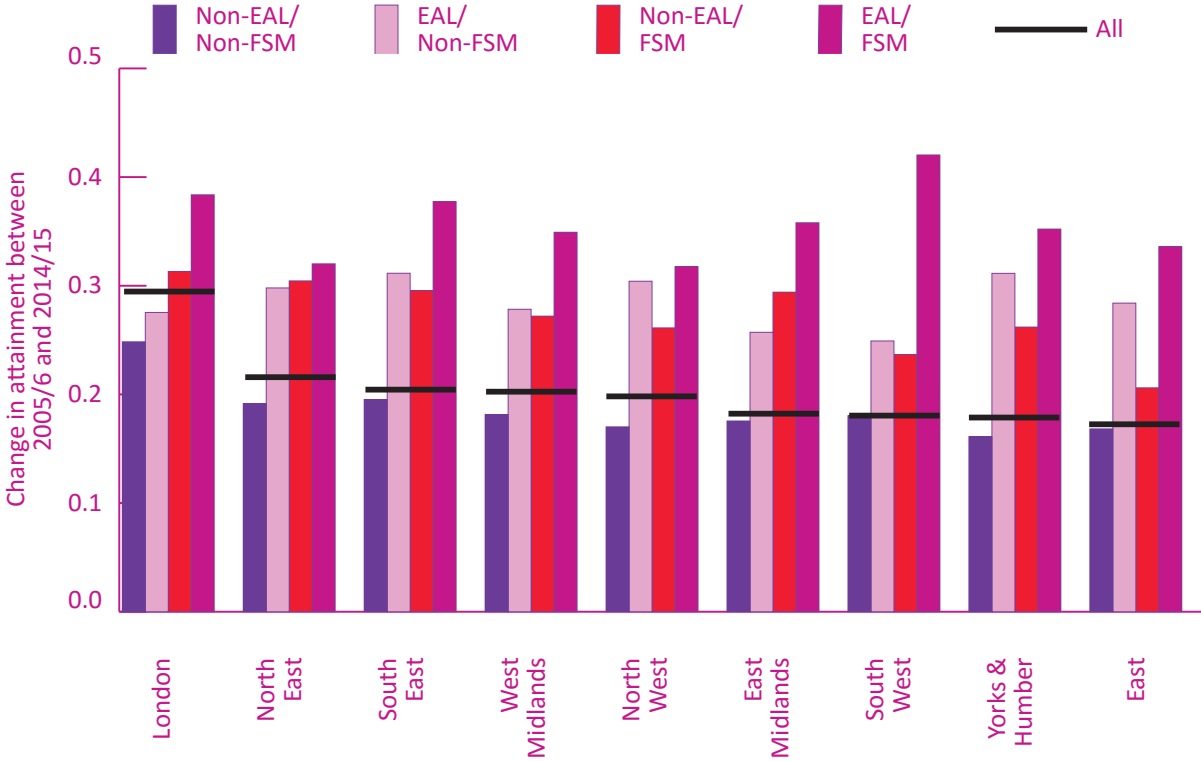


Turning to Key Stage 2, Figures 4.9 and 4.10 similarly plot the improvements made in attainment and progress by groups of pupils. Improvements over the past ten years in primary attainment have been slightly more consistent across regions, and in all areas EAL pupils, irrespective of FSM eligibility, have improved more than those neither EAL nor FSM.

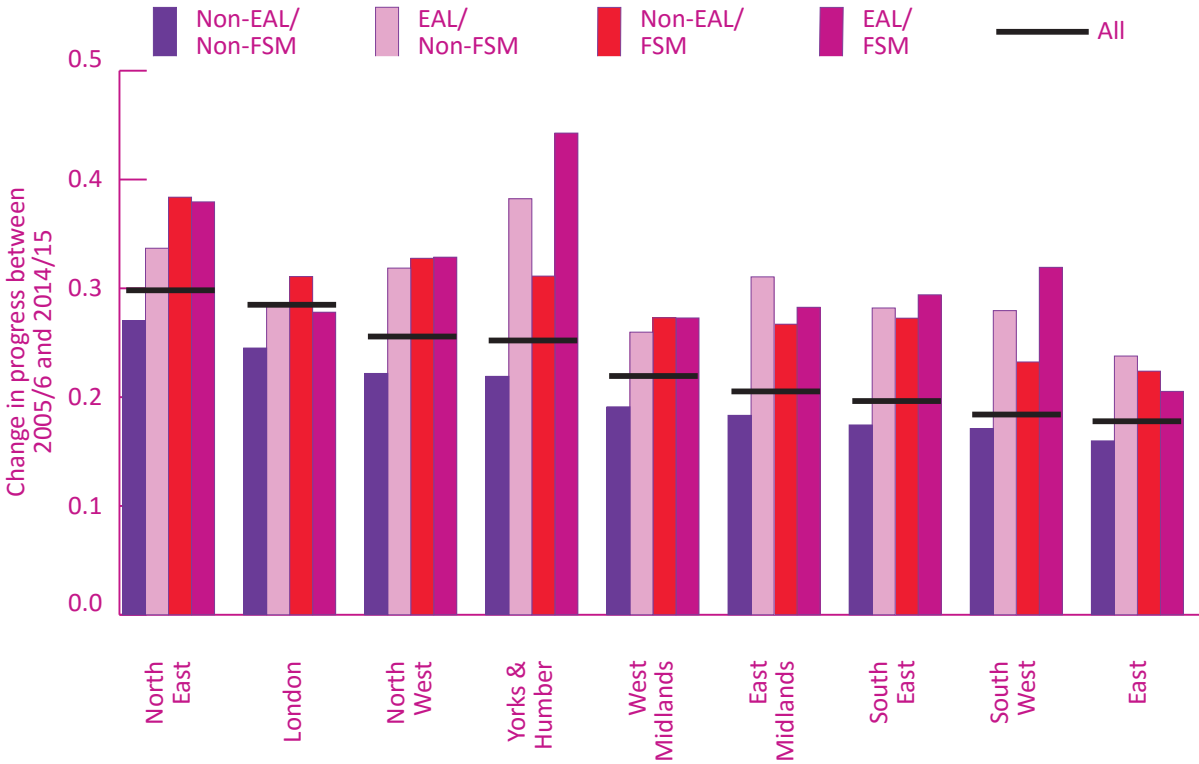
London shows the greatest improvements in attainment for those on FSM but not EAL, with an increase of 0.31 Levels, but they are closely followed by the North East and South East with increases of 0.30. This compares to relatively weak improvements in the South West and East of England of 0.24 and 0.21 respectively. In terms of progress, London and the North have made the biggest strides for FSM pupils who are not EAL, whereas the South West and East of England have had relatively small improvements.

