Research Report DFE-RR034

Achievement of Children in the Early Years Foundation Stage Profile

Schools Analysis and Research Division

Department for Education

This research report was written before the new UK Government took office on 11 May 2010. As a result the content may not reflect current Government policy and may make reference to the Department for Children, Schools and Families (DCSF) which has now been replaced by the Department for Education (DFE).

The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Education

Contents

1. Introduction

Changes from Version 1

This is a revised version of the *Achievement of Children in the Early Years Foundation Stage Profile* topic note which was published on 30th September 2010.

The changes are as follows:

- A correction has been made to chart 6.4 on page 65 to the proportion of children achieving level 2a and 2c.
- Consequently, the commentary about the chart on page 64 has been amended to reflect the correction.
- In addition, the comments in the summary sections on page 57 and page 76 for chapter 6 which refers to how the maths EYFS to KS1 transitions pattern differ to that of writing and reading has also been changed.

1.1 Background

Data on children's achievement by the end of the Early Years Foundation Stage (EYFS), covering all funded children in England, have been collected and analysed by DfE[1] for the years 2007-2009. These analyses provide information about what children know and can do by the end of the school year in which they turn five.

The data contain individual scores for the thirteen summary scales that make up the EYFS profile. The scale scores are summed up from individual scale points (descriptors of what children can do), with the assessments made by practitioners based on their accumulated observations and knowledge of the child.

Two key indicators are used throughout the paper; these are a Good Level of Development, which measures performance against a threshold standard, and the Early Years Achievement Gap, which summarises the degree of spread, or inequality of performance between the highest and lowest achieving children.

Findings are presented covering the following areas of analysis:

- The proportion of children achieving a Good Level of Development (national performance), and the size of the Achievement Gap (inequality), as three year trends.

[1] The Department for Education (DfE) was formerly known as the Department for Children, Schools and Families (DCSF).

- Progress by Local Authorities in increasing performance and shrinking the Achievement Gap.
- Characteristics of children with lower EYFS achievement.
- Individual Scale Point Achievement – what children know and can do at the end of the EYFS.
- Subsequent achievement at Key Stages 1 and 2 – how much EYFSP achievement tells us.

1.2 The Early Years Foundation Stage Profile (EYFS Profile)

The Early Years Foundation Stage (EYFS) is a framework that was published in 2007, and became statutory in 2008. The framework sets standards for development, learning and care of children from birth to five years old. A key component of this framework was the Foundation Stage Profile, an observational based assessment which sums up and describes each child's development and learning achievements at the end of the EYFS when they turn five. This was then renamed to the Early Years Foundation Stage Profile (EYFS Profile) from September 2008.

A review of the entire EYFS framework was announced on the 6th of July 2010 and this review is due to report back in the spring of 2011. Any proposed changes will then be implemented from September 2012.

1.2.1 The Thirteen EYFS Profile Assessment scales

The EYFS profile records each child's achievements at the end of the EYFS in six areas of learning and development, namely:

- personal, social and emotional development (PSE)
- communication, language and literacy (CLL)
- problem solving, reasoning and numeracy (PSRN)[2]
- knowledge and understanding of the world (KUW)
- physical development (PD)
- creative development. (CD)

Table 1.1 maps the thirteen assessment scales to the six areas of learning and development under which they are nested: three scales under personal, social and emotional development; four under communication, language and literacy; three under problem solving, reasoning and numeracy; and three further areas which are not subdivided and constitute one scale each.

Table 1.1 Mapping of the Thirteen EYFS Profile Assessment scales

[2] This was formerly referred to as Mathematical Development

Areas of Learning	Assessment scales	Assessment Scale Code
Personal, Social and Emotional Development	Dispositions and Attitudes	PSE:DA
	Social Development	PSE:SD
	Emotional Development	PSE:ED
Communication, Language and Literacy	Language for Communication and Thinking	CLL:LCT
	Linking Sounds and Letters	CLL:LSL
	Reading	CLL:R
	Writing	CLL:W
Problem Solving, Reasoning and Numeracy	Numbers as Label for Counting	PSRN:NLC
	Calculating	PSRN:C
	Solids, Shapes and Measures	PSRN:SSM
Knowledge and Understanding of the World	Knowledge and Understanding of the World	KUW
Physical Development	Physical Development	PD
Creative Development	Creative Development	CD

These thirteen assessment scales, which were derived from the early learning goals[3], each have nine scale points that capture and describe children's achievement at the end of the EYFS. Further details of the individual scale points which make up the thirteen scales can be found in chapter 5; comprehensive descriptions are available in the EYFS Profile Handbook[4].

Scale points 1-3 describe the achievement of children who are still progressing towards the early learning goals, while scale points 4-8 describe a child's achievement of the early learning goals. Points (4-8) are not hierarchical and a child may achieve them in any order, however, achievement of these must include successful achievement of scale points 1-3 as these are developmental steps leading to the achievement of points 4-8.

Scale point 9 is awarded after *all* of points 1-8 have been achieved, and the child is deemed to be working consistently beyond the early learning goals.

1.3 Quality and Moderation of EYFS Profile data

1.3.1 Data Quality and Collection

2009 was the third year that schools and Early Years settings have been under a statutory obligation to provide full data for every individual child in respect of the 13 summary scales to their LAs. Before 2007, LAs were only required to submit a 10% sample (consisting of those children born on the 5th, 15th, and 25th of each month) of their children's data.

According to the 2009 EYFS Profile Statistical First Release, the EYFS Profile data for 2009 compares well to previous years and is of a good quality. The data are collected for all children who are aged 5 in maintained schools and those who are *funded* in private, voluntary and independent Early Years settings. The data is made available in the form of summary scale points for each of the 13 assessment scales and the overall EYFS Profile score.

[3] The early learning goals are set of statutory expectations for most children to reach by the end of the EYFS, details of which are available on the following webpage: http://nationalstrategies.standards.dcsf.gov.uk/eyfs/site/requirements/learning/goals.htm
[4] http://nationalstrategies.standards.dcsf.gov.uk/node/113520

Individual Scale Points (ISP) data detailing which points a child has achieved in each scale are submitted by schools and Early Years' settings on a voluntary basis. In 2009, the data were provided for 48% of children, up by 6 percentage points from 2008, and were found to be nationally representative. However, these data are currently deemed to be "Experimental Statistics" as they are still being evaluated and remain subject to further testing in terms of volatility and ability to meet customer needs[5].

1.3.2 Moderation

The Qualifications and Curriculum Development Agency QCDA has been responsible for the external moderation of LAs' EYFS Profile data since 2003 when sample collection of EYFS data began. Moderation was set in place on a continuous basis to assess the systems, tools, and training that LAs have in place for collecting EYFS Profile results. This is to ensure that practitioners adhere to best practice and are consistent in their implementation of the EYFS Profile assessments.

The results of the agency's monitoring of the data in 2009 indicate that LAs' moderation processes are more robust than in previous years, and deliver more reliable national profile data. This is reflected in the downturn in the percentage of children achieving at the higher end of the scales (8 or 9 points) seen between 2006 and 2008. A further reduction in 2009 in the percentage of high achievers suggests that the reporting system is still becoming embedded and this should be taken into account when making year on year comparisons.

1.4 Measures of Achievement

For the most part, the topic note focuses on two measures at the national and local authority levels:

- the proportion of children reaching a *Good Level of Development*; and
- the *Achievement Gap* between the lowest achievers and the rest

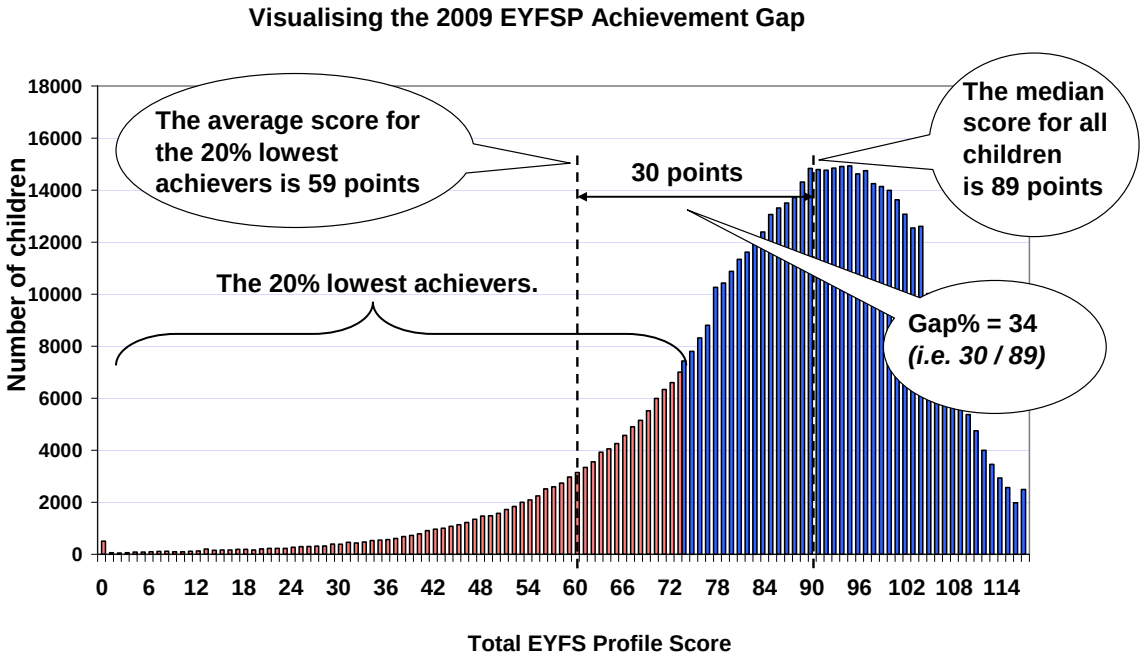
A child is said to have reached a Good Level of Development when he/she achieves a score of 78 points across the 13 assessment scales with at least 6 or more points in the communication, language and literacy and personal, social and emotional development scales.

Chart 1.1 shows the distribution of children based on their total point scores. The Achievement Gap is calculated as the difference between the median score for all children (89 points) and the mean score for the lowest 20% of

[5] Experimental Statistical Release: Individual Scale Point results for the Early Years Foundation Stage Profile (EYFS Profile) 2008/09
http://www.dcsf.gov.uk/cgi-bin/rsgateway/search.pl?cat=1&subcat=1_1&q1=Search

achievers (59 points), expressed as a percentage of the median score for all children.

Chart 1.1 – Distribution of EYFS Profile Total Point Scores.



1.5 Overview of Chapter Contents

Chapter 2 presents analysis of EYFS achievement, beginning with national trends in performance and the Achievement Gap for 2007-2009, then examining the 2009 data in greater detail at Local Authority level. The interrelationships between performance, inequality and area deprivation are explored.

Chapter 3 switches the perspective from current performance to progress over the years 2007-2009. Local Authority variation and how this relates to prior attainment and area deprivation are considered, covering both performance and inequality. The Statistical Neighbours model is used to investigate how further observable factors can be used to uncover differences in relative progress for EYFS achievement.

Chapter 4 identifies some child characteristics that are disproportionately prevalent amongst the lowest achieving children at EYFS. Statistical analysis is used to isolate the association of each characteristic to levels of achievement. The overlap between low achievement and disadvantage is then probed using area deprivation data in combination with information from the EYFS profile.

Chapter 5 presents the pattern of achievement for individual scale points within the assessment scales to highlight what children know and can do at

the end of the EYFS. This is followed by analysis of differences between boys and girls, and between the lowest achieving children and the rest.

Chapter 6 uses matched attainment records to examine what achievement at the end of the EYFS means for children's outcomes at Key Stages 1 and 2. Transitions from EYFS to individual Key Stage levels are reported, and considered in the light of correlations between the separate EYFS scales. Finally, a contextualised value-added model is used to determine how much variation in Key Stage 1 achievement is explained by prior attainment at EYFS.

2. Performance and Inequality at the Local Level - Analysis of EYFS Profile Achievement in 2009

Summary

- Nationally, there has been a consistent increase in performance on the Early Years Foundation Stage Profile; the proportion of five year olds reaching a Good Level of Development has increased from 45% in 2006 to 52% in 2009; LA results in 2009 ranged from 35% - 60%.
- The Achievement Gap, which measures inequality in achievement on the EYFSP, has narrowed from 38% in 2006 to 34% in 2009, with LA results for 2009 ranging from 25% - 40%.
- Of children in the highest performing fifth of LAs, 60% achieved a Good Level of Development; children in the lowest performing fifth of LAs are only half as likely to achieve the standard, averaging 30%.
- In the fifth of LAs with the most equal achievement, the average Achievement Gap was 30%; the fifth with the most unequal achievement has a larger gap of 37%.
- EYFS achievement, and inequality in that achievement, are both spread unevenly across England; the South West contains high proportions of LAs with good performance and of LAs with low inequality between the lowest scoring children and their peers.
- Local Authorities with higher area deprivation (IDACI) tend to have marginally lower rates of achievement of a Good Level of Development; approximately 14% of the variation in performance across LAs is explained by area deprivation.
- Local Authorities with higher area deprivation (IDACI) also tend to have slightly larger Achievement Gaps; approximately 11% of the variation in achievement inequality across LAs is explained by area deprivation.

2.1 Chapter Introduction

This chapter presents analysis of two key EYFS Profile indicators, Good Level of Development - a threshold performance measure, and the Early Years Achievement Gap - a measure of achievement inequality, at Local Authority level. See section 1.4 for details of how these indicators are constructed.

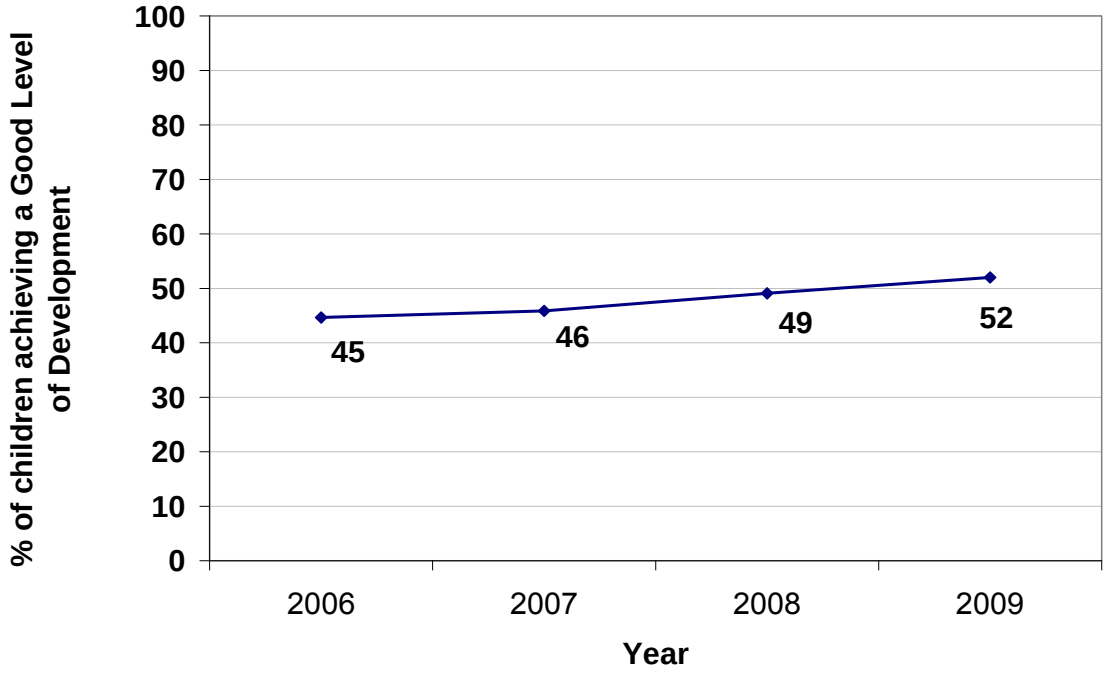
To introduce the indicators, sections 2.2 and 2.3 present the national Good Level of Development and Achievement Gap trends respectively, and summarise the degree of local variation around the national averages. Section 2.4 then focuses on the highest and lowest performing fifths of LAs, and explores their distribution across the regions of England. Section 2.5 considers the relationship between levels of area deprivation (IDACI) and Good Level of Development and the Achievement Gap.

Analysis of how *child* characteristics relate to Good Level of Development and the Achievement Gap can be found in Chapter 4.

2.2 National Good Level of Development Trend

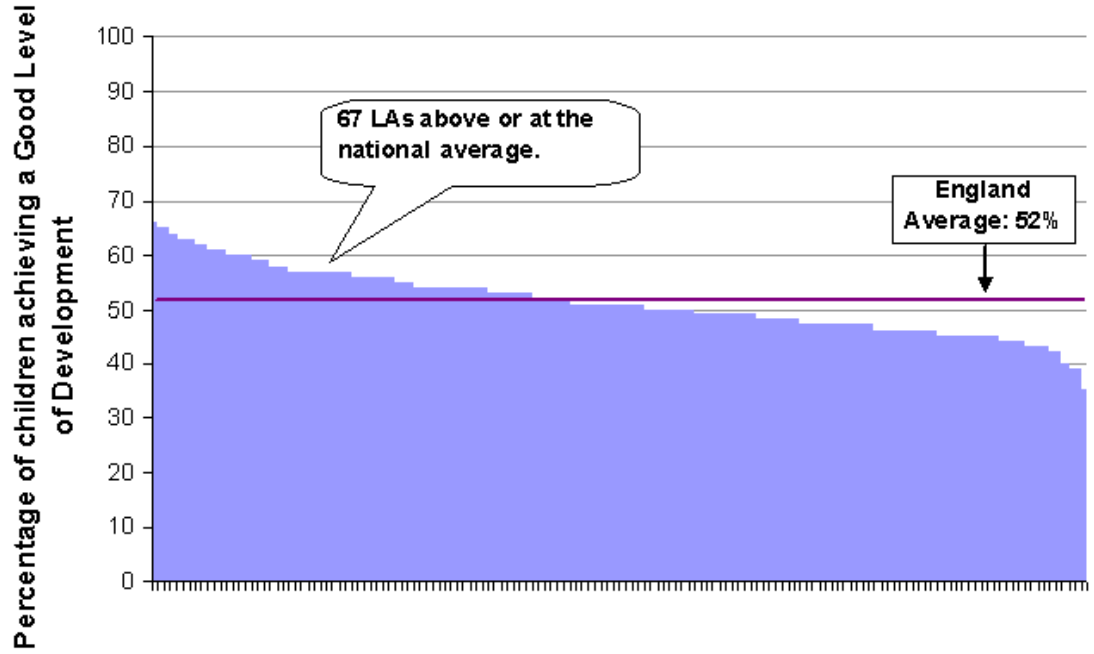
National EYFS performance has increased consistently each year since 2006, with the percentage of children achieving a Good Level of Development rising from 45% in 2006 to 52% by 2009 (see chart 2.1). The yearly improvement averages to 2.3 percentage points over the period.

Chart 2.1 National Good Level of Development Trend for 2006 - 2009



The national average of 52% masks a considerable degree of variation at Local Authority level, with results ranging from 35% to 66% (see chart 2.2).