Pupils who are both FSM and EAL have improved attainment most in the South West and London (at 0.42 and 0.38 of a National Curriculum Level respectively) but for this group there have been improvements in all regions of at least 0.32 of a Level.

**Figure 4.9: Regional performance changes in Key Stage 2 attainment between 2005/06 and 2014/15 by pupil background**



**Figure 4.10: Regional performance changes in Key Stage 2 progress between 2005/06 and 2014/15 by pupil background**



Overall, across the two Key Stages:

- : In all regions, among pupils who are not EAL, those who are FSM have improved faster than others;
- : London’s strong improvements have not been especially concentrated on disadvantaged pupils, but both London and the North have made bigger improvements than others for non-EAL pupils on FSM;
- : The South and East of England have made fewer strides in improving performance for most disadvantaged pupils who are not EAL; and
- : There are large differences in the rates of improvement for EAL pupils, and the South West in particular appears to have made better progress for this group than for others.

**Have changes been concentrated in schools serving disadvantaged communities?**

In this section we look at whether there is relationship between the level of pupil disadvantage in schools and their improvement over the last ten years. For each time period and within each region, we have grouped schools into deciles based on the proportion of pupils claiming free school meals.<sup>51</sup> ‘Decile 1’ represents the least disadvantaged schools while ‘Decile 10’ represents the most disadvantaged on this measure.

Figure 4.11 shows that the change over the past ten years in Key Stage 4 performance increases substantially as the level of disadvantage in the school increases – taking into account both disadvantaged and other pupils and considering progress as well as attainment. **Schools in the three most disadvantaged deciles (deciles 8, 9 and 10) have improved attainment by around half a GCSE**

<sup>51</sup> The deciles were constructed by calculating for each school (a) the number of EAL pupils who were FSM, (b) the number of non-EAL pupils who were FSM and (c) the total number of pupils. Schools were ranked on the proportion of pupils who were disadvantaged, with non-EAL FSM pupils weighted twice as heavily in this calculation (calculating a school factor equal to (b + a/2) divided by c).

grade more over the last ten years than schools in the least disadvantaged deciles (deciles 1, 2 and 3).

At Key Stage 2, schools in the three most disadvantaged deciles improved attainment by around a fifth of a National Curriculum Level more than schools in the least disadvantaged deciles (Figure 4.12).

**Figure 4.11: Improvement between 2005/06 and 2014/15 by school FSM rate, Key Stage 4**



**Figure 4.12: Improvement between 2005/06 and 2014/15 by school FSM rate, Key Stage 2**

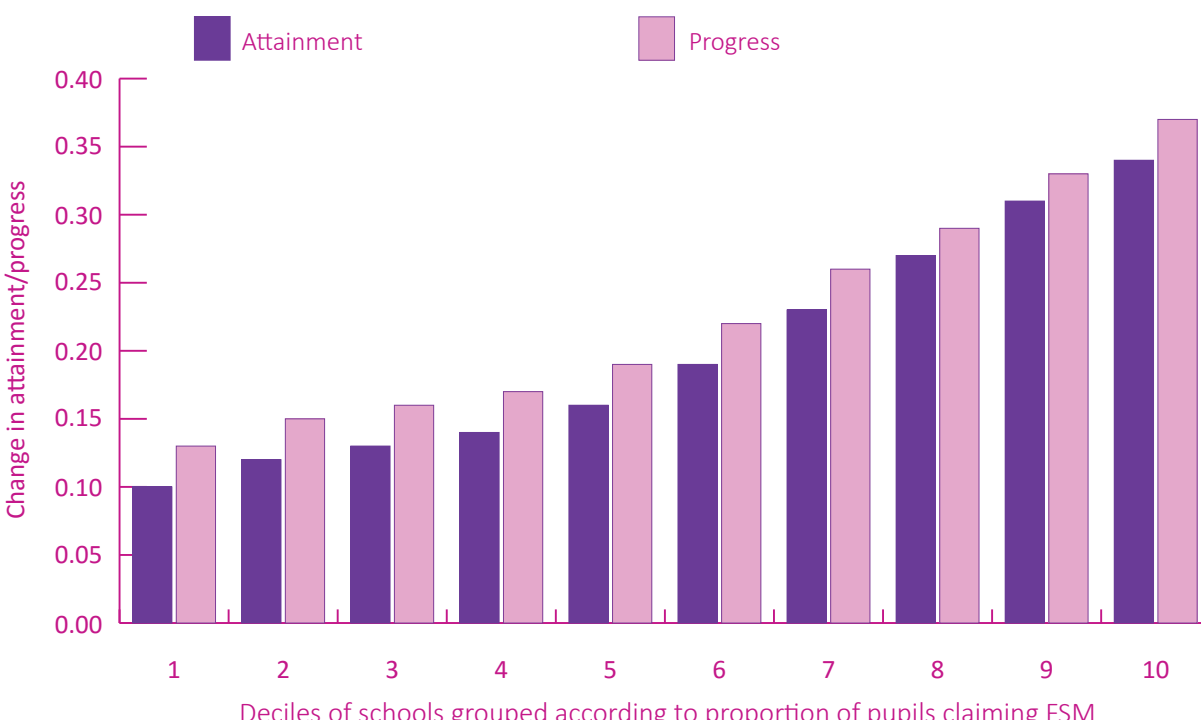


Figure 4.13 compares trends in London, the North (including the Midlands) and the South (including the East of England). This shows that, when we look only at the most disadvantaged schools (those in deciles 8 to 10), **in Key Stage 4 London’s attainment has improved by 0.89 of a GCSE grade**, compared with an increase of 0.71 in the South.

The trend is less stark for progress, however, with a difference of 0.10 in the improvement made between London and the North for disadvantaged schools. At primary, London has still improved more than elsewhere in the country in terms of attainment, but the North and South are not as far behind in terms of improvements in progress made during Key Stage 2.

**Figure 4.13: Regional improvement between 2005/06 and 2014/15 for schools with the highest FSM rates (deciles 8 to 10), Key Stages 2 and 4**



**Where has attainment for ‘white working class’ pupils improved the most?**

EAL pupils have, nationally, seen significant improvements in progress and attainment in recent years, and the preceding analysis (including chapter 3) demonstrates the significant difference this categorisation, and that of ethnicity, makes to comparisons of regional performance and trends. To look for a more ‘like-for-like’ comparison, here we compare improvement rates for white, non-EAL pupils only.

Figure 4.14 presents results for progress and attainment by level of school FSM rates, FSM status of the pupils compared, and in our three groups of regions: London, the North (including the Midlands) and the wider South (including the East of England).

In most cases London had as great if not greater improvements for attainment and progress compared to other areas. The North and Midlands have, however, had similar or stronger growth in some cases.

Generally, the South East, South West and the East of England have made smaller strides – overall improving attainment for white, non-EAL pupils on FSM by 0.57 of a GCSE grade compared with the North’s 0.78. This isn’t the case for the most disadvantaged schools at Key Stage 2, though, where this group has improved performance at a comparable pace.

Among these disadvantaged schools, in the Northern and Southern regions, FSM pupils have had bigger improvements in attainment and progress than other pupils. This has not been so much the case in London – again reflecting the more consistent improvement that London has made for all pupils.

Across these 3 areas of the country, the improvement for those on FSM in Key Stage 4 attainment ranges from 0.57 (in the South) to 0.78 (in the North) of a GCSE grade. That compares well with a range of improvement for all pupils of 0.43 to 0.67 across the regions (see earlier section). This suggests that the low attainment of white disadvantaged pupils has not suddenly emerged as a result of differing trends over the last decade – it is a more long-standing issue. Many of these pupils will have been helped by the focus on improvements for disadvantaged pupils across the country, but their low starting points show that clearly more improvement is needed.

**Figure 4.14: Regional performance changes (2005/06 to 2014/15) for white, non-EAL pupils**

School and pupil characteristics			Attainment change			Progress change		
			London	North	South	London	North	South
Key Stage 4	All schools	Non-FSM	0.62	0.52	0.42	0.34	0.25	0.18
		FSM	0.72	0.78	0.57	0.47	0.48	0.32
	Disadvantaged schools	Non-FSM	0.83	0.68	0.70	0.49	0.37	0.37
		FSM	0.81	0.82	0.74	0.52	0.51	0.42
Key Stage 2	All schools	Non-FSM	0.25	0.17	0.18	0.23	0.21	0.17
		FSM	0.31	0.27	0.25	0.30	0.31	0.25
	Disadvantaged schools	Non-FSM	0.35	0.24	0.29	0.32	0.29	0.27
		FSM	0.34	0.30	0.34	0.33	0.35	0.33

**How might other aspects of geography affect performance?**

Much has been made recently, including by the likes of Ofsted<sup>52</sup> and the Future Leaders Trust<sup>53</sup>, of the challenges facing coastal schools in England. Whilst not producing a trend analysis on this topic, here we give some descriptive analysis of the latest attainment and progress data in order to shed light on the issue. Improving our understanding here may help us develop future approaches to tracking and reporting progress in improving educational standards on different geographical bases besides regions.