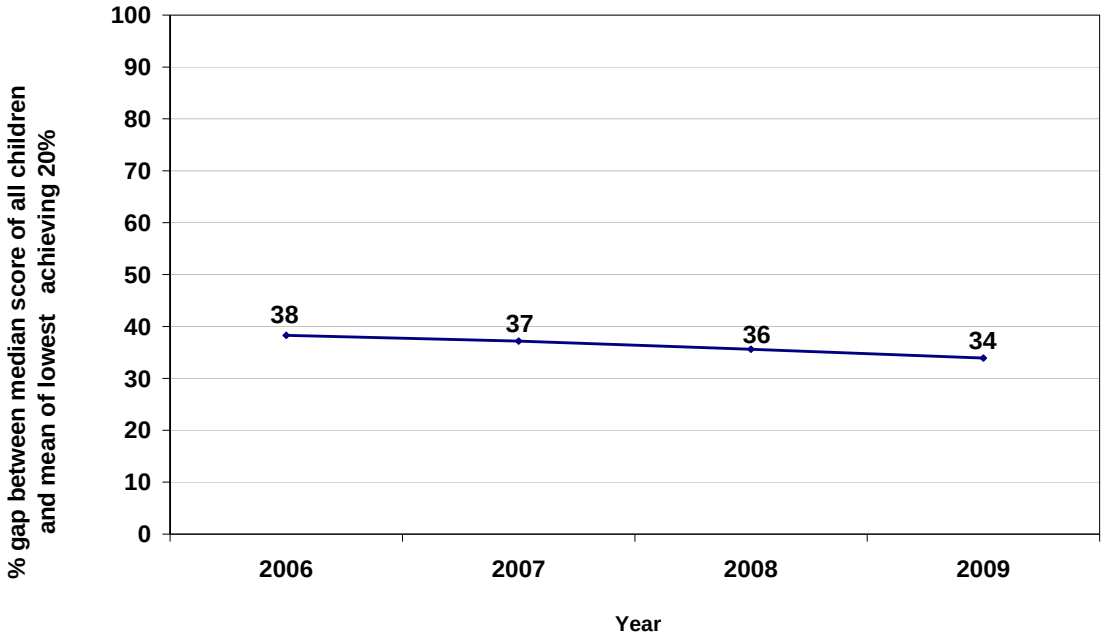
Chart 2.2 – Distribution of EYFS Performance in Local Authorities in 2009



2.3 National Achievement Gap Trend

Inequality in national EYFSP results has decreased consistently in each year since 2006, with the Achievement Gap falling from 38% in 2006 to 34% in 2009 (see chart 2.3). The yearly improvement averages to 1.3 percentage points over the period.

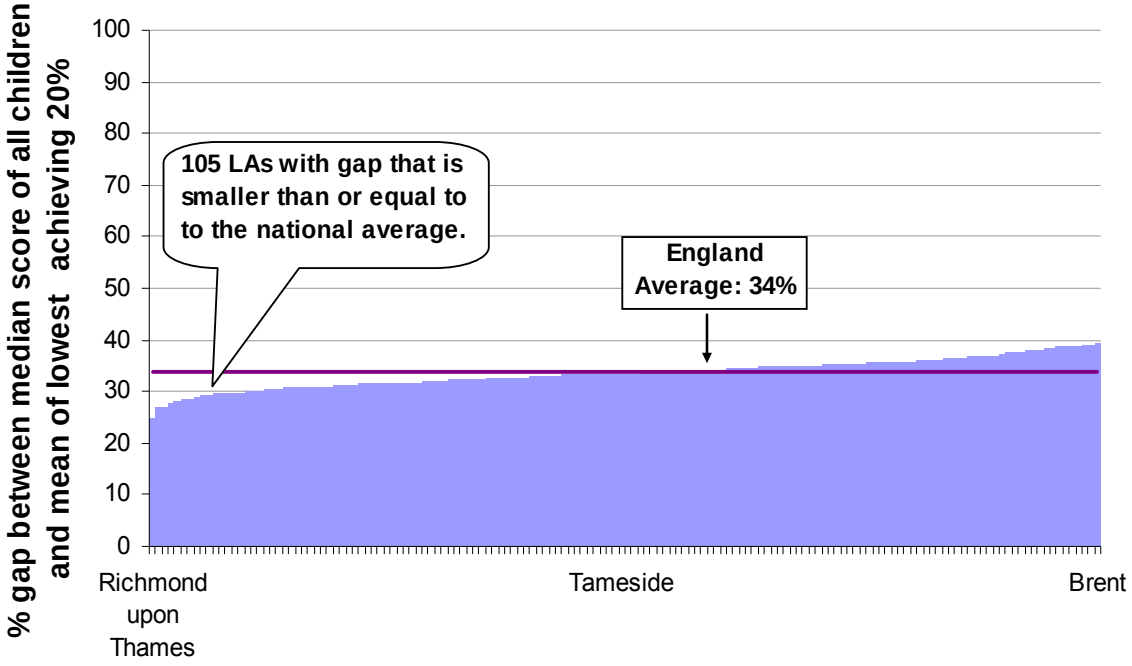
Chart 2.3 Achievement Gap Trend for 2006-2009



Compared with the Good Level of Development measure, there is less Local Authority variation around the national average for the Achievement Gap measure. The gap ranges from 40% to 25% around a national average of

32% (see chart 2.4). Half of the LAs were within +/- 2 percentage points of the national average, and of the range of results, more of the variation is driven by a minority of LAs with more extreme results.

Chart 2.4 Distribution of Achievement Gaps in Local Authorities in 2009



2.4 Snapshot of the Highest and Lowest Fifths of LAs in 2009

This section focuses on the top and bottom fifths of LAs according to performance and inequality, presenting an overview for the Good Level of Development, and Achievement Gap measures (section 2.4.1), and exploring the regional distribution of these subsets of LAs (sections 2.4.2 and 2.4.3).

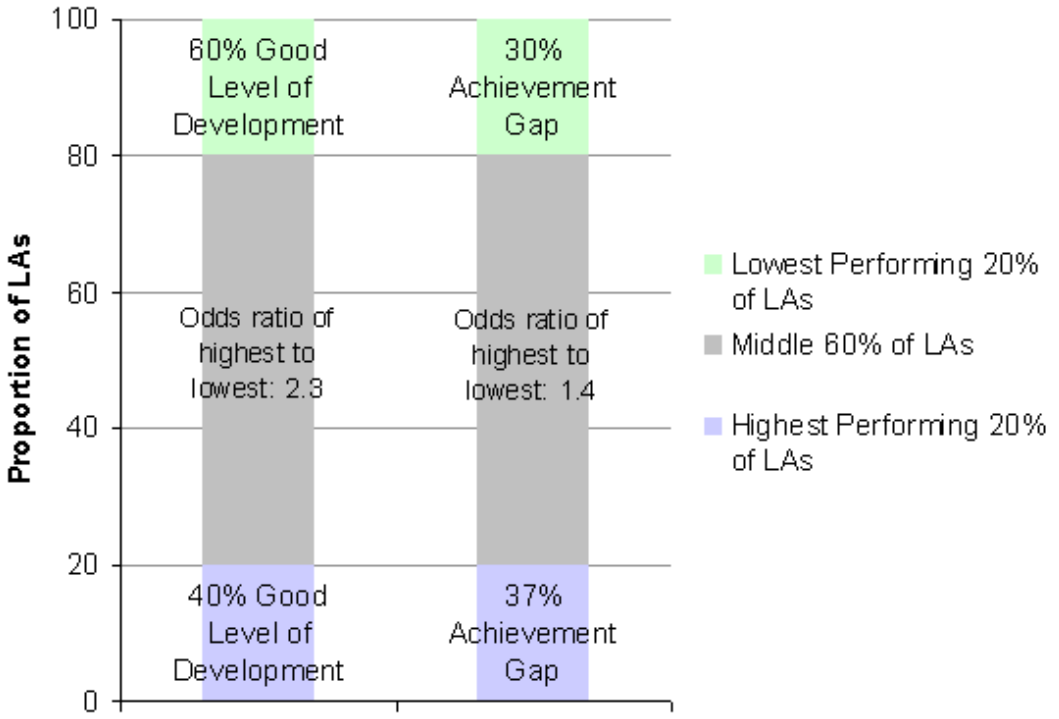
2.4.1 Overview of the Highest and Lowest Fifths of LAs

There is a 20 percentage point gap between the highest and lowest fifths of LAs for the percentage of children achieving a Good Level of Development (see chart 2.5), resulting in an odds ratio for the highest performing LAs to the lowest of 2.3.

The smaller 7 percentage point gap between the highest and lowest fifths of LAs for the Achievement Gap results in an odds ratio (most unequal achievement / least unequal achievement) of 1.4.

These odds ratios enable us to compare the size of the differences even though the two indicators are on different scales; this confirms that there is greater local variation in the percentage of children achieving a Good Level of Development than in the Achievement Gaps.

Chart 2.5 Comparison of Indicators: Highest and Lowest Fifths of LAs



2.4.2 Regional Incidence of Highest & Lowest Performing LAs

Good Level of Development

The largest concentrations of LAs in the highest performing fifth at EYFS are in the South West (47%) and Outer London (37%); the smallest concentrations of LAs in the highest performing fifth are in the South East (5%) and Yorkshire & the Humber (7%).

Turning to the lowest performing fifth of LAs, the largest concentrations are in Inner London (62%) and the West Midlands / East of England (tied 36%); the smallest concentrations are in the South East (again at 5%) and the South West (7%).

Inner London, West Midlands and the South West have over half of their LAs in either the highest or lowest performing fifth of authorities; by contrast, the South East, East Midlands and Yorkshire & the Humber have fewer than 35% of their LAs in either the highest or lowest performing fifth (see chart 2.6a).

Chart 2.6a Incidence of Highest & Lowest Performing LAs in each Region
What % are in the Highest / Lowest Fifth? - Good Level of Development

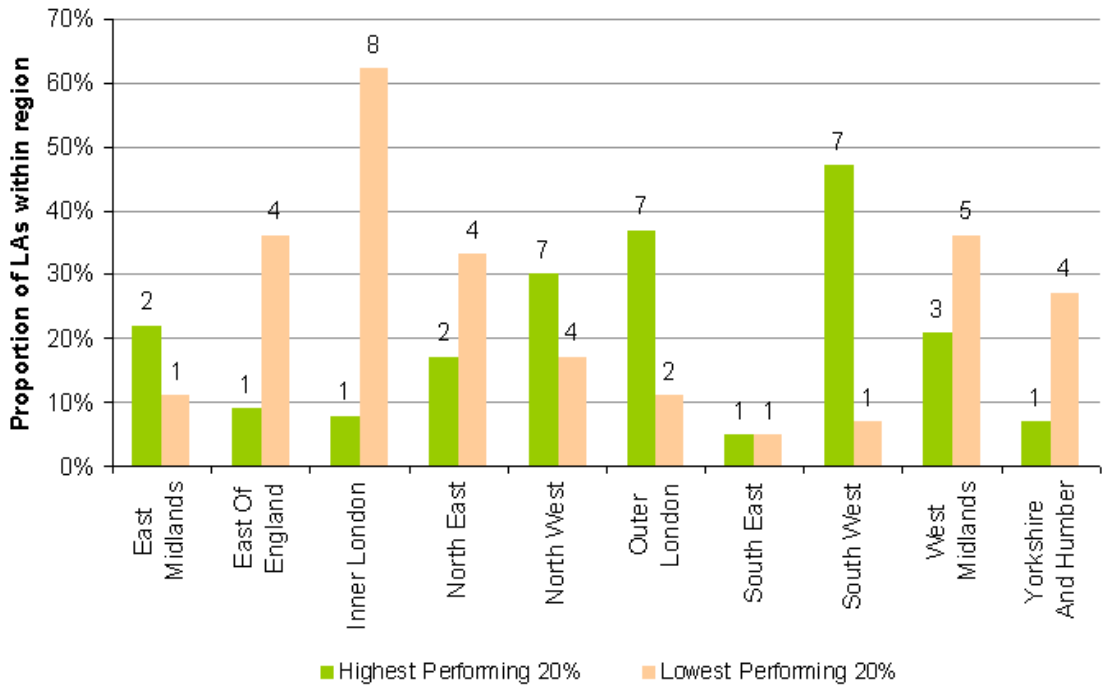
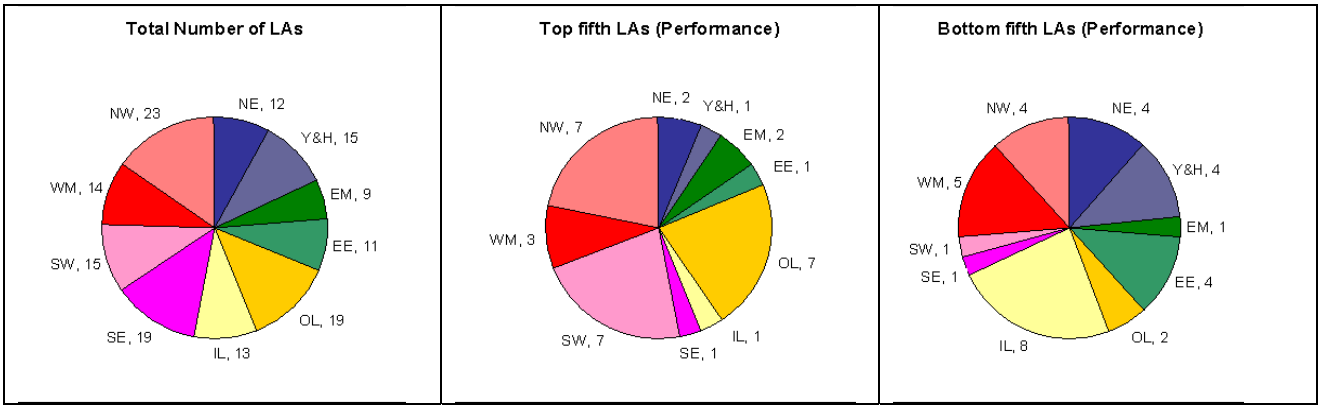


Chart 2.6b Placement of Highest & Lowest Performing LAs across Regions
Where are the Highest / Lowest Fifth? - Good Level of Development



2.4.3 Regional Incidence of Highest & Lowest Performing LAs
Achievement Gap

The highest concentrations of LAs with the most equal achievement at EYFSP (smallest Achievement Gaps) are in the South West (60%) and the South East (37%); the lowest concentrations of LAs with the most equal achievement at EYFSP are in Inner London (0%) and Yorkshire & the Humber (7%).

Turning to the LAs with the most *unequal* achievement (largest Achievement Gaps), the highest concentrations are in the North east (42%) and Inner

London (38%); the lowest concentrations are in the South West (0%) and the South East (5%).

The South West, West Midlands and North East have 50% or more of their LAs in either the fifth with the largest Achievement Gaps, or the fifth with the smallest Achievement Gaps; by contrast, the East Midlands, North West and East of England have fewer than 30% of their LAs in these groups (see chart 2.7a).

Chart 2.7a Incidence of LAs with Most & Least Equal Achievement in each Region
What % are in the Highest / Lowest Fifth? – Achievement Gap

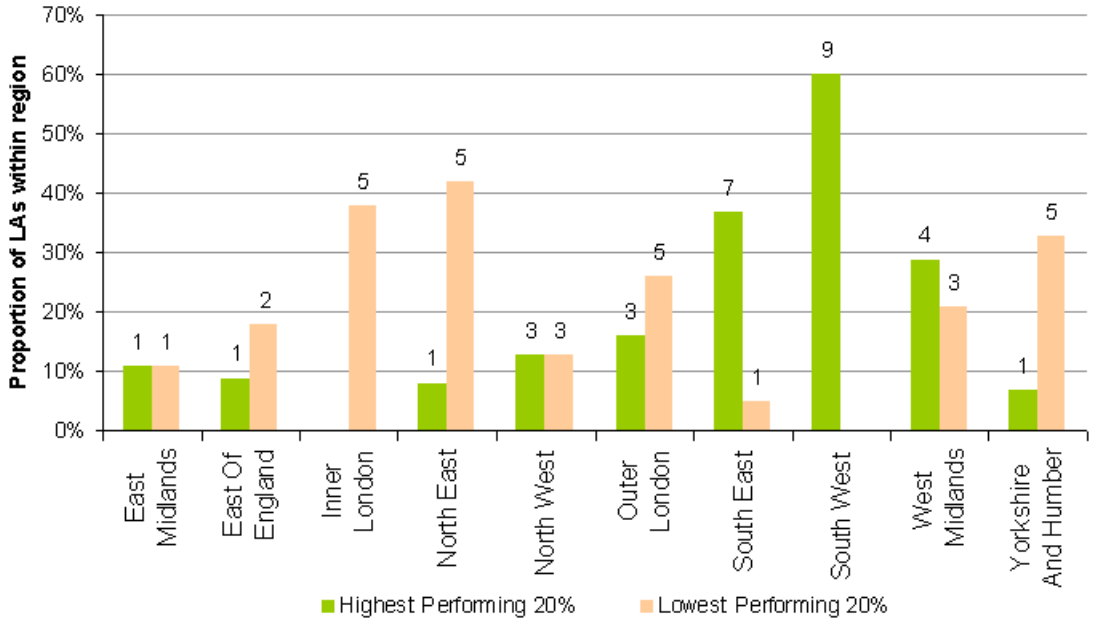
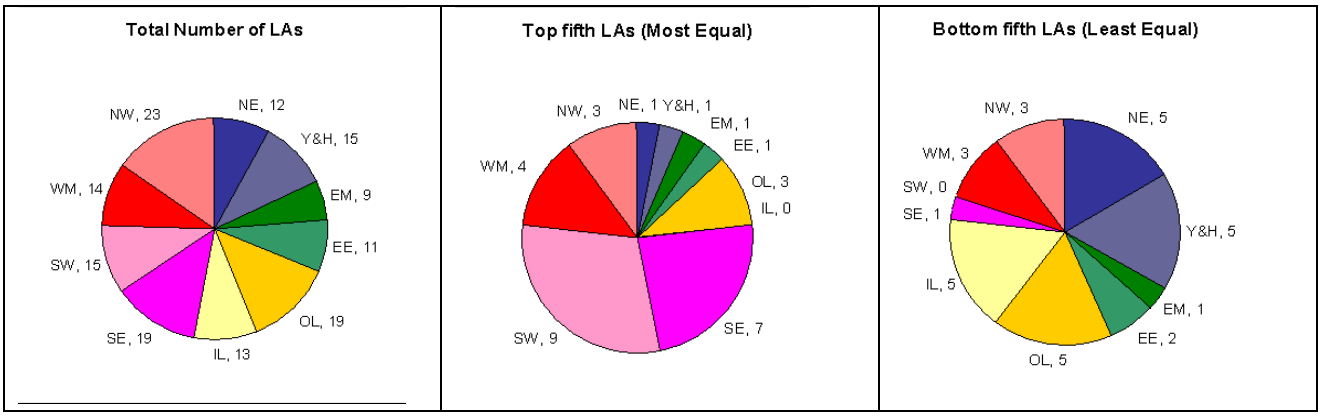


Chart 2.7b Placement of LAs with Most & Least Equal Achievement across Regions
Where are the Highest / Lowest Fifth? - Achievement Gap



2.5 LA Results by Level of Deprivation

This section examines how much Local Authority variation in EYFS performance, and the Achievement Gap, is explained by differences in levels of area deprivation. The measure of deprivation used here is the Income

Deprivation Affecting Children Index (IDACI)[6]. The higher the IDACI score the more deprived the areas are, in which the children live.

Each point in chart 2.8 represents a Local Authority; the vertical position represents the percentage of children achieving a Good Level of Development, while the horizontal position represents the proportion of children living in deprived households. Under a perfect negative correlation where performance was completely explained by the IDACI deprivation measure, the LA points would all form a straight line from the top left to the bottom right of the chart.

A degree of negative correlation between performance and deprivation is found, with approximately 14% of the variation in achievement of a Good Level of Development being explained by IDACI; this is not a strong correlation, but it would be surprising to find a very strong association between performance and any single factor at the LA level; we can conclude that LA performance is related to deprivation, but may not be the most important factor. LAs with higher deprivation have a modest tendency to lower performance at EYFS.

Chart 2.8 Scatter plot of LA Good Level of Development against IDACI

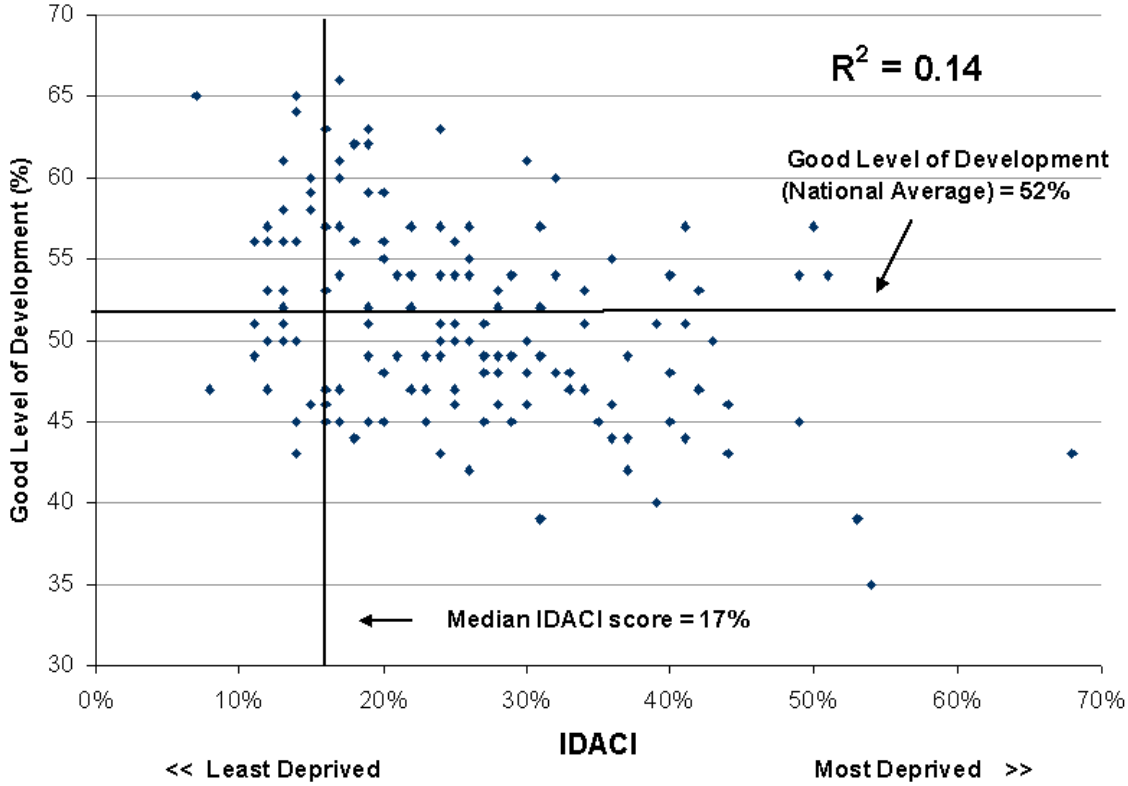
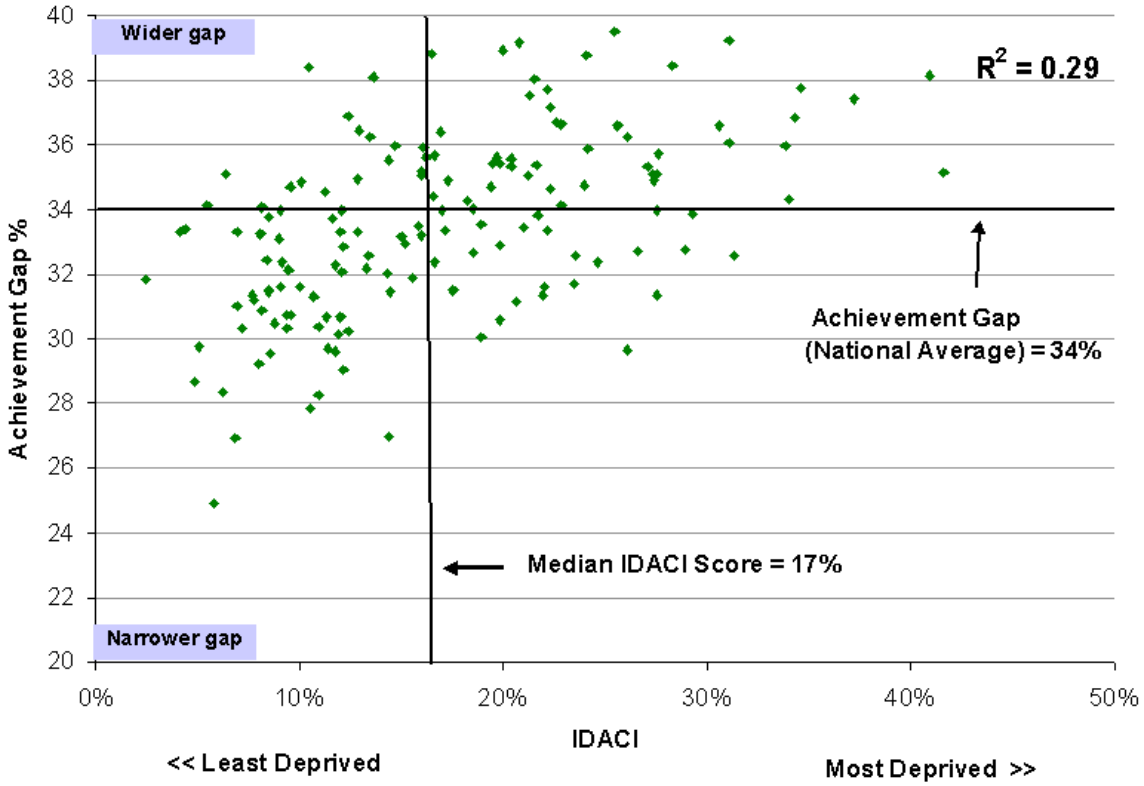


Chart 2.9 depicts the relationship between inequality in EYFS achievement and area deprivation. Under a perfect positive correlation where the variation in the Achievement Gap was completely explained by IDACI deprivation, the LA points would form a straight line from the bottom left to the top right of the

[6] IDACI measures the proportion of children under the age of 16 in an area living in low income households. It ranges from 0.00 to 1.00 with 0.17 being the pupil level national median score.

chart. A stronger (and positive) correlation is found than was the case for EYFSP performance, with 29% of the variation in the percentage Achievement Gaps explained by IDACI.

Chart 2.9 Scatter plot of LA Achievement Gaps against IDACI



However the way in which the Achievement Gap is derived (see Section 1.4), means that LAs will necessarily have a smaller percentage Achievement Gap if their performance is higher. This is demonstrated in Table 2.2, which presents two hypothetical LAs with the same difference in median EYFS Profile scores. While the difference between the median scores is the same in both cases, LA2 has a larger Achievement Gap because its median and mean results are lower.

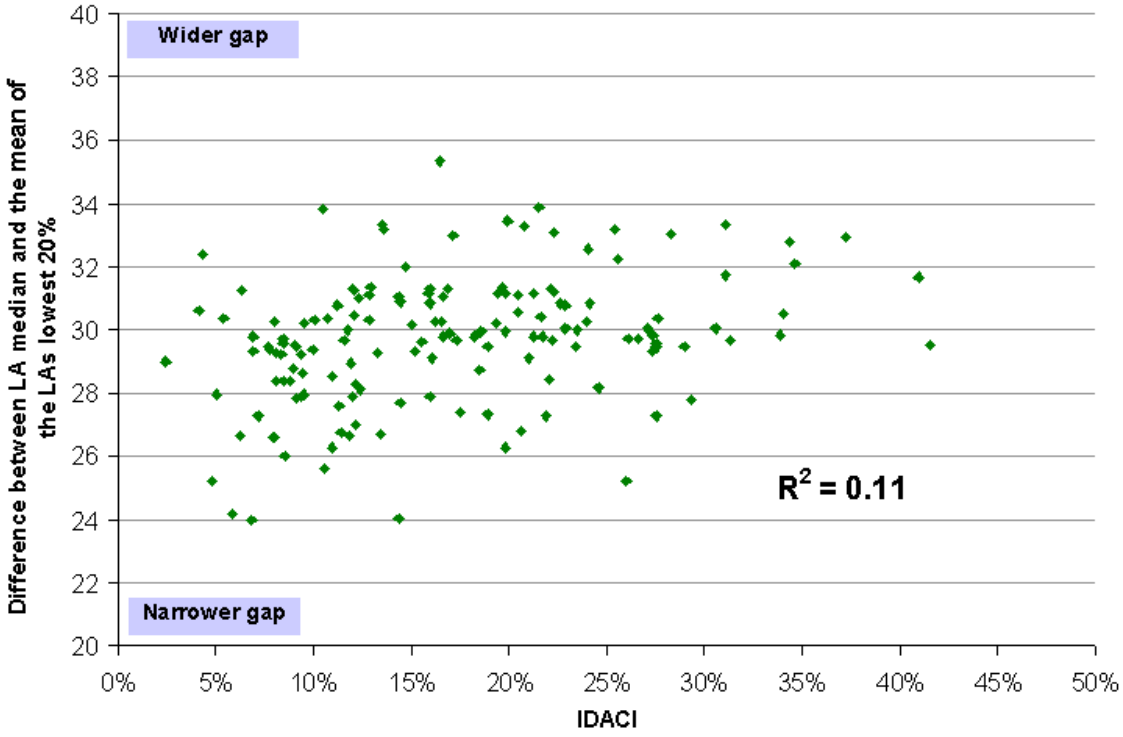
Table 2.2 How the Achievement Gap measure places an emphasis on higher results

	Median	Mean of Lowest 20%	Difference (Median –Mean of Lowest20%)	Achievement Gap
LA 1	50	40	10	20%
LA 2	30	20	10	33%

As LAs with higher area deprivation tend to have lower EYFS performance, chart 2.10 now examines the raw profile score difference between the LA median and the mean for the lowest performing 20% of children in that LA, and plots this against the IDACI deprivation score. This provides an alternative measure of inequality that is not biased according to performance level.

After correcting for the bias in chart 2.9, there is still a positive correlation between inequality and IDACI deprivation, but it is smaller than it appeared (and weaker than the association with performance), with approximately 11% of variation in the Achievement Gap explained by IDACI.

Chart 2.10 Scatter plot of LA Achievement Gap Raw Difference against IDACI



3. Progress at the Local Level - Changes in EYFSP Achievement from 2007-2009

Summary

- The majority of Local Authorities (74%) have made progress both by increasing their percentage of children achieving a Good Level of Development, and by narrowing their Achievement Gaps between the lowest achieving children and their peers, between 2007 and 2009.
- On both measures, LAs with better performance in 2007 generally tended to make less progress by 2009; this fits with the general observation that once a high percentage of children have reached an achievement threshold, those remaining tend to be the most difficult to progress.
- Progress in a given LA can be compared with that of other LAs with similar contexts (Statistical Neighbours); the fairest comparisons also account for the starting points of the LAs or use standardised measures of progress.
- Absolute progress on the Good Level of Development measure in LAs ranged from an increase of 25 percentage points, to a decline of 8 percentage points between 2007 and 2009; relative progress using Statistical Neighbour analysis ranged from 17 percentage points more than expected, to 15 percentage points fewer than expected.
- Absolute progress in narrowing the Achievement Gaps in LAs varied from a gap decrease of 10 percentage points, to a gap increase of 5 percentage points between 2007 and 2009. Relative progress in narrowing the gaps using Statistical Neighbour analysis varied from 6 percentage points more than expected, to 8 percentage points less than expected.
- Eleven Local Authorities have lower than average percentages of children achieving a Good Level of Development, larger than average Achievement Gaps, *and* are making less progress on both fronts than their Statistical Neighbours.
- Twenty-three Local Authorities scattered across England have achievement that is average or better, Achievement Gaps that are average sized or smaller, *and* are making more progress than their Statistical Neighbour groups on both fronts.

3.1 Introduction

The previous chapter examined Local Authority EYFSP data for 2009, and identified the highest and lowest performance (Good Level of Development), and the largest and smallest achievement inequalities (the Achievement Gap). This chapter extends the analysis to encompass progress in performance and in reducing inequality of achievement. Changes from 2007 to 2009 are presented to reduce the influence of any unusual “one-off” movements in a particular year.

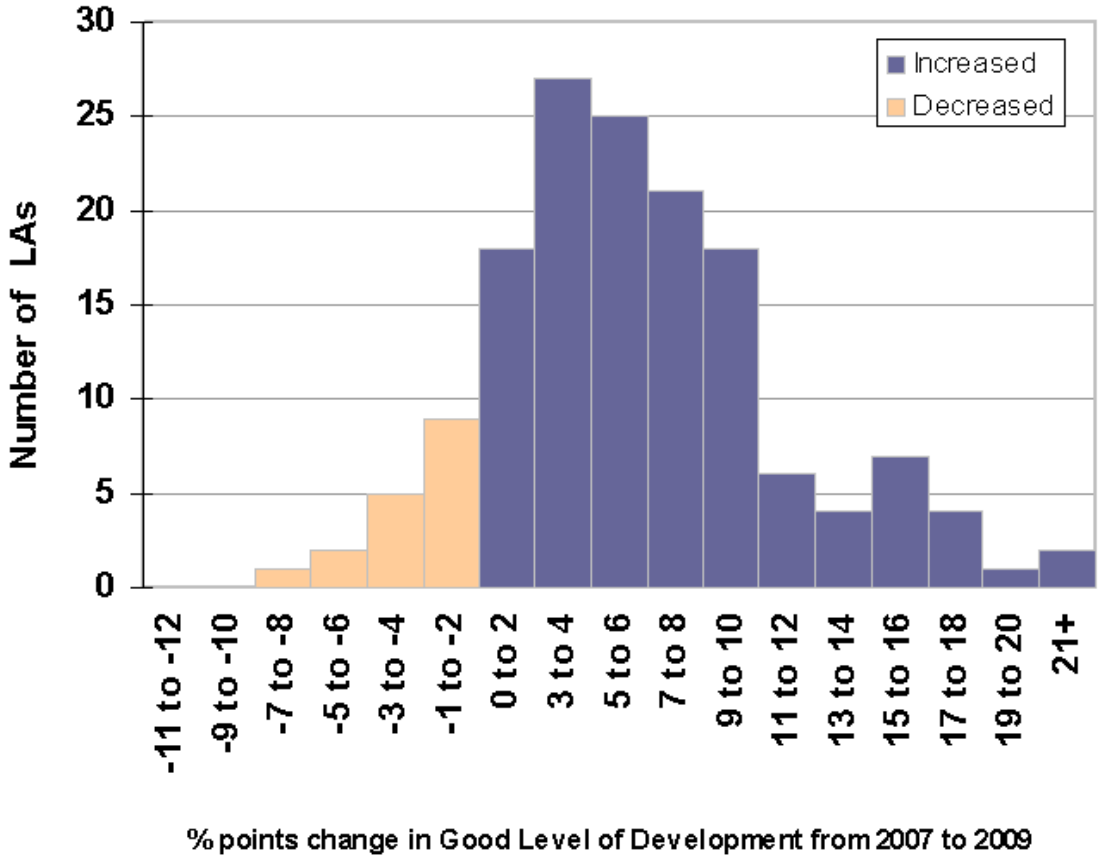
Section 3.2 introduces the distribution of performance progress made by LAs, then links this to their starting performance levels; section 3.3 repeats this analysis on the Achievement Gap to investigate changes in inequality of achievement. Section 3.4 introduces the concept of statistical neighbours to assess relative progress, benchmarking each LA's performance against expectations set by a group of other LAs with the most similar observed characteristics.

3.2 Progress in EYFS Profile Performance (Good Level of Development)

Chapter 2 reported on a national increase in the percentage of children achieving a Good Level of Development from 46% in 2007 to 52% in 2009. Chart 3.1 shows significant variation at Local Authority level around this increase of 6 percentage points (echoing the variation around current levels of performance presented in the previous chapter).

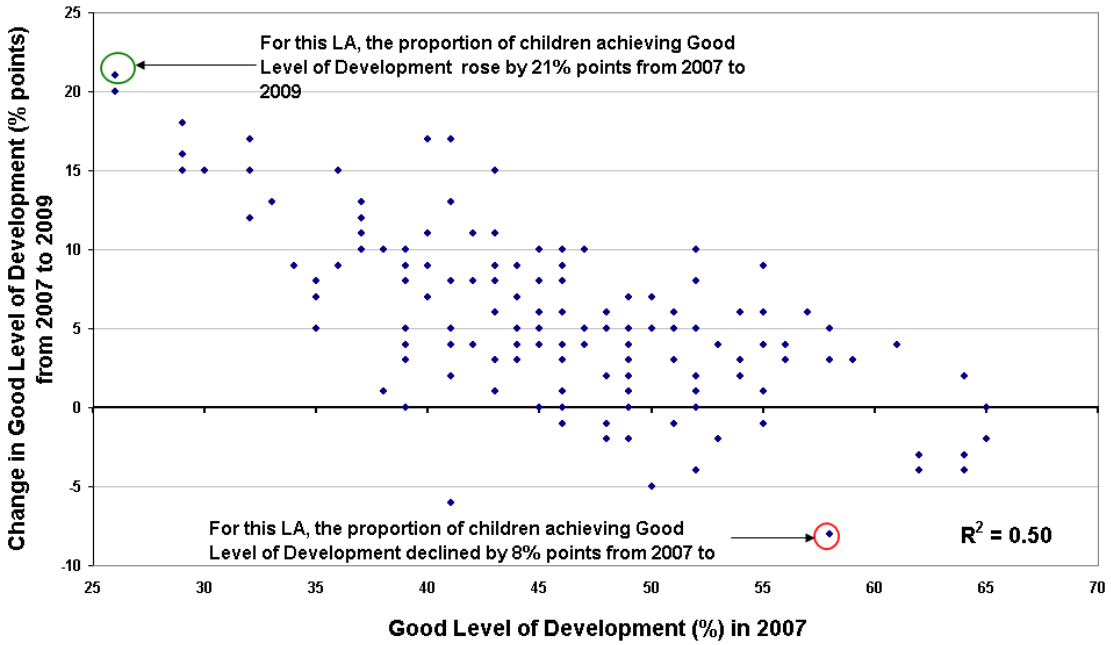
Most Local Authorities made some progress on their percentage of children achieving a Good Level of Development between 2007 and 2009, improving by up to 10 percentage points; 24 LAs made greater progress than this, 6 were non-movers, and 14 slipped to a lower percentage. The largest increase in performance by an individual LA was from 21% to 46% achieving the threshold.

Chart 3.1 – Distribution of the change in performance from 2007 to 2009.
(Note: Differences are rounded to the nearest whole number)



For the most part, the largest increases in performance by individual LAs (25, 21 and 20 percentage points) coincided with low starting points (21%, 26%, and 26% respectively), and hence greater scope for improvement. This tendency is illustrated in chart 3.2, where approximately 50% of the variation in subsequent progress is explained by the starting level of performance. Note that there is no clear pattern of prior performance for LAs that regressed between 2007 and 2009.

Chart 3.2 – Local Authority Performance Plotted against Subsequent Progress (Good Level of Development)

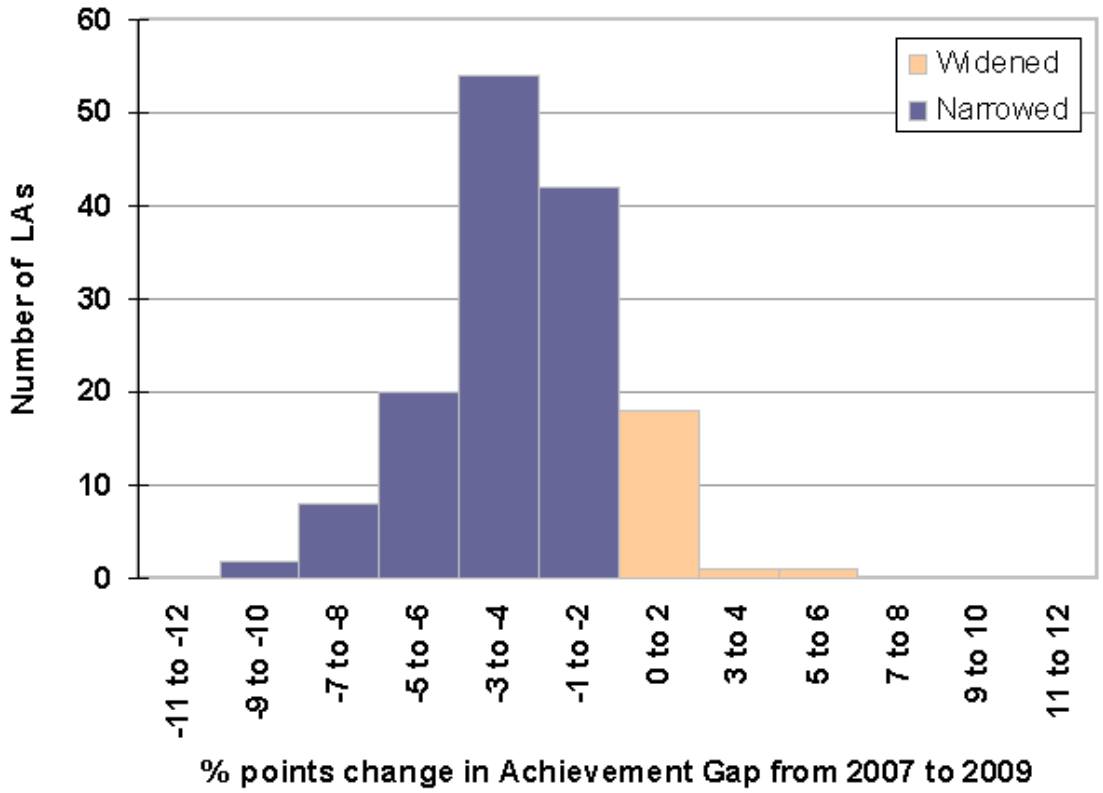


3.3 Progress in Narrowing the Early Years Achievement Gap

Chapter 2 reported on a national reduction of the Achievement Gap from 37% in 2007 to 34% in 2009. Chart 3.3 shows some variation at Local Authority level around this decrease of 3 percentage points (in addition to the variation around current levels of achievement inequality presented in the previous chapter).