Here, we define coastal schools as those within 5.5km of the coast of England and exclude selective schools, leaving 496 secondary and 2,357 primary schools in the 2015 attainment data. We find that, returning to Attainment 8 measures and using the 2016 scale:

- : **In coastal areas, 48 per cent of pupils achieved 50 points or more in Attainment 8, compared to 54 per cent elsewhere** (a difference of 6 percentage points, a roughly similar difference to that between London and the rest of the country on this measure as outlined in chapter 1); and
- : **The average Progress 8 score was 0.12 of a grade lower in coastal schools.**

For Key Stage 2:

- : **In coastal areas, 22 per cent of pupils achieved a level 5 in reading, writing and mathematics, compared with 25 per cent elsewhere; and**
- : **The difference in progress was nil.**

Coastal schools have widely differing characteristics – some are in urban areas (Liverpool, Newcastle for example) whereas others are in more sparsely populated areas. We therefore make two further distinctions:

<sup>52</sup> Ofsted (2014), 'The report of Her Majesty's Chief Inspector of Education, Children's Services and Skills 2013/14'.  
<sup>53</sup> The Future Leaders Trust (2015) 'Combating Isolation: Why coastal schools are failing and how headteachers are turning them around'.

1. Some of the explanations proposed for the differences in outcomes between these schools and others include the impacts of longstanding local economic conditions, for instance a prevalence of seasonal employment and long term disadvantage. We use the same method as earlier in the chapter to define highly disadvantaged schools (deciles, 8, 9, and 10 of FSM rates). There, the proportion of disadvantaged pupils who had been FSM for 90 per cent or more of their time in school is greater than the national proportion (around a fifth), suggesting that these schools are also more likely to face problems of *persistent* disadvantage.
2. It has also been claimed that the inaccessibility of some coastal areas is important, so we further divide schools between those that are 'isolated', with fewer than four other schools within 2.75km, and others. This may be pertinent to the ability of schools to collaborate, teacher retention, the relevance of choice and competition; or wider factors associated with sparse settlements, the parents they attract, employment opportunities and pupil aspirations.

As Figures 4.15 and 4.16 show, coastal schools are more likely to be isolated and disadvantaged (group C), but only by 6 percentage points in both phases. In each of these categories of schools and overall, coastal schools have a similar proportion of disadvantaged pupils. The most noticeable difference is that they have a lower proportion of EAL pupils – 5 per cent compared with 16 per cent elsewhere for Key Stage 4, and 6 per cent compared with 20 per cent for Key Stage 2.

**Figure 4.15: Characteristics of coastal and other secondary schools (Key Stage 4)**

School classification		Percentage of coastal/ non-coastal schools	Pupil Premium eligible	EAL
All	Coastal	100%	28%	5%
	Non-coastal	100%	27%	16%
A. Moderate/low disadvantage and not isolated	Coastal	68%	22%	4%
	Non-coastal	70%	19%	10%
B. High disadvantage and not isolated	Coastal	18%	47%	8%
	Non-coastal	22%	50%	40%
C. High disadvantage and isolated	Coastal	14%	42%	4%
	Non-coastal	8%	43%	14%

**Figure 4.16: Characteristics of coastal and other secondary schools (Key Stage 2)**

School classification		Percentage of coastal/ non-coastal schools	Pupil Premium eligible	EAL
All	Coastal	100%	33%	6%
	Non-coastal	100%	31%	20%
A. Moderate/low disadvantage and not isolated	Coastal	65%	22%	5%
	Non-coastal	71%	20%	15%
B. High disadvantage and not isolated	Coastal	23%	57%	10%
	Non-coastal	23%	55%	38%
C. High disadvantage and isolated	Coastal	12%	53%	6%
	Non-coastal	6%	50%	10%