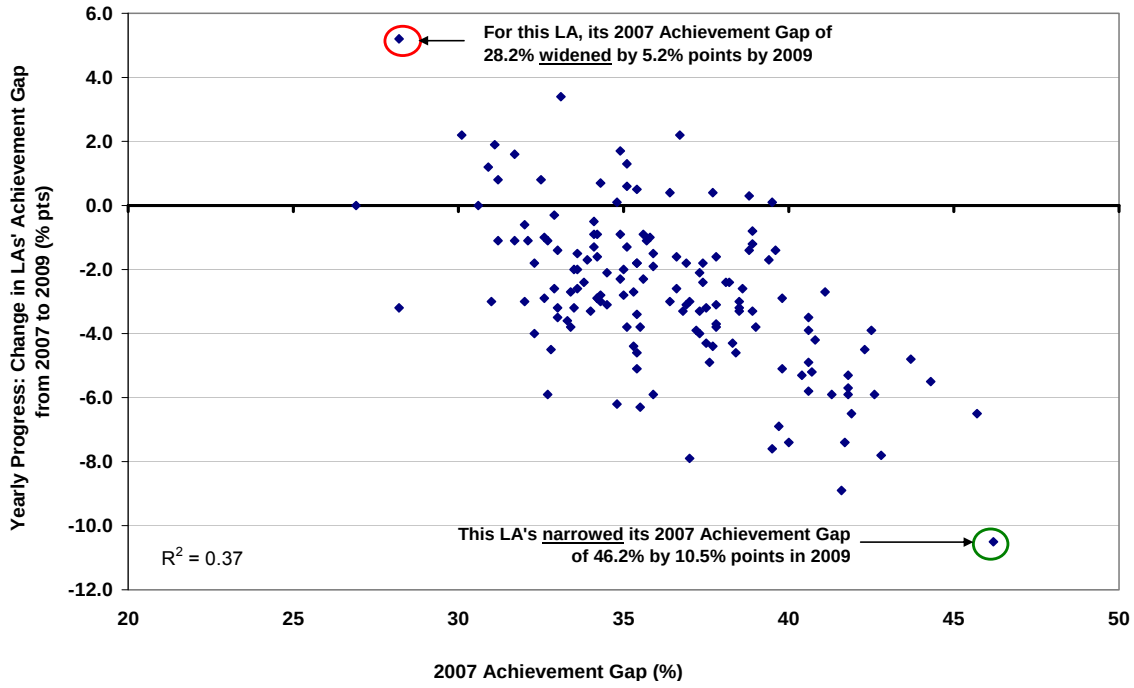
Reductions of up to 4 percentage points to their Achievement Gaps were made by 96 LAs between 2007 and 2009; a further 30 reduced inequality of achievement by more than this; in contrast, 25 recorded increases, of which 19 were not more than 2 percentage points.

Chart 3.3 Distribution of the change in Achievement Gaps from 2007 to 2009
(Note: Differences are rounded to the nearest whole number)



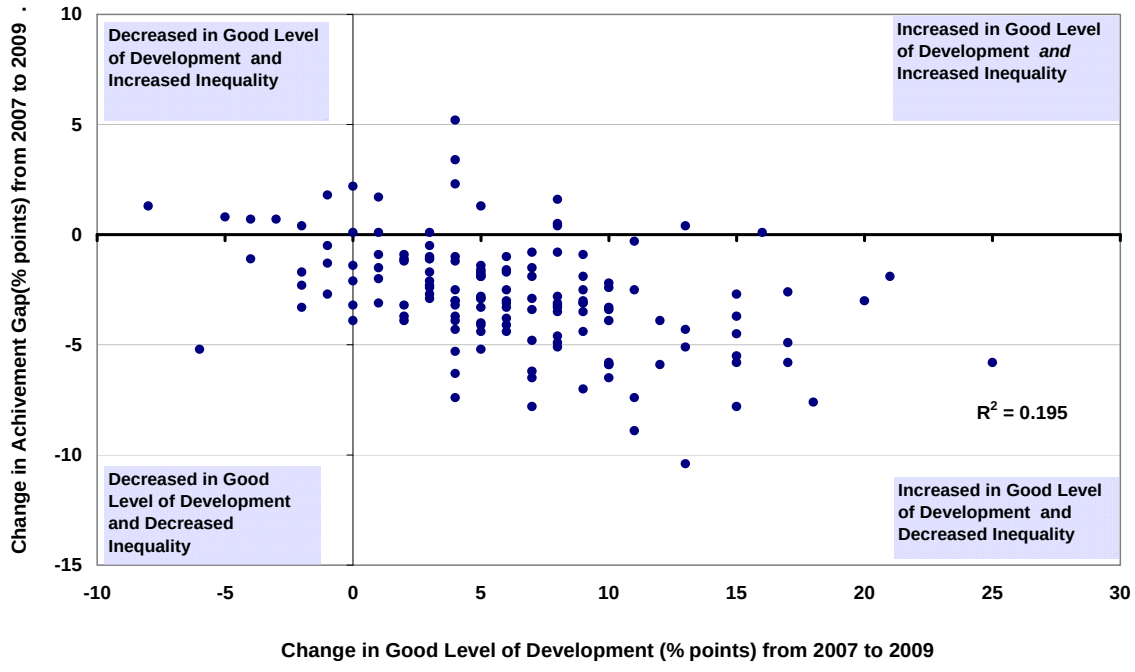
As might be expected, the largest reductions in inequality of achievement coincided with large initial gaps, and hence greater scope for improvement. This is evident in Chart 3.4, where 37% of the variation in changes to the Achievement Gaps is explained by their initial size. This correlation between starting point and subsequent progress is a little weaker for inequality of achievement than for achievement itself, but is still of practical significance.

Chart 3.4 Changes in Achievement Gaps from 2007 to 2009, against starting Gaps



Comparing progress on the two dimensions (level of achievement and Achievement Gaps), chart 3.5 reveals that the majority of LAs (74%) have improved by both increasing the percentage of children achieving a Good Level of Development, and by reducing inequality of achievement between the lowest scoring children and their peers.

Chart 3.5 Progress in Achievement Gaps vs. progress in Good Level of Development



3.4 LA Performance Compared with Statistical Neighbours

The previous sections demonstrated that the amount of progress made by LAs tends to be related to how much scope for improvement their previous performance left. Charts 3.2 and 3.4 could be used to identify how many LAs made good progress relative to others with similar starting points.

However, this approach would ignore other factors which vary between LAs, in addition to their prior performance, and are relevant to the difficulty of making progress. In the following section, one model for assessing relative progress is presented, using LA peer groups to benchmark individual LA progress against that achieved by other LAs with similar observed characteristics.

3.4.1 Children's Services Statistical Neighbours Benchmarking

The Children's Services Statistical Neighbours Benchmarking model was developed to allow LAs to compare their performance with other LAs for which similar outcomes should be achievable. For each Local Authority, it identifies a number of other LAs that are deemed to be statistically similar across a number of key characteristics. These are known as its Statistical Neighbours.

> "Any LA may compare its performance (as measured by various indicators) against its statistical neighbours to provide an initial guide as to whether their performance is above or below the level that might be expected…It should be noted that the comparison of outcome information is intended as a starting point for viewing performance to support benchmarking work. To obtain a comprehensive picture this needs to be supplemented with further analysis of performance information, including trends over time."
> (Children's Services Statistical Neighbour Benchmarking Tool, DCSF)[7]

Note that each LA has its own unique set of Statistical Neighbours. In some cases, LAs are known to have a poor level of similarity to this set, and these LAs have been excluded from the analysis. A list of LAs with a poor level of similarity to their Statistical Neighbours can be found in Annex A; by and large these are located in Inner London.

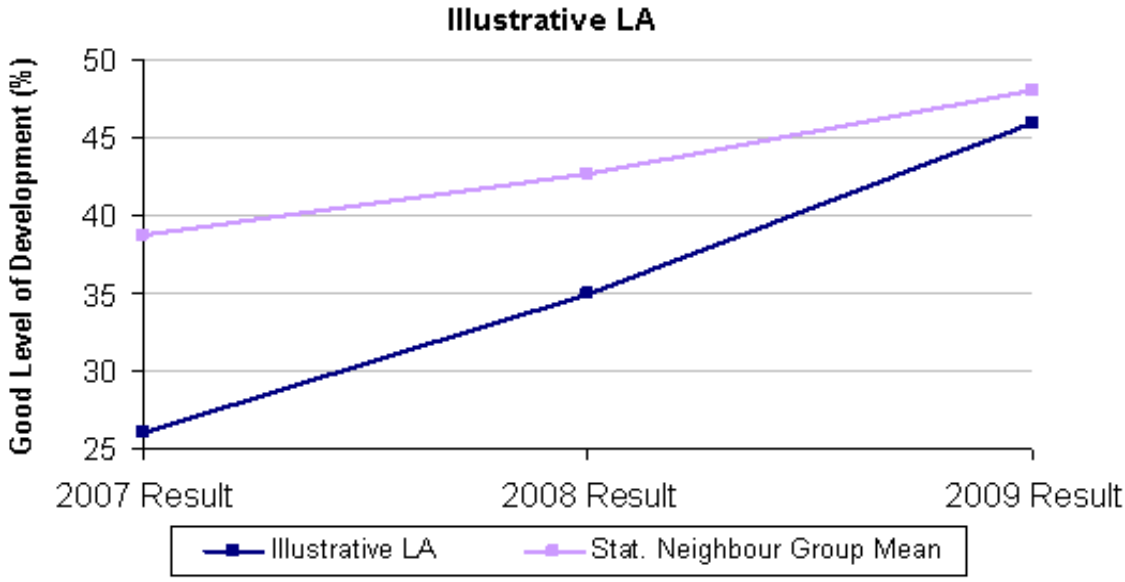
3.4.2 Example of Statistical Neighbour Analysis

Chart 3.5 and table 3.1 examine performance progress in an illustrative Local Authority compared with its Statistical Neighbour group. The percentage of children achieving a Good Level of Development has increased between 2007 and 2009; moreover the rate of performance is catching up to the Statistical Neighbour mean, which was considerably higher than the illustrative LA at the outset in 2007. The Statistical Neighbour analysis suggests that the

[7] http://www.dcsf.gov.uk/rsgateway/DB/STA/t000712/index.shtml

illustrative LA was performing worse than expected in 2007, but has made good progress in closing the gap between their performance and the performance of their Statistical Neighbour peers, which itself has improved over the period.

Chart 3.6 Relative progress in an illustrative LA and its Statistical Neighbours



The above example reflects the general conclusion from section 3.2, that LAs with lower starting performance tend to make more progress. It is important to stress that benchmarking analyses, such as the Statistical Neighbour model, should be used with care and attention to detail in order to reflect this nuanced understanding of expected progress.

Table 3.1 provides detailed comparisons for the illustrative LA, including odds ratios – these are used to standardise the percentages and remove the influence of the choice of threshold measure (Good Level of Development) and the differential starting points of the LA compared with its Statistical Neighbour group. The odds ratios confirm that the LA had made better than expected progress, and the individual Statistical Neighbour figures enrich our understanding by revealing that the illustrative LA had the second lowest starting point as well as the second largest percentage point progress.

Table 3.1 Breakdown of Illustrative LA's Relative Progress

LA	2007 Result	2008 Result	2009 Result	2007-09 Change
Illustrative LA	**26**	**35**	**46**	**20**
SN 1	52	53	53	1
SN 2	45	49	45	0
SN 3	44	44	53	9
SN 4	38	40	48	10
SN 5	42	42	46	4
SN 6	44	45	47	3
SN 7	29	36	44	15
SN 8	21	27	46	25
SN 9	36	50	51	15
SN 10	37	41	47	10
Stat. Neighbour Group Average	**38.8**	**42.7**	**48**	**9.2**
Odds Ratio (LA / SN Average)	**0.55**	**0.72**	**0.92**	**2.47**

Other factors to consider when interpreting benchmarking analyses include the length of the data time series available, and the characteristics of the population over time. For example, with only three years of comparable data available, year-on-year volatility could be mistaken for a trend. It is also possible that changes in the underlying characteristics of the successive age 5 cohorts could influence the results, particularly as the model to select Statistical Neighbours reflects different age groups, of which the age five cohort will be one of the first to reflect any population changes over time. It may be necessary to examine additional population data when interpreting findings from benchmarking models to account for changing circumstances within the LA of interest.

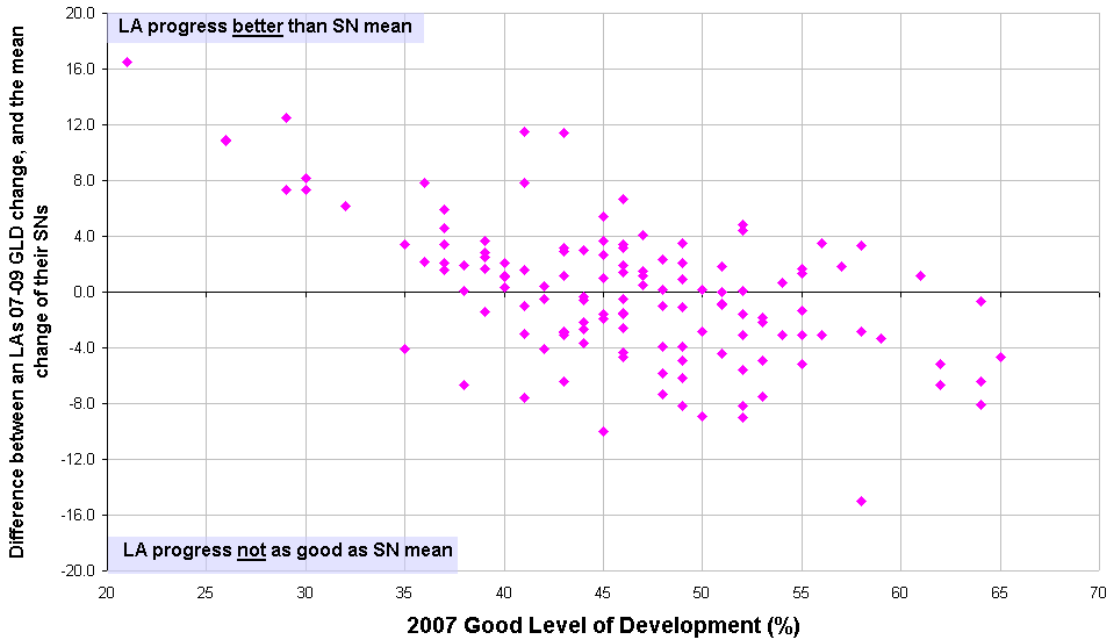
3.4.3 Distribution of Relative Progress in Achievement

Chart 3.7 plots the distribution of LA performance progress relative to the Statistical Neighbour group means (vertical axis), against the LA starting point performance in 2007 (horizontal axis).

Examining the ranges of performance progress (Good Level of Development) made by Local Authorities, absolute progress ranged from an increase of 25 percentage points, to a decline of 8 percentage points between 2007 and 2009; relative progress *(deducting statistical neighbour group mean progress from LA progress)* ranged from 17 percentage points more than expected, to 15 percentage points fewer than expected. The effect of differing LA contexts on absolute performance progress is to make absolute progress appear better (or easier to achieve) than it actually is once the LA context is accounted for in a relative progress model.

A full list of LA performance against Statistical Neighbours, sorted by good level of development, can be found in Annex B.

Chart 3.7 Progress relative to Statistical Neighbours, by starting point



3.4.4 Distribution of Relative Progress in Achievement Gap Narrowing

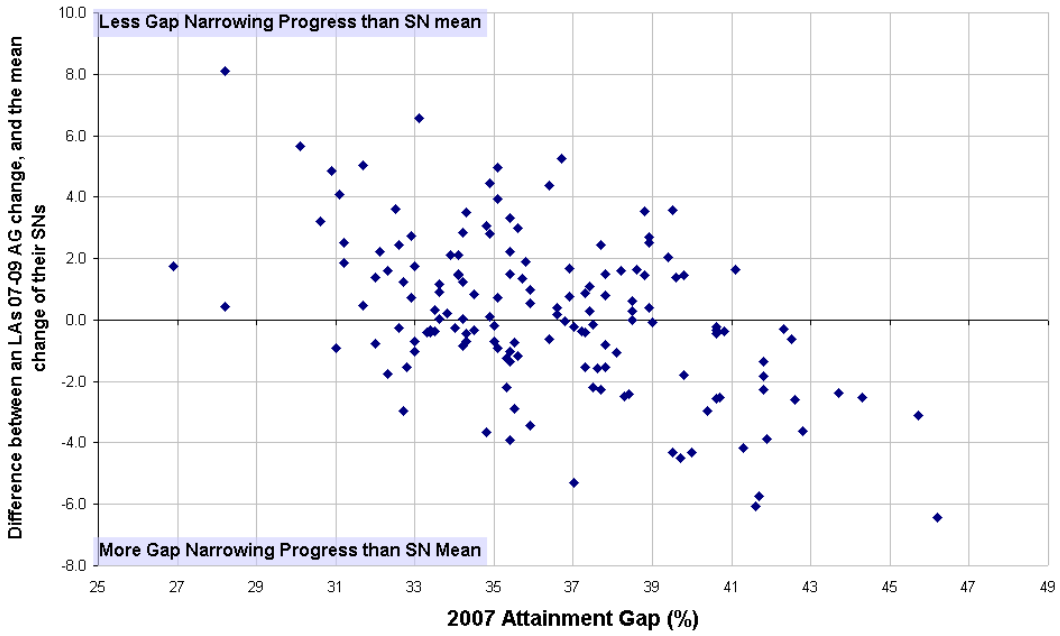
Chart 3.8 plots the distribution of LA progress in reducing achievement inequality (relative to the Statistical Neighbour group means) on the vertical axis, against the starting size of Achievement Gaps in 2007 on the horizontal axis.

Examining the range of progress (reductions to the Achievement Gap) made by Local Authorities, absolute progress varied from a gap decrease (or increase in achievement equality) of 10 percentage points, to a gap increase of 5 percentage points between 2007 and 2009. Relative progress *(deducting statistical neighbour group mean progress from LA progress)* ranged from 6 percentage points more than expected (greater equality in achievement), to 8 percentage points less than expected (extra inequality in achievement).

As with performance progress, the effect of differing LA contexts is to make absolute progress in narrowing the Achievement Gap appear slightly higher (or easier to achieve) than it is once the LA context is accounted for in a relative progress model.

A full list of LA performance against Statistical Neighbours, sorted by Good the achievement gap, can be found in Annex B.

Chart 3.8 Achievement Gap Narrowing relative to Stat. Neighbours, by starting point



3.4.5 Map of LA performance against Statistical Neighbours

As a final step, the results have been plotted onto maps in order to assess whether LAs in different parts of England tend to underperform more than others. Chart 3.10 shows Good Level of Development, whilst Chart 3.11 shows the Achievement Gap. Please note that the geographical size of the LA is not representative of the number of children in that LA.

The information in the maps can be interpreted by imagining a race between Local Authorities to improve their absolute performance levels. LAs that are shaded red are behind the pack in the race and are slipping further behind; those shaded orange are ahead of the pack but not increasing their advantage; those shaded pale green are behind the pack but catching up; finally, those shaded dark green are ahead of the pack and pulling away.

Eleven Local Authorities have lower than average percentages of children achieving a Good Level of Development, larger than average Achievement Gaps, and are making less progress on both fronts than their Statistical Neighbours. Seven of these eleven are concentrated on the east side of England, from Nottinghamshire to Suffolk.

Twenty-three Local Authorities scattered across England have achievement that is average or better, Achievement Gaps that are average sized or smaller, and are making more progress than their Statistical Neighbour groups on both fronts.

Chart Table 3.10 Map of LA progress: Good Level of Development

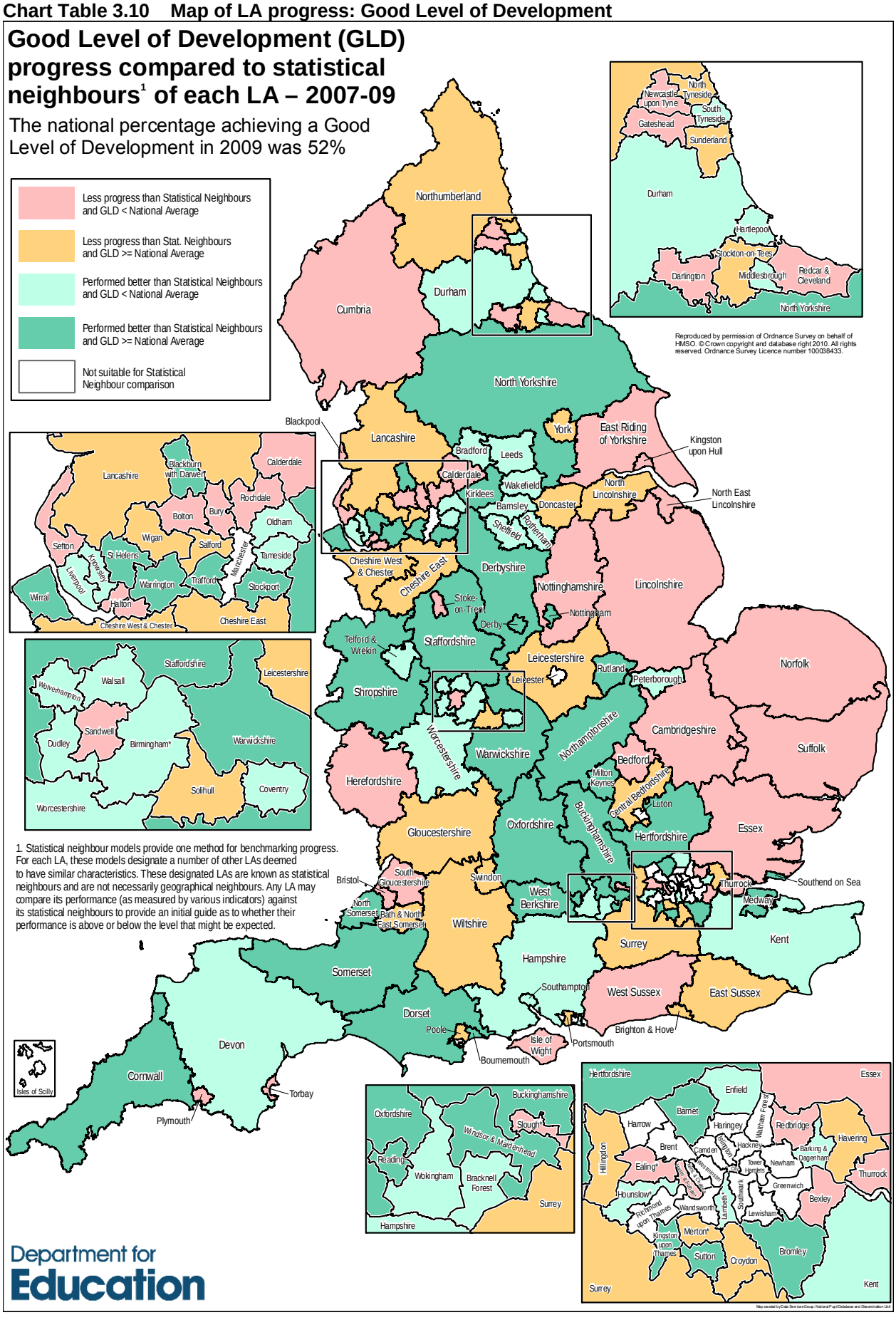
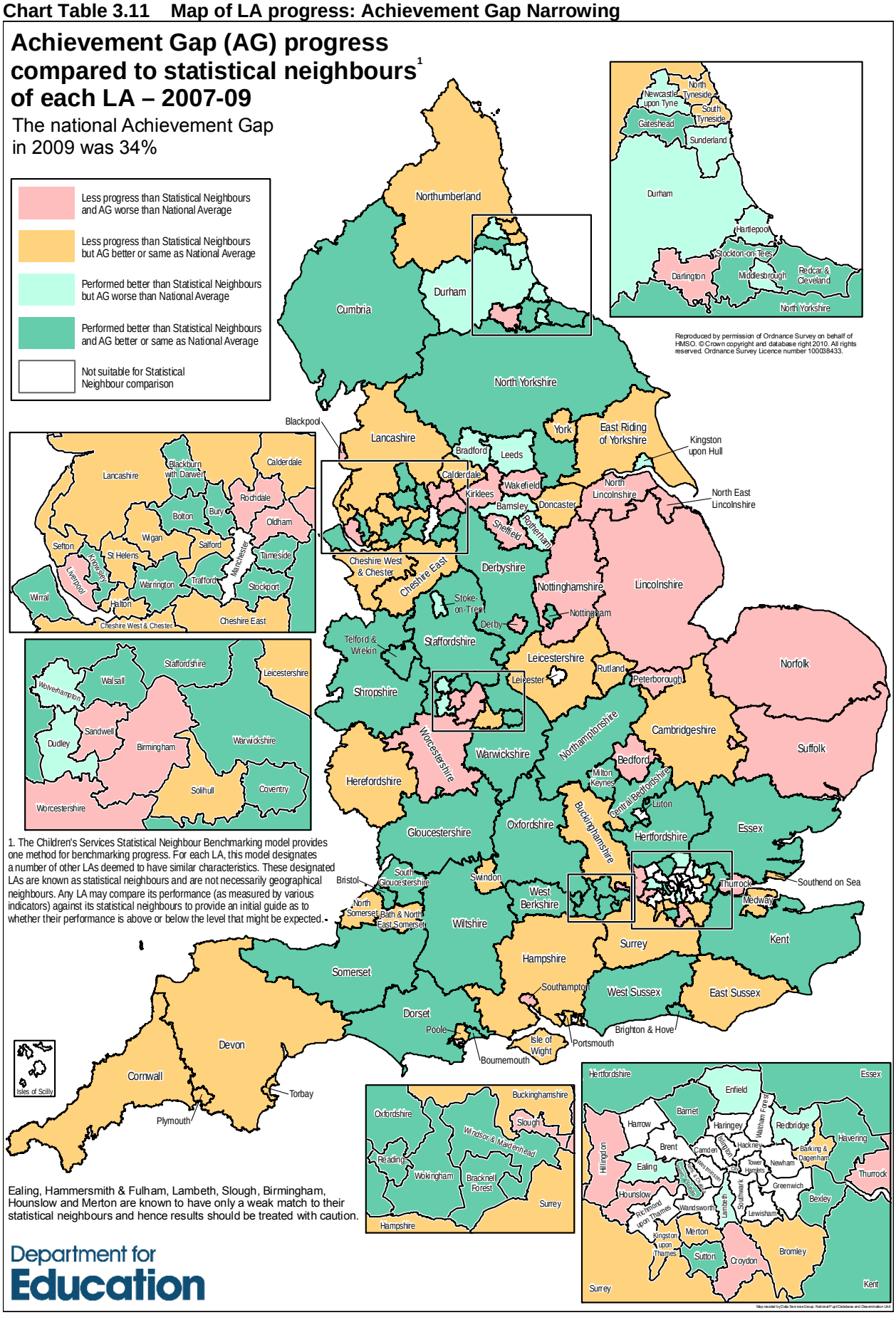


Chart Table 3.11 Map of LA progress: Achievement Gap Narrowing



4. Characteristics of Low Achievers on the EYFS Profile

Summary

- From 2006-2009, the Achievement Gap has narrowed as a result of a steady and consistent rise in the average points score for the lowest 20% of achievers, while the median score for all children has remained static.
- In 2009, children with statements of SEN were over-represented in the lowest 20% of achievers at EYFS, making up 5% of this group, but only 1% of all children. Those with SEN but without statements accounted for 23% of low achievers, compared with 8% of all children. Other over-represented groups were children eligible for Free School Meals, those learning English as an Additional Language, and boys.
- In 2009, children in Minority Ethnic groups accounted for 47% of the lowest 20% of achievers at EYFS, but only 39% of the population as a whole. Looking at major ethnic categories beneath this total, Asian children were over-represented in the low achieving group (10% vs. 7% of all children); as were Black children (6% vs. 4%); by contrast, children of mixed ethnicity were slightly under-represented.
- Collectively, children with FSM, SEN and/or Minority Ethnic status account for 60% of the lowest achieving fifth of children; area deprivation was the largest known factor for identifying the remaining 40% of low achievers, but explained little of the variation in point scores within this group.
- Logistic regression modelling of multiple simultaneous characteristics reveals that the odds of being in the lowest achieving 20% of children at EYFS are increased for children living in deprived areas, for children born later in the school year, for boys and for children known to be in care, and well as for those with SEN, eligible for FSM or in minority ethnic groups.
- Deprivation and low achievement are overlapping, but are not synonymous. Half of the lowest achieving fifth of children live in the 30% most deprived areas; alternatively, over one quarter of children living in the 30% most deprived areas achieve scores within the lowest fifth at EYFS. Almost half (45%) of children in the 2009 EYFS cohort fell into either the lowest scoring fifth and/or the 30% most deprived areas of residence.

4.1 Introduction

Research has shown that a gap between high achievers and low achievers in the educational system starts to appear at 22 months of age, and that this gap

is significant between children from high and low socio-economic backgrounds[8]. This chapter uses 2009 EYFS Profile data to re-examine the achievement gap at the end of the school year in which children turn 5, to test for the importance of socio-economic factors on a more recent cohort of children.

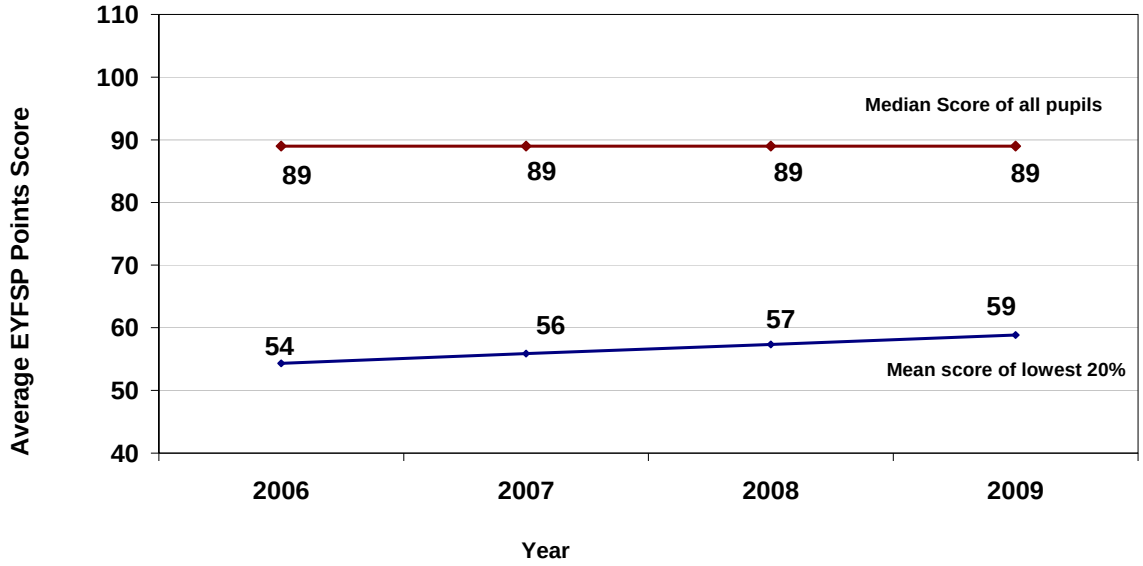
The following analysis uses the Achievement Gap definition of low achievement, and explores the characteristics of children with total EYFS Profile scores in the bottom 20% of the distribution to see how they differ from the national cohort as a whole.

In 2009, the lowest fifth of achievers recorded a median score of 59 points (equivalent to approximately 4.5 scale points across all thirteen assessment scales); this compares with a median of 89 points for all children, or approximately 6.8 points per scale.

4.2 Understanding the Achievement Gap Trend

Chapter 1 reported that the national EYFSP achievement gap has reduced steadily between 2006 and 2009. Dismantling the gap into its two constituent parts, chart 4.1 reveals that the reduction since 2007 is driven entirely by an improved mean score for the lowest achieving fifth of children; the all children's median score has remained static at 89, whilst the mean score for the lowest achieving 20% of children has risen from 54 to 59 over the period.

Chart 4.1 Components of the Achievement Gap: Mean Score of the Lowest 20% & Median Score of All Children



[8] L Feinstein, 'Inequality in the Early Cognitive Development of British Children in the 1970 Cohort', Economica 70, 2003, pp. 73-97

4.3 Who Are the Lowest Achieving 20%?

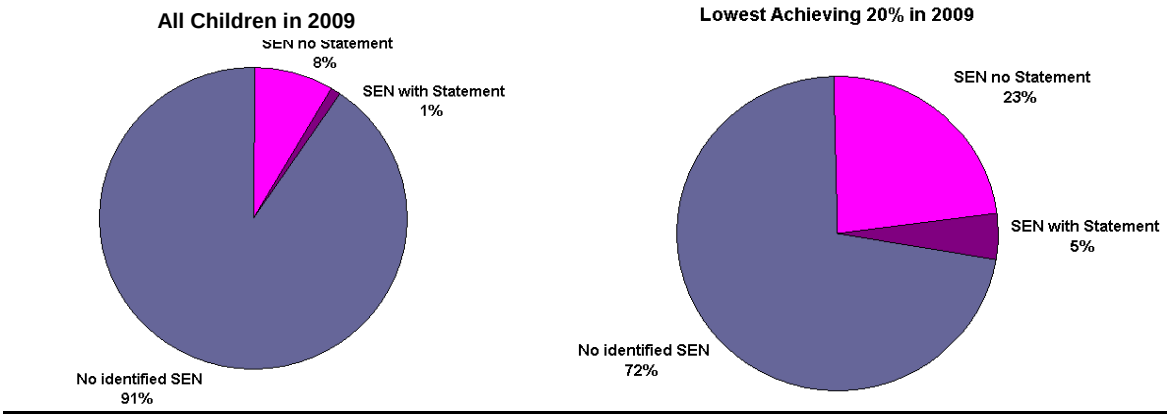
In this section, the lowest achieving 20% are compared with the national cohort according to key observed characteristics. Section 4.3.1 presents key characteristics other than ethnicity, followed by ethnicity analysis in section 4.3.2.

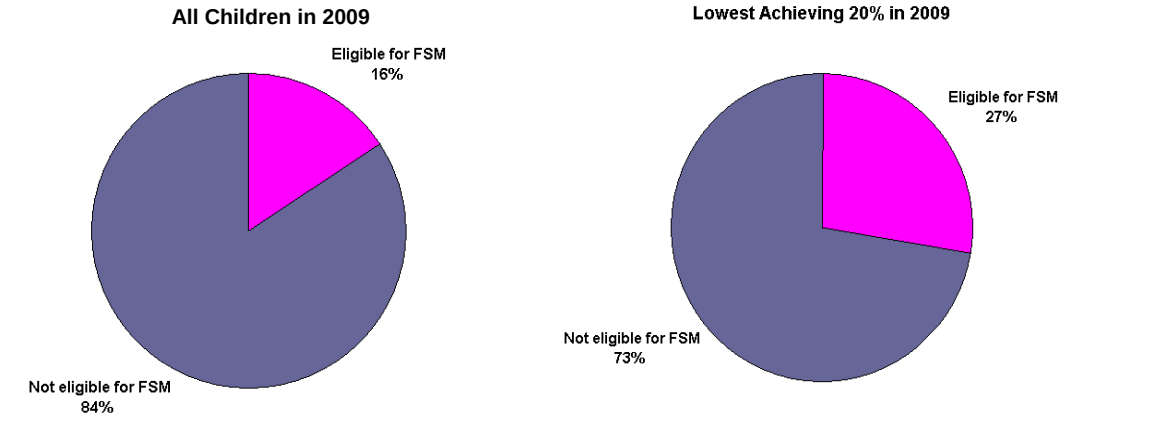
4.3.1 The Lowest Achieving 20%: Incidence of Key Characteristics

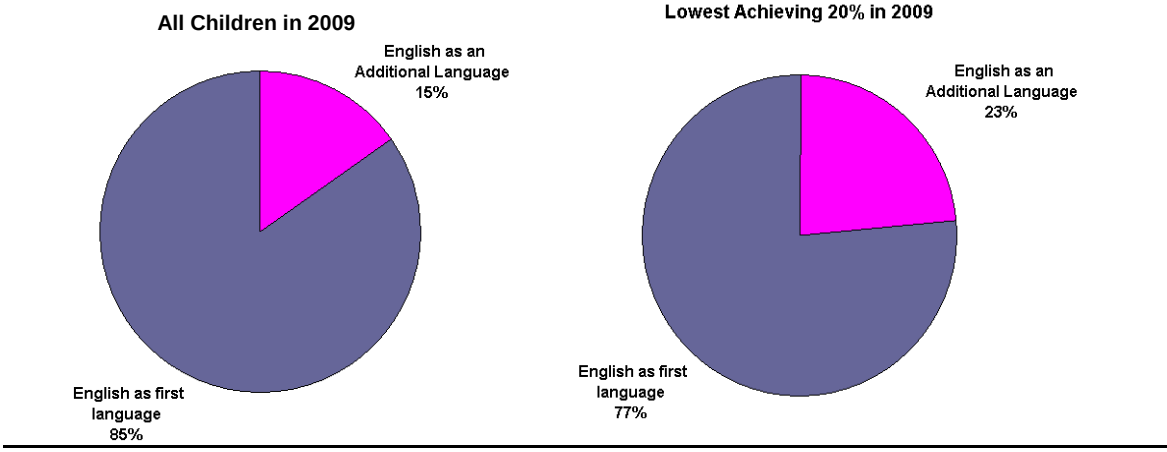
Chart 4.2 presents the incidence of various groups in the lowest achieving fifth of children, and for comparison, in the cohort as a whole. The groups are based on gender, eligibility for Free School Meals (FSM), first language, and Special Educational Needs (SEN) status.

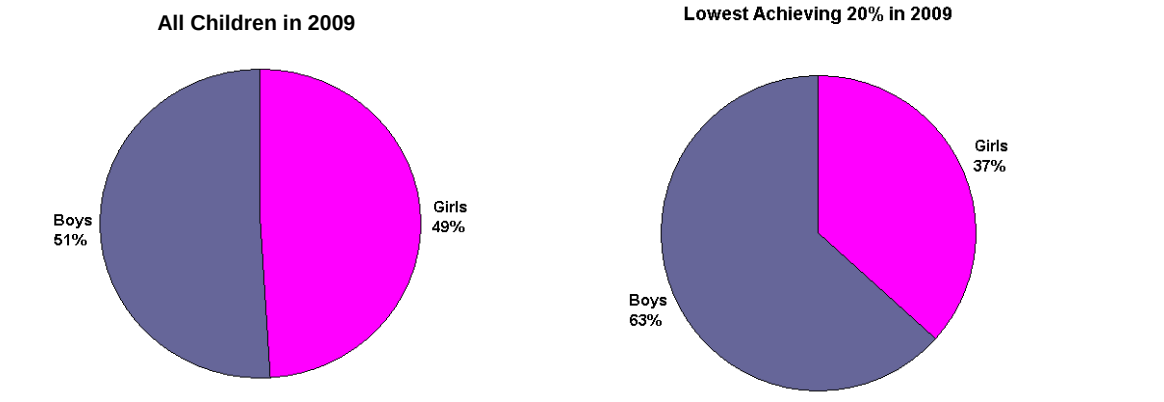
In 2009, children with statements of SEN (those with the most significant needs) are significantly over-represented in the lowest 20% of achievers, making up 5% of this group, but only 1% of all children. Those with SEN but without statements accounted for 23% of low achievers, compared with 8% of all children. Other over-represented groups are children eligible for Free School Meals (27% low achievers vs. 16% nationally), those learning English as an additional language (23% vs. 15%), and boys (63% vs. 51%). There were no large differences in the incidence of children with particular characteristics within the low achieving group between 2007 (not depicted) and 2009.