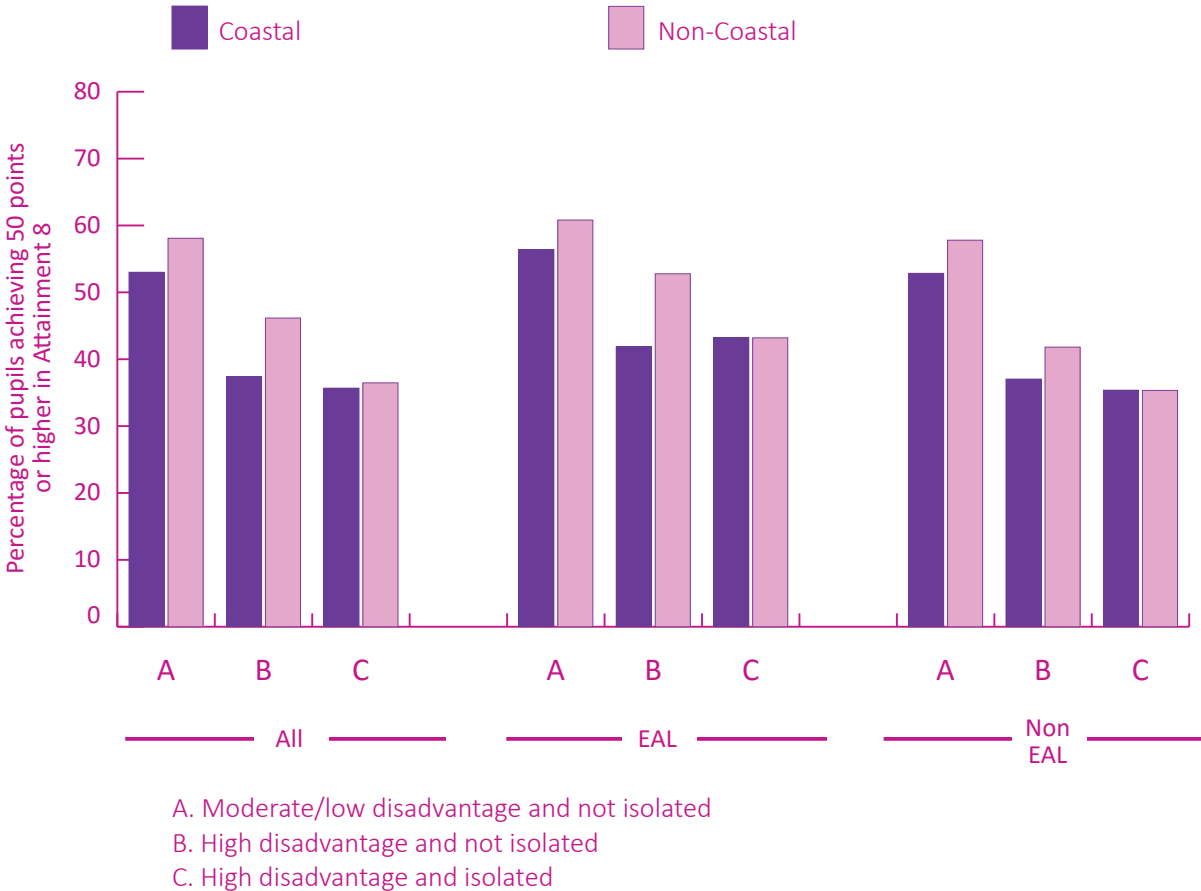
Figures 4.17 and 4.18 compare attainment and progress in coastal and other schools within these categories, separately for all pupils and then by EAL status.

In non-coastal areas, on average pupils in disadvantaged and isolated schools make around 0.4 of a GCSE grade’s less progress and the proportion achieving at least 50 points is 22 percentage points lower compared to category A schools. The fact that a bigger proportion of coastal schools are in this category might therefore have a small impact on outcomes even if they were otherwise identical to other schools.

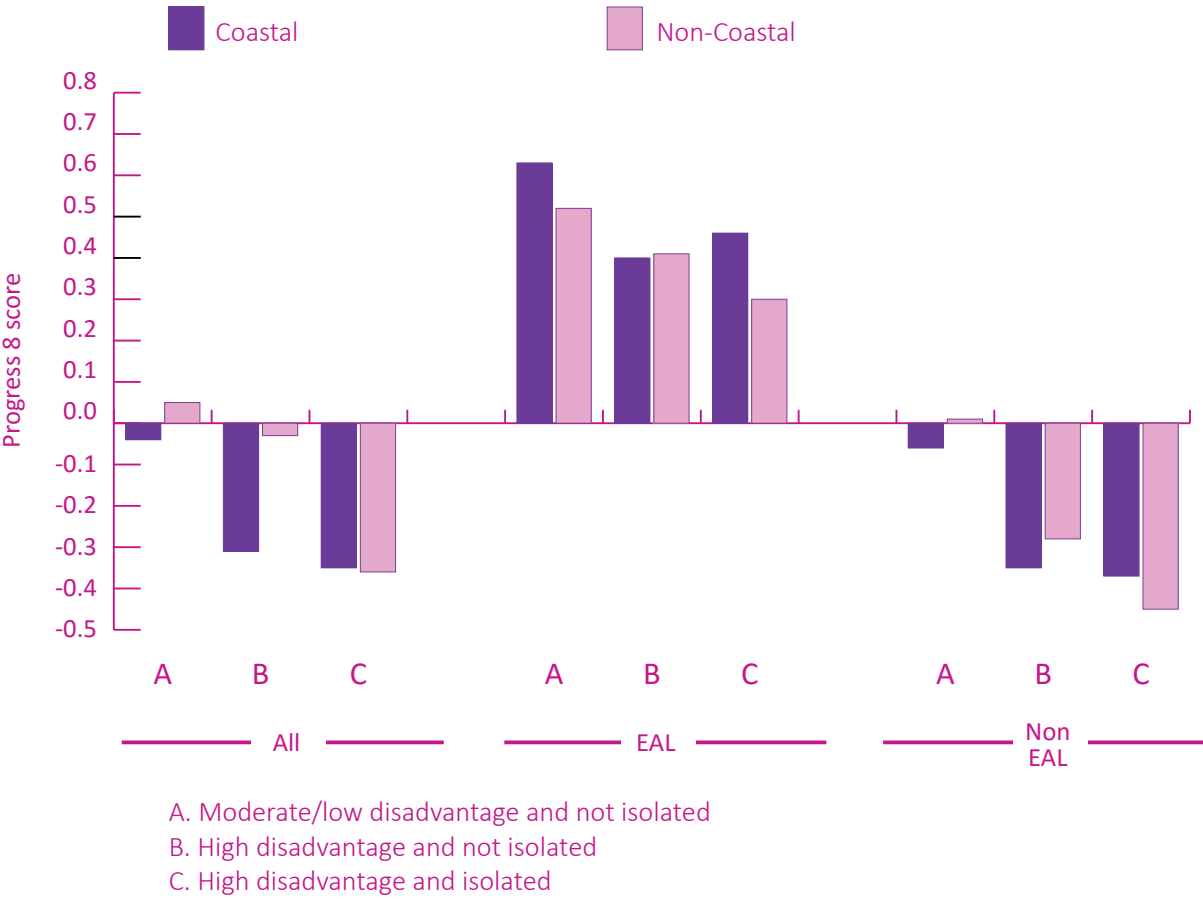
There are still some differences in attainment at Key Stage 4 when comparing across subgroups of pupils and schools, particularly for EAL pupils in non-isolated disadvantaged schools – who have a difference in the proportion achieving 50 points of 11 percentage points (Figure 4.17). The picture is more mixed when looking at progress and some of the differences are small. For instance:

- : There is a gap between coastal and other schools of 0.09 of a GCSE grade’s progress for schools that are less disadvantaged and not isolated;
- : There is a gap between coastal and non-coastal schools of 0.28 for disadvantaged but not isolated schools; but
- : For EAL pupils in any type of school, coastal schools appear to do as well or better than non-coastal schools.

**Figure 4.17: Key Stage 4 attainment in coastal and other schools, 2015**



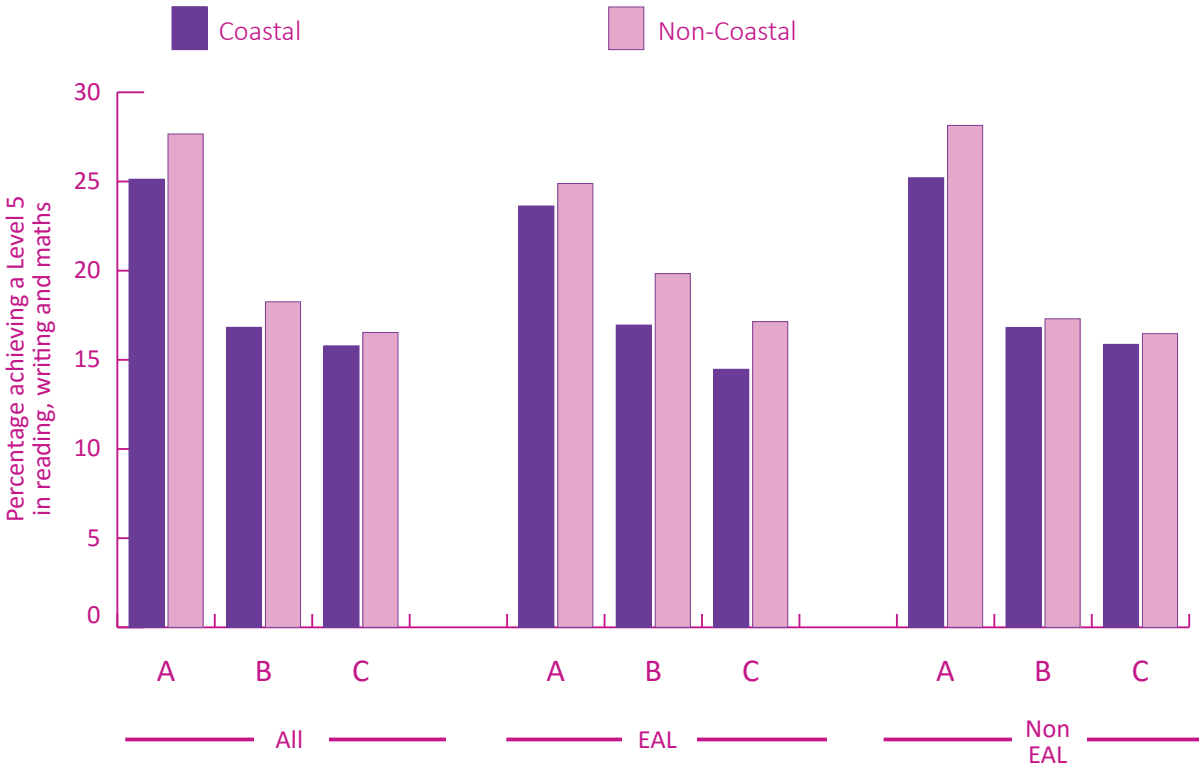
**Figure 4.18: Key Stage 4 progress in coastal and other schools, 2015**