Chart 4.2 Incidence of Key Characteristics at EYFS: Lowest Achieving 20% Compared with All Children









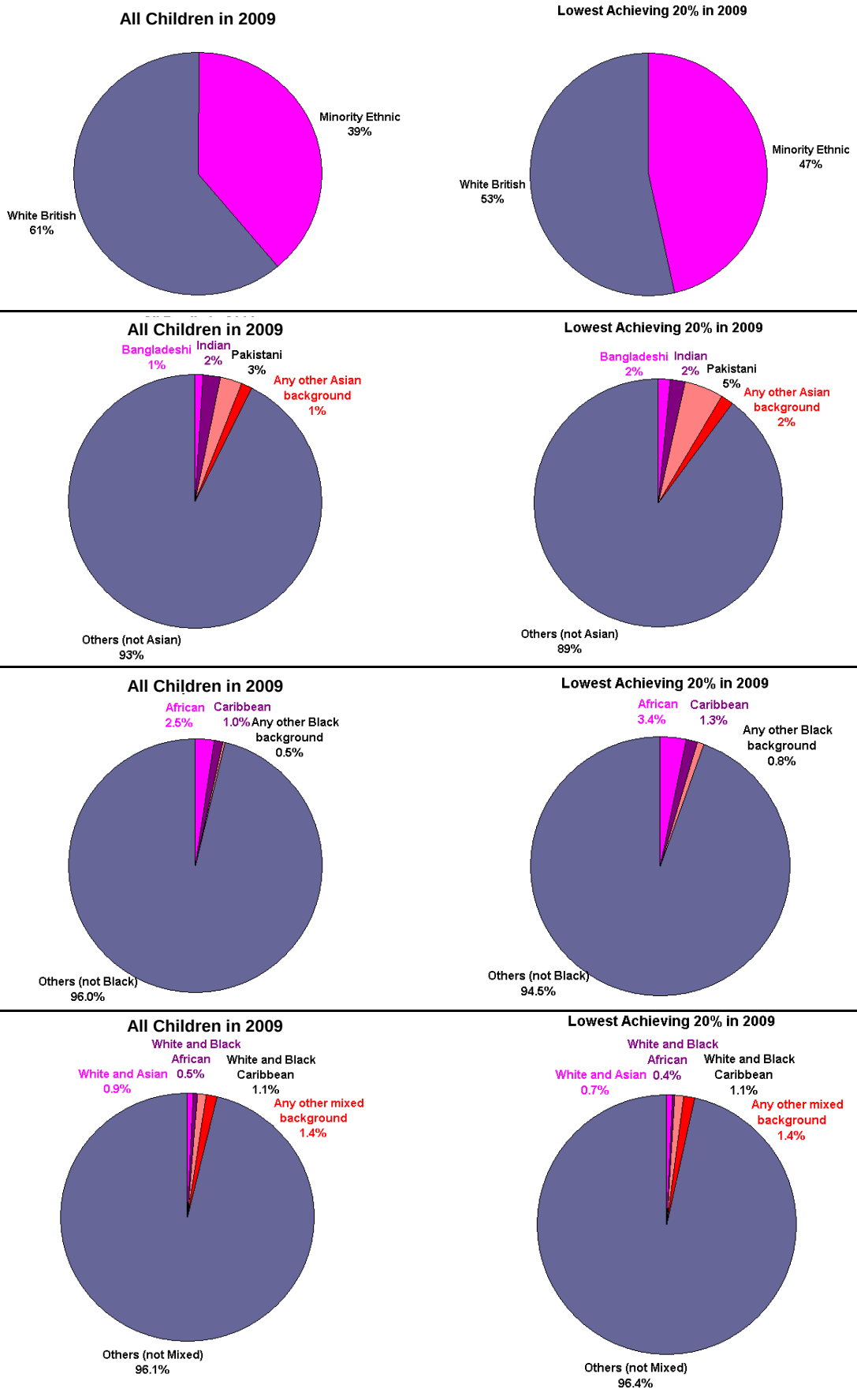
4.3.2 The Lowest Achieving 20%: Incidence of Ethnic Groups

Chart 4.3 presents the incidence of recorded ethnic groups in the lowest achieving 20% of children, and in the cohort as a whole. In 2009, children in Minority Ethnic groups account for 47% of the lowest scoring fifth at EYFS, but only 39% of the population as a whole. Looking at major ethnic categories beneath this total, Asian children were overrepresented in the low achieving group (10% vs. 7% of all children); as were Black children (6% vs. 4%). Children of mixed ethnicity were slightly underrepresented in the lowest fifth of achievers.

Gypsy / Romany and Traveller of Irish Heritage children were the most over-represented ethnic sub-categories in the lowest achieving 20% in 2009, accounting for 0.6% of this group, but only 0.2% of all children (not depicted). However, it should be noted that these are very small groups with known recording problems, and are the lowest achieving groups at all Key Stages.

There have been some slight decreases in the disproportionate incidence of most Asian and Black ethnic groups in the lowest achieving 20% between 2007 and 2009 (not depicted). Some small ethnic groups have seen slight increases, but these are as likely to reflect volatility as underlying trends.

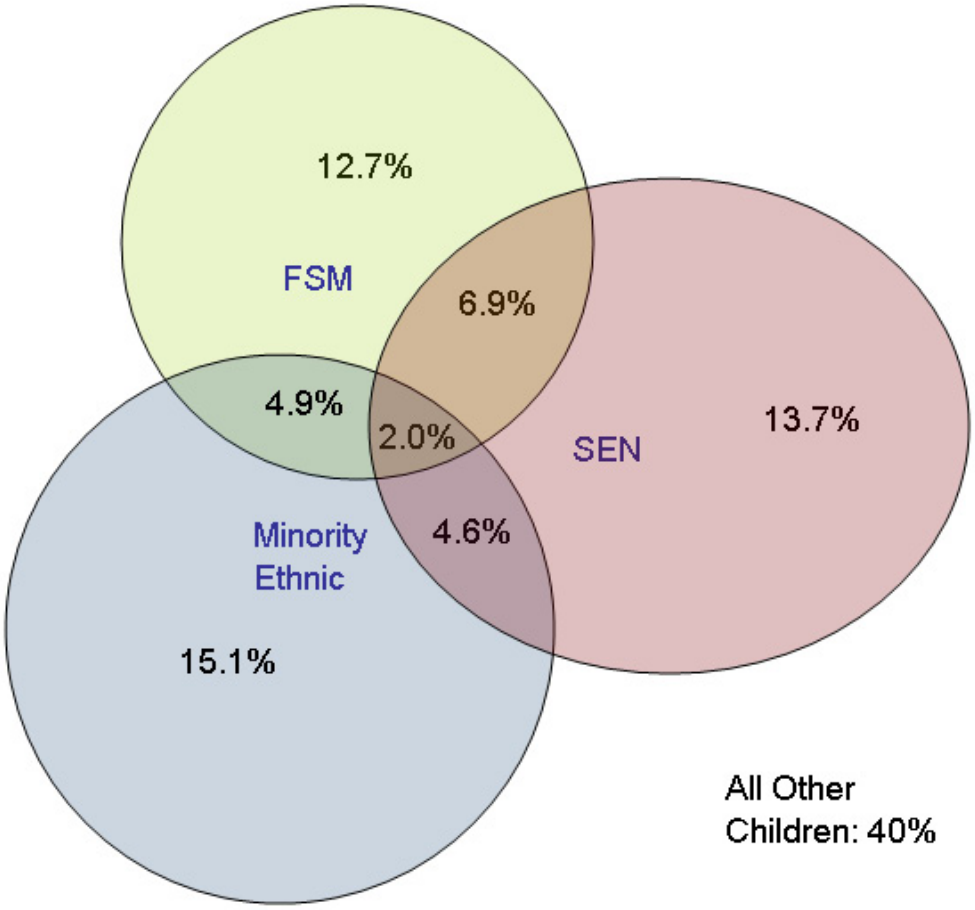
Chart 4.3 Incidence of Ethnic Groups at EYFS: Lowest Achieving 20% Compared with All Children



4.3.3 Overlap of FSM, SEN & Ethnicity in the Lowest Achieving 20%

Collectively, children with FSM, SEN and/or Minority Ethnic status account for 60% of the lowest achieving fifth (see chart 4.4). This leaves 40% of the low achievers unaccounted for; section 4.3.4 identifies further characteristics of the remaining 40% of the lowest scoring group.

Chart 4.4 Placement of Lowest Achieving 20% by FSM, SEN & Minority Ethnic Status



Shape sizes are not fully proportional

4.3.4 The Remaining 40%

There were 45,000 children in the lowest 20% of achievers that were neither FSM, nor from a minority ethnic group, nor with SEN status. Further analysis showed that of these 45,000 children;

- 63% were boys
- 54% were born between May-August and a further 17% in March-April
- 25% were located in a subset of 10 LAs

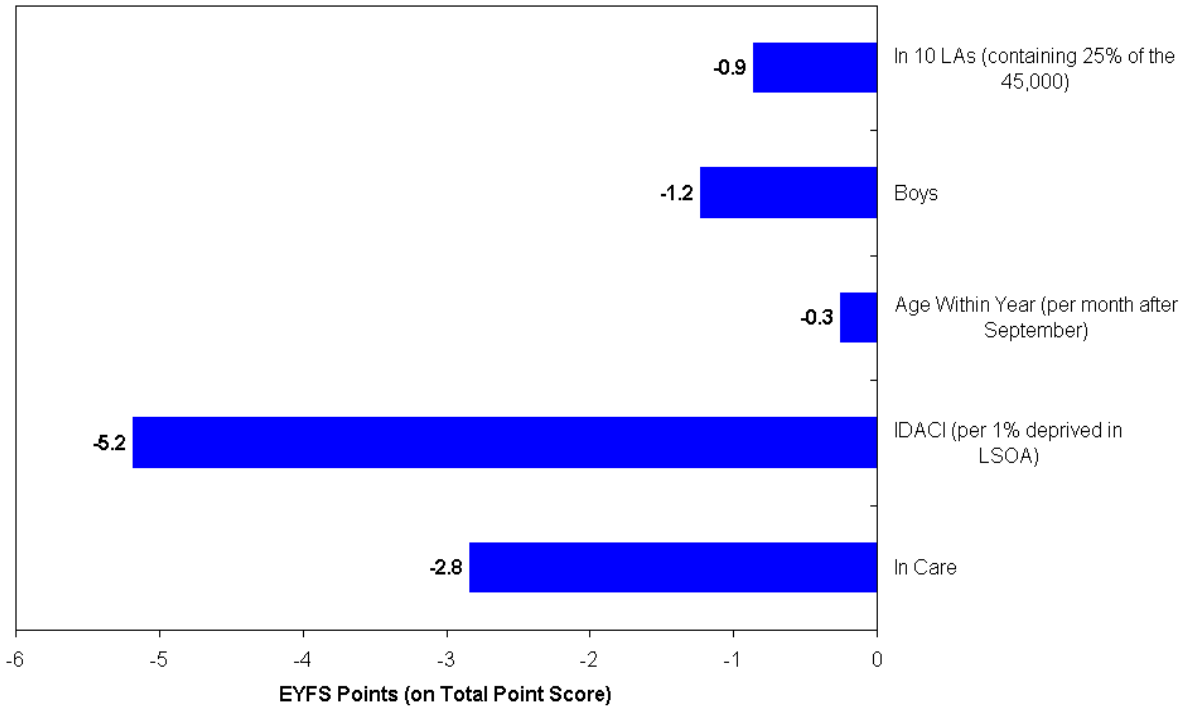
Regression analysis was then applied to determine the contribution of each characteristic. It was found that there were five which were statistically associated with total point scores for within the group of 45,000 (see chart

4.5), but these further factors could only explain 2% of the variation in point scores.

Area deprivation (IDACI) had the strongest association with lower total point scores of the additional characteristics, even though children eligible for FSM are not in the group under analysis. For the remaining 40% of children, there was a penalty of 5 points for each additional 1% of deprived children in the area where the child lived. Children known to be in care scored 3 fewer points on average; boys and children in the subset of 10 LAs which make up one quarter of the remaining 40% scored around 1 point lower; and there was an additional 1 point penalty for every four months later than September that the child was born.

These characteristics may also have an additional association with achievement for children who *are* in the FSM / SEN / minority ethnic subset of low achievers, and for those *outside* the bottom fifth of achievers, but here they are modelled only for the 45,000 children in the remaining 40% of the bottom fifth.

Chart 4.5 Additional Characteristics, Effect on Total Point Score for the Remaining 40% of low achievers (those without FSM, SEN, or Minority Ethnicity)



4.4 The Odds of Being in the Lowest 20 Percent of Achievers

Returning to all children in the lowest achieving 20% at EYFS, this section marshals the available characteristics data to model the odds of being among the bottom fifth of scorers once all included characteristics are controlled for. The technique used for this analysis is logistic regression, which looks at a number of child characteristics simultaneously in order to determine their

effect on the odds of being in the lowest 20%. The following characteristics are considered:

- Gender
- Ethnicity
- SEN status
- Month of birth
- English as an additional language
- Free School Meal Eligibility
- Income Deprivation Affecting Children Index (IDACI)
- Whether the child has been in care
- Interactions between month of birth and School Action and month of birth and School Action Plus/statemented.

Where the odds for a given characteristic are greater than one, a child with that characteristic is more likely to appear in the lowest 20% all other things being equal.

Chart 4.6 presents the effects on the odds of being in the lowest achieving 20% for 2007 and 2009; there is some volatility in the odds effects for special educational needs and for the Gypsy / Roma and Traveller of Irish Heritage groups – small numbers of cases are likely to be the explanation for this in the latter two groups, but less likely to be so for the SEN groups. For example, children with special educational needs at school action plus had almost 10 times the odds of being in the bottom 20% of achievers in 2007, but this has shrunk to 6 times the odds in 2009.

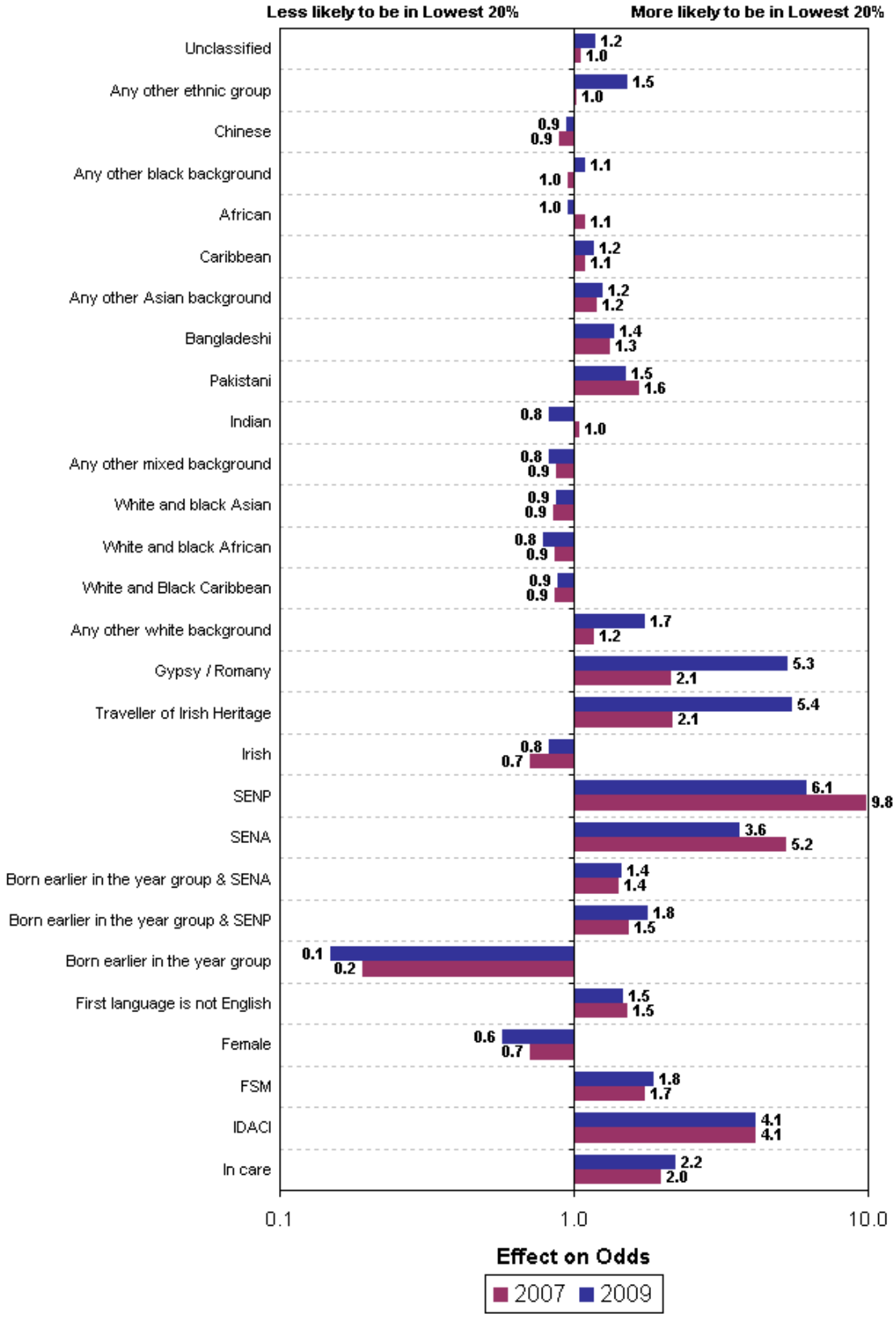
Across both years, the following factors have the most important effects on the odds of being in the lowest achieving 20% of children:

- Special educational needs, at school action or school action plus levels, showed *increases* in odds with additional increases for older children (born earlier in the year group) who also have SEN – these are likely to be a subset with more extreme needs as older children are known to be less likely to be identified with SEN, especially in their first year of schooling when their needs can be masked by being older than other children in the cohort.
- Older children (born earlier in the year group) without SEN, had *decreased* odds of being in the lowest achieving fifth.
- Children living in deprived areas (IDACI) had *increased* odds of being in the bottom 20% of achievers.

Additionally:

- Being eligible for FSM, having English as an additional language, being in care, having SEN and being younger all *increase* the odds of being in the bottom fifth of achievers.
- Being of Irish or Chinese heritage *decreases* the odds of being in the lowest achieving fifth.

Chart 4.6 Effects on Odds of Being in the Lowest 20% of EYFS Profile Scores, 2007 & 2009

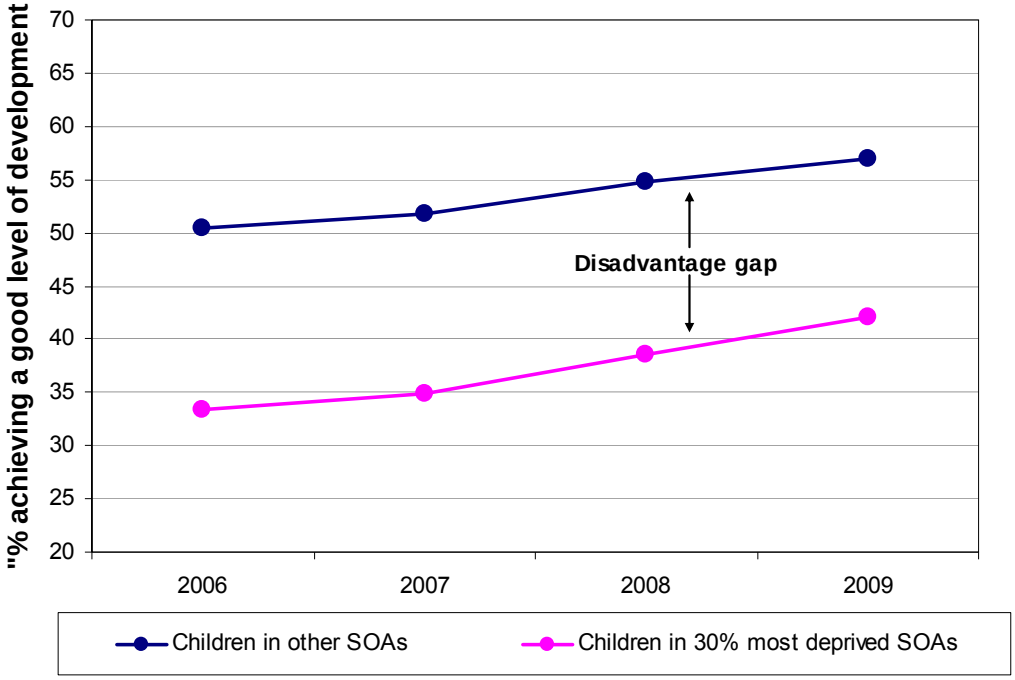


4.5 The Disadvantage Gap

In this section, the focus moves to a different achievement gap based on area deprivation. The Index of Multiple Deprivation[9] is used to rank Super Output Areas from most to least deprived; based on these rankings, a Disadvantage Gap is constructed between children living in the most deprived 30% of areas in the country, and the rest. EYFS performance (achieving a Good Level of Development) is then compared between the two groups.

Chart 4.7 plots the Disadvantage Gap from 2006 to 2009, over which period there has been a slight reduction. In 2009, 42% of children in the 30% most deprived areas achieved a Good Level of Development; this compares with 57% of children living in other areas, resulting in a remaining gap of 15 percentage points.

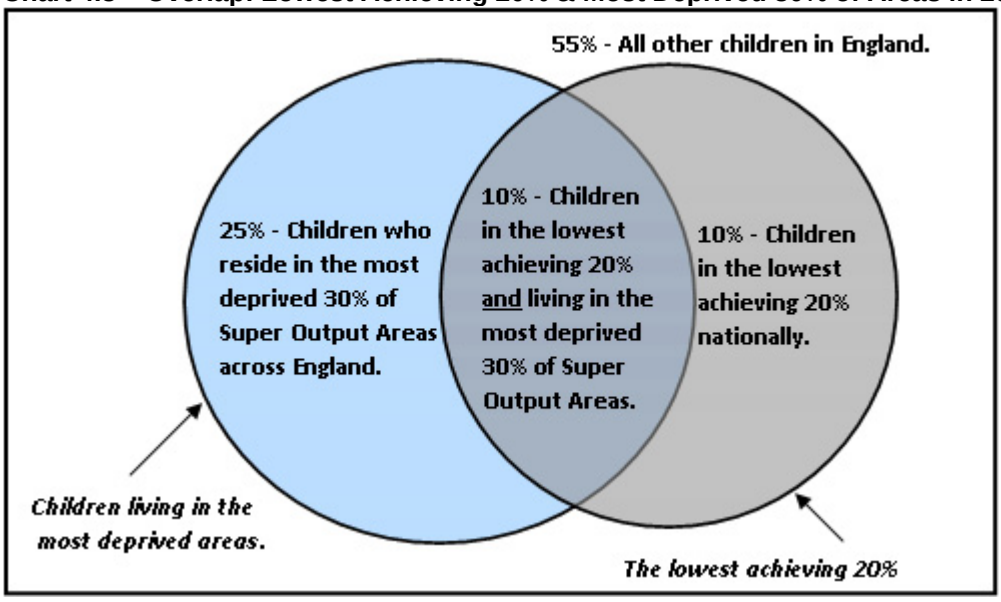
Chart 4.7 Trend in the Disadvantage Gap from 2006 to 2009



Returning to the lowest achieving 20% of children on EYFSP scores, chart 4.8 illustrates the overlap between this group and children living in the 30% most deprived areas. Half of the lowest achieving fifth of children live in the 30% most deprived areas; alternatively, over one quarter of children living in the 30% most deprived areas achieve scores within the lowest fifth at EYFS. Almost half (45%) of children in the 2009 EYFSP cohort fell into either the lowest scoring fifth and/or the 30% most deprived areas of residence.

[9] 'The Index of Multiple Deprivation is measure that was created by the Department for Communities and Local Government (CLG) and contains seven domains which relate to income deprivation (http://www.communities.gov.uk/documents/communities/pdf/576659.pdf)

Chart 4.8 – Overlap: Lowest Achieving 20% & Most Deprived 30% of Areas in 2009.



5. What Five Year Olds Know and Can Do – Analysis of Individual Scale Points

Summary

- Averaged across the individual scales, 98% of children achieve the "stepping stone" scale points (1-3): there is a steady decline in the proportion achieving each subsequent point in the range 4-8, the "early learning goals". Very few children achieve point 9 on any of the scales, i.e. few are working consistently beyond the early learning goals.
- Of the personal, social and emotional development scale points, the tasks achieved by children least often all relate to cultures and beliefs.
- Of the communication, language & literacy scales, writing scale points, e.g. holding a pencil and using it effectively to form recognisable letters (70%), were generally achieved by fewer children than those on the reading scales, e.g. understanding of the elements of stories (84%). More achieved the linking sounds & letters points, e.g. hearing and saying sounds in words (86%); the highest achievement was in language for communication & thinking, e.g. using language to imagine and recreate roles and experiences (91%).
- Of the problem solving, reasoning & numeracy scales, points from numbers as labels for counting, e.g. counting 10 everyday objects reliably (91%), were achieved by the greatest percentages of children, followed by those from shape, space & measures, e.g. describing the shape and size of solids and flat shapes (82%). Generally, the calculating scale points were achieved by the fewest children, e.g. 64% were able to find one more or less than a number from 1-10.
- The scale points with the four largest gender differences occur in points 5-8 of the writing and creative development scales. For example, writing for different purposes and in different forms (74% of girls; 53% of boys), has a gap of 21 percentage points, as does using imagination in creative activities and tasks (71% of girls; 50% of boys).
- The largest achievement differences between all children and the lowest achieving 20% are greater than 50 percentage points. For example, the gap was 57 percentage points for beginning to use the vocabulary of addition and subtraction. Using phonics to read simple words had a difference of 55 percentage points.
- The earliest substantial differences between all children and the lowest scoring 20% on total point scores are at point 4 in Communications, Language & Literacy. Naming and sounding letters of the alphabet had a gap of 40 percentage points; writing their name and simple words had a 47 percentage point difference.
- Between 2008 and 2009, most of the (small) increases in the percentages of children achieving scale points were in the range of points 4-6. All but two scale points in the range 7-9 saw small decreases, thought to be explained by moderation of EYFS Profile results becoming more robust and embedded.

5.1 Introduction

Unlike the EYFS Profile summary data discussed so far in this report, which show the total number of points achieved on each of the 13 assessment scales, the Individual Scale Points (ISP) data identify which specific points were achieved *within* a scale. An example of how a child's ISP sums up to their summary score for that scale is shown in table 5.1.

Table 5.1 An Illustration of Individual Point Scores

Assessment Scale	Individual Scale Points Achievement Data										EYFSP Summary Data
		1	2	3	4	5	6	7	8	9*	Total Score
PSE:DA	Point Achieved	yes	yes	yes		yes		yes			**5**
PSE:SD	Point Achieved	yes	yes	yes	yes			yes	yes		**6**

* Scale point 9 is only awarded on the condition that a child has achieved scale points 1-8 and is working consistently beyond the early learning goals.

Local authorities voluntarily provide ISP data. In 2009, the data provided represented 48% of children nationally, up by 6 percentage points from 2008. The demographic make up of this data sample has been found to be representative of children nationally in terms of the main child characteristics; however, they are currently being published as experimental statistical release as the data are still in the process of being evaluated.

The structure of the EYFS Profile assessment is such that within the ISP data, the higher the scale point, the more challenging it is intended to be for children to achieve. However, achievement of an earlier scale point does not determine whether it is possible for a child to achieve a later scale point, so it is possible to achieve point 7 but not point 6 within a given scale, for example.[10]

The data are useful for identifying individual learning priorities, but also when analysed on aggregate, they can reveal information about what types of task children are capable of, contrasted with those that fewer children demonstrate, as measured at the time of assessment. It is important to remember that children vary in age when they are assessed, mainly according to their month of birth. The age-related differences within the achievement data have not been standardised, and must be taken into account when interpreting findings.

5.2 Children's ISP Achievement - Overview

On average, at least 98% of children achieve points 1-3 (the "stepping stones") across all scales, but there is a steady decline in the proportion of children achieving each subsequent point in the range 4-8 (the "early learning

[10] http://www.qcda.gov.uk/resources/assets/EYFS_profile__scale_points_1-3_2009.pdf

goals") – see table 5.2. Very few children achieve point 9 on any of the scales; this is expected given that the point is awarded only after all of points 1-8 have been achieved, and the child is deemed to be consistently working beyond the early learning goals.

Table 5.2 Individual Scale Point Percentage Achievement Distribution

	Stepping stone points [1]			*Early learning goals* [2]					
Scale	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9** [3]
PSE: Dispositions and Attitudes	*100*	*100*	*99*	*97*	*97*	*86*	*73*	*55*	*12*
PSE: Social Development	*100*	*100*	*100*	*94*	*93*	*84*	*53*	*36*	*9*
PSE: Emotional Development	*100*	*98*	*98*	*94*	*85*	*64*	*62*	*64*	*9*
CLL: Language for Communication and Thinking	*100*	*99*	*98*	*93*	*91*	*83*	*57*	*40*	*9*
CLL: Linking Sounds and Letters	*100*	*96*	*98*	*76*	*86*	*78*	*66*	*34*	*11*
CLL: Reading	*100*	*99*	*96*	*93*	*84*	*62*	*60*	*34*	*7*
CLL: Writing	*100*	*98*	*94*	*81*	*70*	*64*	*48*	*27*	*5*
PSRN: Numbers as Labels and for Counting	*100*	*99*	*98*	*97*	*90*	*91*	*83*	*40*	*15*
PSRN: Calculating	*99*	*99*	*95*	*90*	*81*	*68*	*64*	*28*	*6*
PSRN: Shape, Space and Measures	*100*	*99*	*98*	*91*	*89*	*82*	*68*	*29*	*7*
Knowledge and Understanding of the World	*100*	*99*	*98*	*93*	*78*	*70*	*74*	*48*	*3*
Physical Development	*100*	*100*	*99*	*94*	*88*	*90*	*81*	*56*	*7*
Creative Development	*100*	*99*	*99*	*95*	*91*	*75*	*60*	*28*	*4*
Average	100	99	98	91	86	76	64	38	7

1 Describe the attainment of a child who is still progressing towards the early learning goals.

2 These are not hierarchical or linear, indeed some scale points require ongoing assessment over time and a child may achieve them in any order

3 Attainment of a child who has achieved scale points 1–8 and developed further, working consistently beyond early learning goals. This will be attained by children who have significant abilities in an area of learning. Its purpose is to identify these abilities to year 1 teachers and ensure that these children's specific development and learning needs will be met.

5.3 ISP Achievement by Areas of Learning (All Children)

The following sections examine points 4-9 (the early learning goals) of the scales in more detail, beginning with the personal, social and emotional (PSE) development scale in 5.3.1, followed by the communication, language and literacy (CLL) scale in 5.3.2 and the problem solving, reasoning and numeracy (PSRN) scale in section 5.3.3. The knowledge and understanding of the world (KUW), physical development (PD), and creative development (CD) scales are explored in section 5.3.4.

5.3.1 Achievement in Personal, Social and Emotional Development

Table 5.3 lists the PSE scale points (4-9); these are then plotted with the percentage of children who achieve them in chart 5.1.

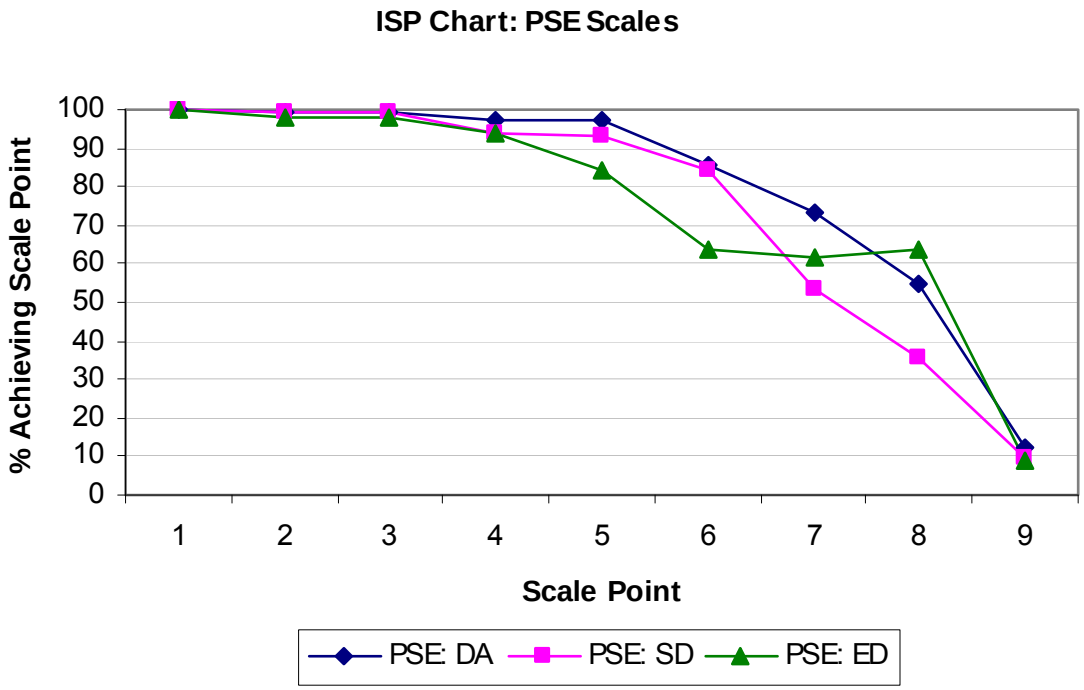
Table 5.3 Individual Scale Points (4-9) for the three PSE Scales

	Personal Social and Emotional Development		
	Dispositions & Attitudes	**Social Development**	**Emotional Development**
4	Dresses and undresses independently and manages own personal hygine	Works as part of a group or class, taking turns and sharing fairly	Responds to significant experiences, showing a range of feelings when appropriate.
5	Selects and uses activities and resources independently.	Forms good relationships with adults and peers	Has a developing awareness of own needs, views and feelings and is sensitive to the needs, views and feelings of others.
6	Continues to be interested, motivated and excited to learn.	Understands that there need to be agreed values and codes of behaviour for groups of people, including adults and children, to work together harmoniously.	Has a developing respect for own culture and beliefs and those of other people.
7	Is confident to try new activities, initiate ideas and speak in a familiar group.	Understands that people have different needs, views, cultures and beliefs that need to be treated with respect.	Considers the consequences of words and actions for self and others
8	Maintains attention and concentrates.	Understands that s/he can expect others to treat her or his needs, views, cultures and beliefs with respect.	Understands what is right and wrong, and why.
9	Sustains involvement and perseveres, particularly when trying to solve a problem or reach a satisfactory conclusion.	Takes into account the ideas of others.	Displays a strong and positive sense of self-identity and is able to express a range of emotions fluently and appropriately.

Of the personal, social and emotional development (PSE) scale points, the tasks achieved by children least often all relate to cultures and beliefs. Understanding and respect for different needs, views, cultures and beliefs, and that these apply to both self and others (social development pts. 7 and 8) were achieved by 36-53% of children; achievement of a developing respect for own culture and beliefs and those of other people (emotional development pt. 6) is a little higher at 64%.

The emotional development (ED) scale points 5 and 6 were achieved by fewer children than those on the dispositions and attitudes (DA), and social development (SD) scales; however, the percentage achieving plateaus for emotional development points 6-8, the DA and SD scale points for this range of scores becoming achieved less frequently than the ED points.

Chart 5.1 Achievement on the Personal, Social & Emotional Development Scales



5.3.2 Achievement in Communication, Language and Literacy

Table 5.4 lists the CLL scale points (4-9); these are then plotted with the percentage of children who achieve them in chart 5.2.

Table 5.4 Individual Scale Points (4-9) for the four CLL Scales

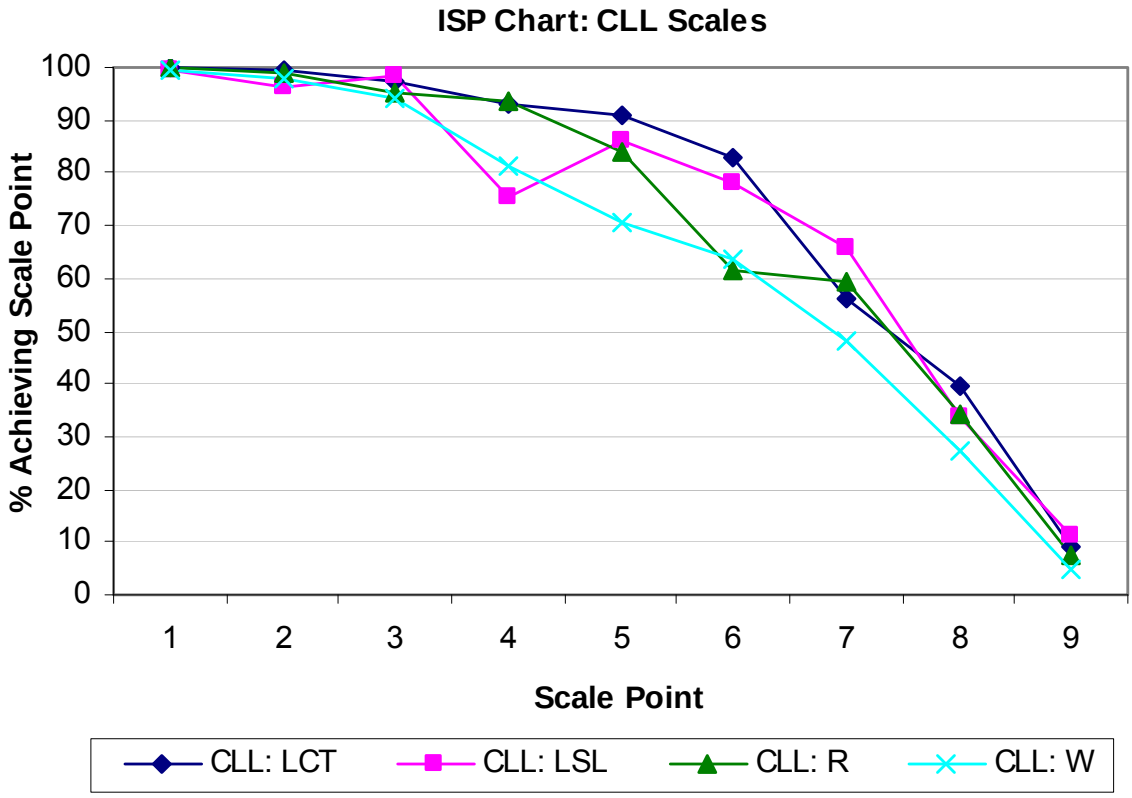
	Communication Language & Literacy	
	Language for Communication & Thinking	**Linking Sounds & Letters**
4	Listens with enjoyment to stories, songs, rhymes and poems, sustains attentive listening and responds with relevant comments, questions or actions.	Links sound to letters, naming and sounding letters of the alphabet.
5	Uses language to imagine and recreate roles and experiences.	Hears and says sounds in words.
6	Interacts with others in a variety of contexts, negotiating plans and activities, and taking turns in conversation.	Blends sounds in words.
7	Uses talk to organise, sequence and clarify thinking, ideas, feelings and events, exploring the meanings and sounds of new words.	Uses phonic knowledge to read simple regular words.
8	Speaks clearly with confidence and control, showing awareness of the listener.	Attempts to read more complex words, using phonic knowledge.
9	Talks and listens confidently and with control, consistently showing awareness of the listener by including relevant detail. Uses language to work out and clarify ideas, showing control of a range of appropriate vocabulary.	Uses knowledge of letters, sounds and words when reading and writing independently.

	Reading	**Writing**
4	Knows that, in English, print is read from left to right and top to bottom.	Writes own name and other words from memory.
5	Shows an understanding of the elements of stories, such as main character, sequence of events and openings.	Holds a pencil and uses it effectively to form recognisable letters, most of which are correctly formed.
6	Reads a range of familiar and common words and simple sentences independently.	Attempts writing for a variety of purposes, using features of different forms.
7	Retells narratives in the correct sequence, drawing on language patterns of stories.	Uses phonic knowledge to write simple regular words and make phonetically plausible attempts at more complex words.
8	Shows an understanding of how information can be found in non-fiction texts to answer questions about where, who, why and how.	Begins to form captions and simple sentences, sometimes using punctuation.
9	Reads books of own choice with some fluency and accuracy.	Communicates meaning through phrases and simple sentences with some consistency in punctuating sentences.