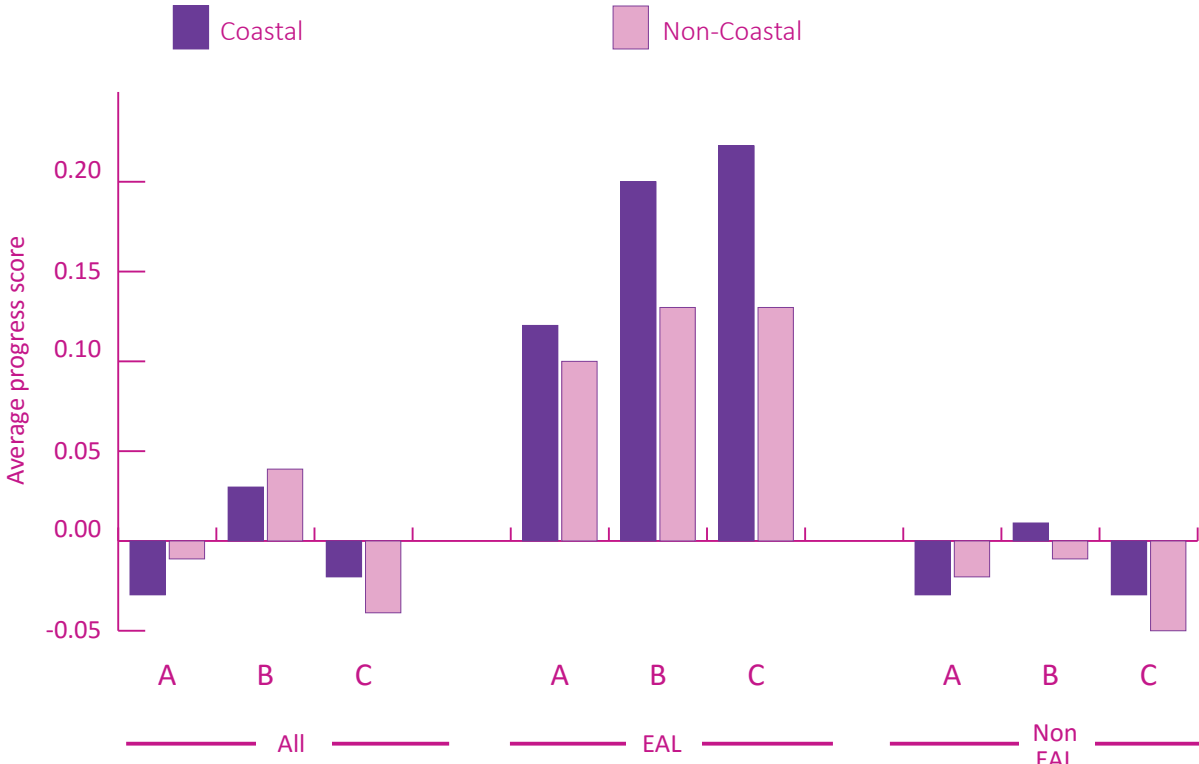
Turning to Key Stage 2 results in Figures 4.19 and 4.20, attainment is slightly higher outside of coastal areas in all sub-categories but again there are mixed results and generally smaller impacts for progress:

- : Less disadvantaged, non-isolated schools that are outside coastal areas have 3 percentage points higher Level 5 attainment rates and 0.02 National Curriculum Levels’ better progress than those in coastal areas; but
- : EAL students in long-term disadvantaged and isolated schools have 0.09 Levels’ better progress in coastal areas compared to those in similar schools elsewhere; and
- : Non-EAL pupils who are in disadvantaged schools, whether isolated or not, have slightly better progress in coastal areas than those in such schools elsewhere.

**Figure 4.19: Key Stage 2 attainment in coastal and other schools, 2015**



**Figure 4.20: Key Stage 2 progress in coastal and other schools, 2015**



Overall, this confirms that all schools, coastal or otherwise, in deprived areas are likely to face challenges in improving attainment:

- : Coastal schools have similar proportions of disadvantaged pupils compared with others, but they have lower proportions that are EAL;
- : Taking into account school isolation and disadvantage, as well as pupil EAL and FSM status, **there is only a modest impact of being a coastal school on attainment**, and it is no stronger than the differences seen in regional comparisons; and
- : The picture is mixed for progress and, when comparing disadvantaged and isolated schools across the country, coastal schools appear no less effective.

## Conclusion

This analysis suggests that some regions have improved performance more than others, with London and the North showing relatively large gains. In the North especially, but in other regions too, this growth has been relatively strong for pupils claiming free school meals, and this includes white pupils when they are looked at separately. In both Key Stages 2 and 4, schools with high proportions of disadvantaged pupils have seen faster growth in attainment and progress.

Whilst these differences have generally not dramatically narrowed regional differences in attainment, the biggest change has been London's emergence as the best performer for attainment and progress. This has been driven by raising performance for all pupils, rather than heavily concentrating improvements on the disadvantaged. In fact, the North has achieved the biggest improvements for disadvantaged pupils who are not EAL.

The wider South and the East of England have made relatively small strides in attainment and progress overall, and have also not increased progress of disadvantaged pupils as strongly – with some exceptions for EAL pupils. This could have been due to their higher starting points, but the fact that London has accelerated ahead suggests that these regions could have made greater gains.

Our findings that coastal schools appear to face similar challenges in terms of pupil outcomes as those in other isolated areas suggest that, in order to generate new insights, future analysis should take into account wider data on local economic context and demographics not available in the National Pupil Database. The relevance of isolation in a more general sense means that rural and urban distinctions could be just as important and should be explored before pursuing more detailed work to track coastal schools specifically.

# Conclusion

There is still a long way to go before the education system performs at what we believe is a world-class standard.

We find deep-rooted and complex challenges that the system must address if it is going to perform at a world-class standard. Supporting the long-term disadvantaged pupils to catch up with their peers is proving particularly difficult – whether in the North, the South, coastal areas or, indeed, London. The differences in regional performance mean that disadvantaged pupils can fall behind their peers by almost an extra half a year depending on where they go to school.

Over the coming year, CentreForum will be expanding its research in these and other areas.

# Technical annex:

## Methodology for trends in performance

Chapter 4 evaluates whether the progress of pupils has changed over a period of time – combining 2005 and 2006 results to give a base year and 2014 and 2015 results for the most recent time period.

The analysis excludes special schools and Pupil Referral Units. It is restricted to state-funded mainstream schools that have results in the base year and latest period. It therefore removes from the sample schools that have closed over that period or new provision. If the impact of such churn is different in different parts of the country this might bias the analysis. The estimates include schools which have changed status across the period, including converter and sponsored academies, but exclude schools that are the result of an amalgamation.

We focus on attainment at, and progress across, Key Stages 2 and 4. The attainment measure used at Key Stage 4 differs from those used elsewhere in the report, and is simply the average grade across all subjects taken converted into a points score (8 points for an A\* down to 1 point for a G). Attainment at Key Stage 2 and Key Stage 1 is measured by average National Curriculum levels calculated across reading, writing and mathematics for each pupil.

Unless otherwise stated, the analysis does not make any adjustment for changes in the characteristics of pupils in each region. Some of the trends highlighted could be a result of such changes. For example, a high-attaining ethnic group becoming more prominent in one part of the country could explain some of any improvement there, and changes in the relative levels of economic disadvantage among those claiming free school meals could explain changes in regional patterns.

As with earlier chapters, our measures feature an adjustment to apply retrospectively changes in rules for multiple GCSE entry, but it is not possible using this data to deal with other potential sources of grade inflation. As such, the analysis serves to highlight variation in trends and the country's key emerging strengths and weaknesses, rather than providing a new estimate of the precise levels of improvement in either attainment or progress. A more reliable estimate of the levels of overall improvement across the country would require detailed analysis using independent benchmarks such as PISA data.

There are potentially two components to improved performance in a secondary school.

- i. Pupils having higher attainment on entry – i.e. pupils in primary schools are achieving better outcomes which are setting them up for better performance later on.
- ii. Pupils are making improved progress during secondary school.

To estimate changes in progress, we group 2005/06 pupils by their prior attainment in National Curriculum levels. For each distinct prior attainment value, we take the average outcome value, and then apply the implied quantities of progress estimated from this first time period (Key Stage 2 2000 and 2001 pupils reaching Key Stage 4 in 2005 and 2006) to pupils in the later time period (Key Stage 2 2009 and 2010 pupils reaching Key Stage 4 in 2014 and 2015) to derive their expected outcomes. Then, for each pupil, we calculate the difference between this and their actual outcome to produce averages for how much progress has improved.

The calculation involves the following steps (taking progress from Key Stage 2 to Key Stage 4 as an example).

- i. For the first period (2005/06) we group pupils based on their prior attainment (Key Stage 2 data in 2000 and 2001). This is done by calculating their average National Curriculum level and then rounding to 1 decimal point (so values go 4.0, 4.1, 4.2, for example).
- ii. For each prior attainment value, we calculate the average outcome (in our case the average GCSE grade using 8 points for an A\* down to 1 point for a G).
- iii. Then, we apply the expected outcomes from (ii) to the pupils in later years (2014 and 2015 combined in this report). For each pupil:

- a. Calculate their prior-attainment band (e.g. 4.5)
  - b. Calculate, from (2), what the average Key Stage 4 attainment for pupils with this Key Stage 2 score would have been in 2005/06.
  - c. Calculate the difference between this figure and their actual Key Stage 4 outcome.
  - d. This gives, for each pupil, the difference between what they attained (in 2014/2015) and what would have been expected if they had made the same progress as that made by similar pupils in 2005/06.
- iv. We average each pupil's score on this measure. This shows by how much pupil progress has improved.

The table below illustrates the calculation for an 'example' school which happens to have 4 pupils in both sets of years and they have the same range of Key Stage 2 attainment values in each year.

- : 'National (05/06)' shows the national average Key Stage 4 score for each Key Stage 2 band in 2005/06.
- : 'Key Stage 2' shows each pupil's Key Stage 2 Band.
- : 'School (05/06)' shows their average GCSE score (5.0 would represent an average of grade C across all subject taken by that pupil) in 2005/06.
- : 'School (14/15)' shows what 4 students with the same prior attainment values attained in 2014/15. Each pupil has attained half a grade higher than that achieved by similar pupils in 2005/06 (this is the concept of 'value added').
- : 'School VA (05/06)' shows the difference between each pupil's attainment and the national average for pupils with the same Key Stage 2 attainment.
- : 'School VA (14/15)' shows the difference between each pupil's attainment in 2014/15 and the national average for pupils with the same Key Stage 2 attainment in 2005/06.

Key Stage 2	National (05/06)	School (05/06)	School VA (05/06)	School (14/15)	School VA (2014/15)
3.5	2.43	2.5	0.07	3.0	0.57
4.0	3.30	3.5	0.20	4.0	0.70
4.5	4.26	4.5	0.24	5.0	0.74
5.0	5.43	5.5	0.07	6.0	0.57

	05/06	14/15	Improvement
Average School VA	0.14	0.64	0.50

Overall, the school's value added has increased from 0.14 to 0.64 – and increase of 0.5 – half of a GCSE grade's progress.

In our analysis we apply this calculation to compare rates of improvement for different areas and regions rather than for individual schools, but the principle is the same.