Of the communication, language and literacy (CLL) scales, the writing (W) scale points were generally achieved by fewer children than those on the reading (R), language for communication and thinking (LCT), and linking sounds and letters (LSL) scales. For example, on the fifth scale points, more children were able to use language to imagine and recreate roles and experiences (LCT, 91%), than were able to hear and say sounds in words (LSL, 86%), or communicate their understanding of the elements of stories (R, 84%); fewest of all were able hold a pencil and use it effectively to form recognisable letters (W, 70%).

The linking sounds and letters (LSL) scale does not follow the expected pattern of lower success rates for each subsequent scale point. The data suggest that fewer children can link sounds to letters and name and sound letters of the alphabet (pt. 4 – 76%), than hear and say sounds in words (pt. 5 – 86%), or blend sounds in words (pt. 6 - 78%). Anecdotal evidence suggests that some schools may be delaying the teaching of letter names (as opposed to their sounds), but this is not verifiable from the EYFS Profile data.

Chart 5.2 Achievement on the Communication, Language & Literacy Scales



5.3.3 Achievement in Problem Solving, Reasoning and Numeracy

Table 5.5 lists the PSRN scale points (4-9); these are then plotted with the percentage of children who achieve them in chart 5.3.

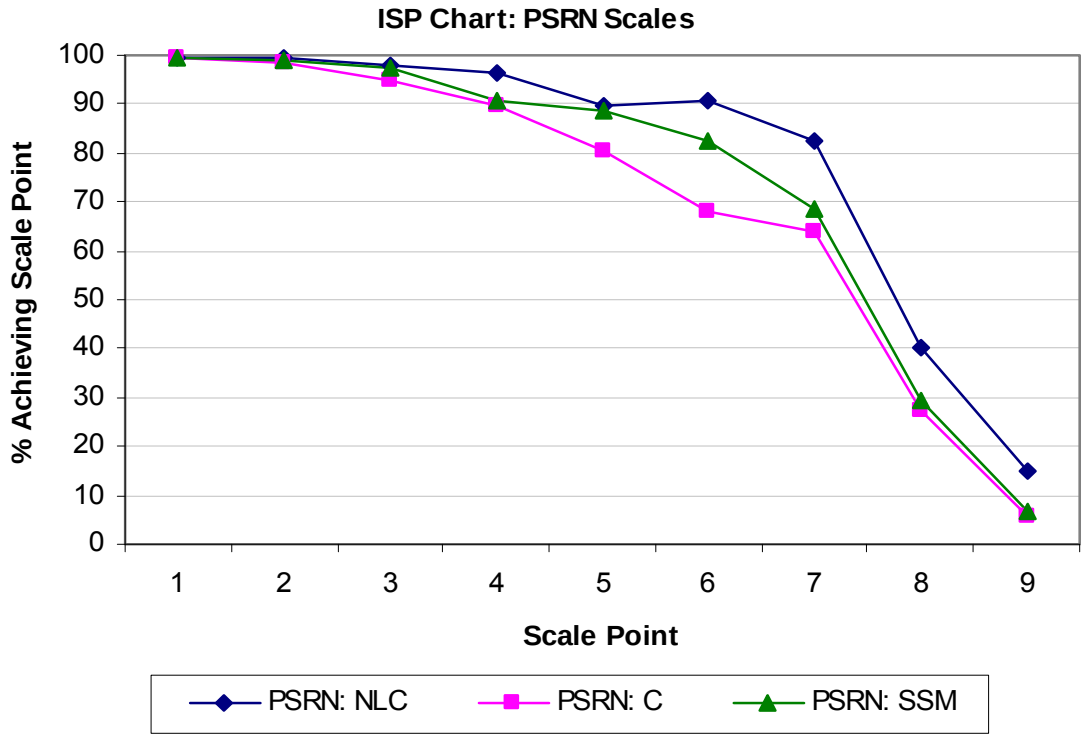
Table 5.5 Individual Scale Points (4-9) for the three PSRN Scales

	Problem solving, reasoning and numeracy		
	Numbers as Labels for Counting	**Calculating**	**Shape, Space & Measures**
4	Says number names in order.	Relates addition to combining two groups.	Talks about, recognises and recreates simple patterns.
5	Recognise numerals 1 to 9.	Relates subtraction to taking away.	Uses everyday words to describe position.
6	Counts reliably up to 10 everyday objects.	In practical activities and discussion, begins to use vocabulary involved in adding and subtracting.	Uses language such as 'circle' or 'bigger' to describe the shape and size of solids and flat shapes.
7	Orders numbers up to 10.	Finds one more or less than a number from 1 to 10.	Uses language such as 'greater', 'smaller', 'heavier' or 'lighter' to compare quantities.
8	Uses developing mathematical ideas and methods to solve practical problems.	Uses developing mathematical ideas and methods to solve practical problems.	Uses developing mathematical ideas and methods to solve practical problems.
9	Recognises, counts, orders, writes and uses numbers up to 20.	Uses a range of strategies for addition and subtraction, including some mental recall of number bonds.	Uses mathematical language to describe solid (3D) objects and flat (2D) shapes.

Of the problem solving, reasoning and numeracy (PSRN) scales, points on the number as labels for counting (NLC) scales generally were achieved by the greatest percentage of children, followed by those on the shape, space and measures (SSM) scale; the calculating (C) learning goals were the least frequently achieved for most scale points.

At scale point 6, more (91%) can count reliably up to 10 everyday objects, than can use language such as circle or bigger to describe the shape and size of solids and flat shapes (82%). Similarly at scale point 7, 83% can order numbers up to 10 compared with 64% who were able to find one more or less than a number from 1-10.

Chart 5.3 Achievement on the Problem Solving, Reasoning & Numeracy Scales



5.3.3 Achievement in Knowledge and Understanding of the World; Physical Development; Creative Development

Table 5.6 lists the KUW, PD and CD scale points (4-9); these are then plotted with the percentage of children who achieve them in chart 5.4.

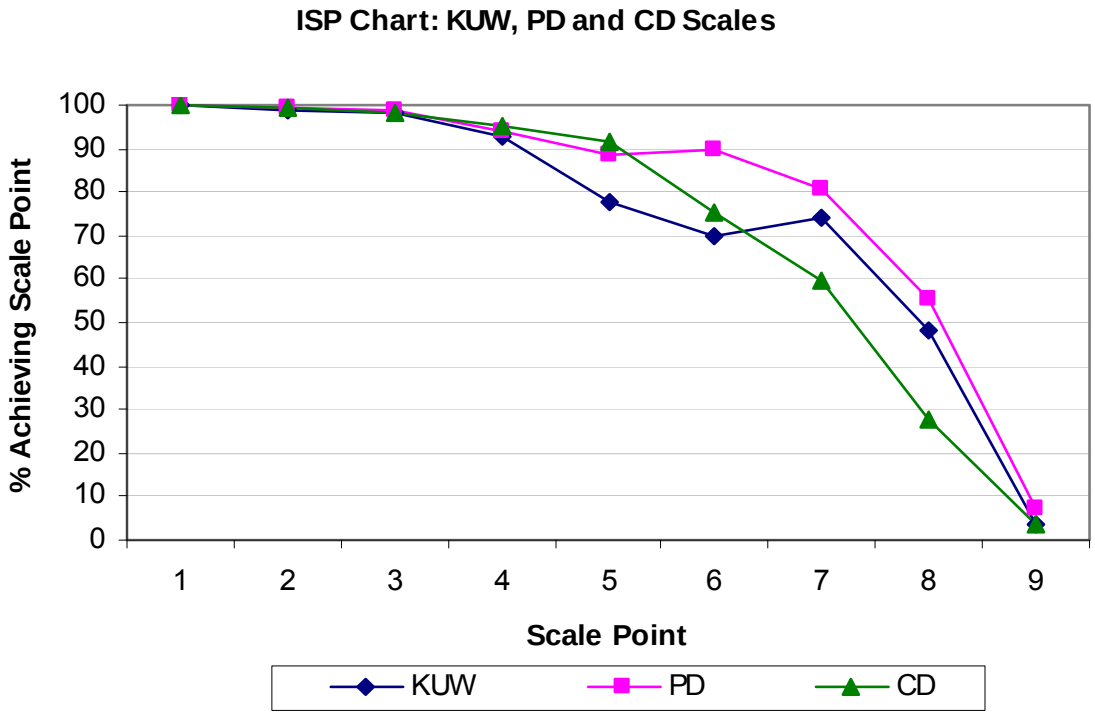
Table 5.6 Individual Scale Points (4-9) for the KUW, PD and CD Scales

	world	Physical Development	Creative Development
	KUW	PD	CD
4	Investigates places, objects, materials and living things by using all the senses as appropriate, identifies some features and talks about those features s/he likes and dislikes.	Moves with confidence, imagination and in safety, travels around, under, over and through balancing and climbing equipment, shows awareness of space, of self and others.	Sings simple songs from memory.
5	Asks questions about why things happen and how things work, looks closely at similarities, differences, patterns and change.	Demonstrates fine motor control and coordination.	Explores colour, texture, shape, form and space in two or three dimensions.
6	Finds out about past and present events in own life, and in those of family members and other people s/he knows, begins to know about own culture and beliefs and those of other people.	Uses small and large equipment, showing a range of basic skills.	Recognises and explores how sounds can be changed, recognises repeated sounds and sound patterns, and matches movements to music.
7	Finds out about and identifies the uses of everyday technology and uses information and communication technology and programmable toys to support her/his learning.	Handles tools, objects, construction and malleable materials safely and with basic control.	Uses imagination in art and design, music, dance, imaginative and role play and stories. Responds in a variety of ways to what s/he sees, hears, smells, touches and feels.
8	Builds and constructs with a wide range of objects, selecting appropriate resources, tools and techniques and adapting her/his work where necessary.	Recognises the importance of keeping healthy and those things which contribute to this, recognises the changes that happen to her/his body when active.	Expresses and communicates ideas, thoughts and feelings using a range of materials, suitable tools, imaginative and role play, movement, designing and making, and a variety of songs and musical instruments.
9	Communicates simple planning for investigations and constructions and makes simple records and evaluations of her/his work. Identifies and names key features and properties, sometimes linking different experiences, observations and events. Begins to exp	Repeats, links and adapts simple movements, sometimes commenting on her/his work. Demonstrates coordination and control in large and small movements, and in using a range of tools and equipment.	Expresses feelings and preferences in response to artwork, drama and music and makes some comparisons and links between different pieces. Responds to own work and that of others when exploring and communicating ideas, feelings and preferences through art.

The three stand-alone scales are tightly bunched at above 90% of children achieving for scale points 1-4; at points 5-6, the Physical and Creative Development points are achieved by more children than the Knowledge and Understanding of the World points; but KUW points 7-9 are achieved by more children than those on the Creative Development scale.

The Physical Development scale has sustained high achievement (>80%) for scale points 1-7; scale point 8 requires the child to show awareness of the importance of keeping healthy, and is only achieved by 56% of children. The Knowledge & Understanding of the World scale points are achieved by over 80% of children for points 1-4; scale point 5 requires the an interest in why things happen, demonstrated by 78% of children; achievement falls further to below 50% for point 8, which requires a range of building and construction skills (48%). Achievement of the Creative Development scale points begins to drop below 80% at point 6, which requires the coordination of musical and movement skills together (75%).

Chart 5.4 Achievement on the Knowledge & Understanding of the World, Physical Development, and Creative Development Scales



5.4 ISP Achievement by Gender Breakdown

There are gender differences in the achievement of scale points. More girls achieved each scale point than boys in almost every assessment scale. The differences in points 1-3 were generally small while those observed for points 4-9 were generally larger. Charts 5.5 – 5.8 illustrate the gender gaps for the complete set of assessment scales.

The scale points with the four *largest* gendered achievement differences are two from CLL Writing and two from Creative Development, and occur in the range of points 5–8. Writing point 5, using a pencil effectively to form letters, has a difference of 17 percentage points (79% of girls achieving compared with 62% of boys). Point 6, attempting writing for different purposes and in different forms, has an even larger gap of 21 percentage points (74% of girls; 53% of boys).

Similarly, point 7 on the Creative Development scale, using imagination in creative activities and tasks, has a 21 percentage point gap (71% of girls achieving compared with 50% of boys). Point 8, communicating ideas, thoughts and feelings through creative means, has a gender gap of 16 percentage points (36% of girls; 20% of boys).

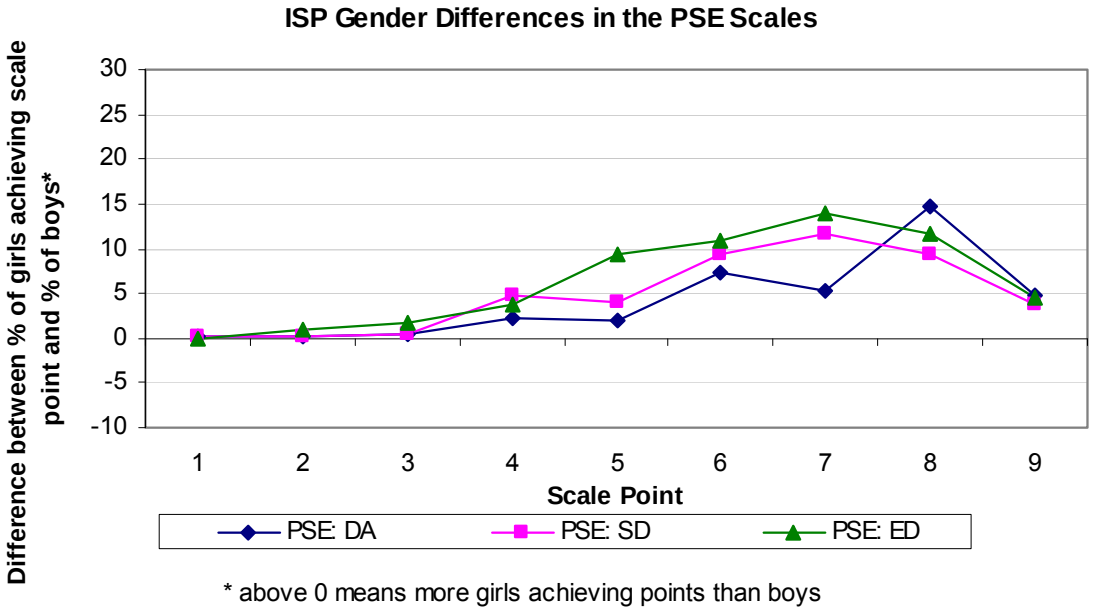
There are noticeably *smaller* gender differences for points 4–9 on the Problem Solving, Reasoning and Numeracy scales, compared with the other assessment areas. The PSRN gaps didn't exceed 5 percentage points (see chart 5.7).

Only three scale points were achieved by higher proportions of boys than girls; these occurred in the Knowledge & Understanding of the World and Problem Solving, Reasoning & Numeracy assessment areas, and had relatively small gaps. Boys have a 5 percentage point advantage in achieving KUW point 8, building with a range of objects, tools and techniques (achieved by 51% of boys compared with 46% of girls). They also have an advantage at point 7, finding out about the uses of everyday technology, but this is smaller at 2 percentage points (75% of boys; 73% of girls).

On the PSRN scales, boys have a slight (I percentage point) advantage on Calculating point 9, using a range of strategies for addition and subtraction including mental recall, also requiring the achievement of all the other Calculating scale points (6% of boys; 5% of girls).

For comprehensive coverage of evidence on reasons for gender achievement gaps, please see *Gender and education: the evidence on pupils in England.* (DFES-00389-2007)[11]. Amongst the explanations considered are different styles of learning, gendered teacher expectations, parental expectations and differences in the home learning environment.

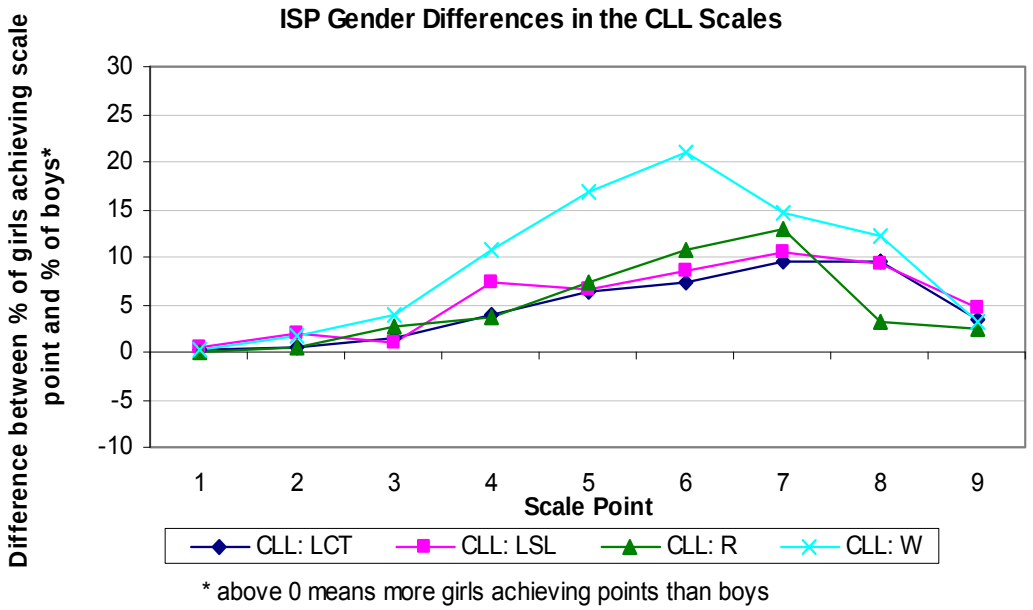
Chart 5.5 Girls' Percentage Point Advantages: PSE Achievement



* above 0 means more girls achieving points than boys

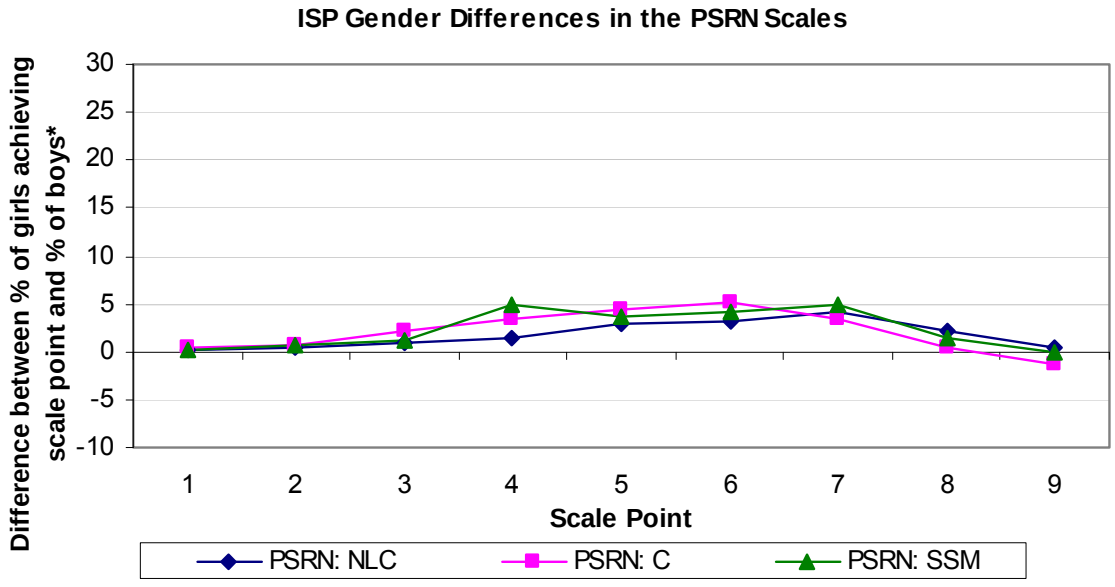
[11] http://www.education.gov.uk/research/data/uploadfiles/DFES-00389-2007.pdf

Chart 5.6 Girls' Percentage Point Advantages: CLL Achievement



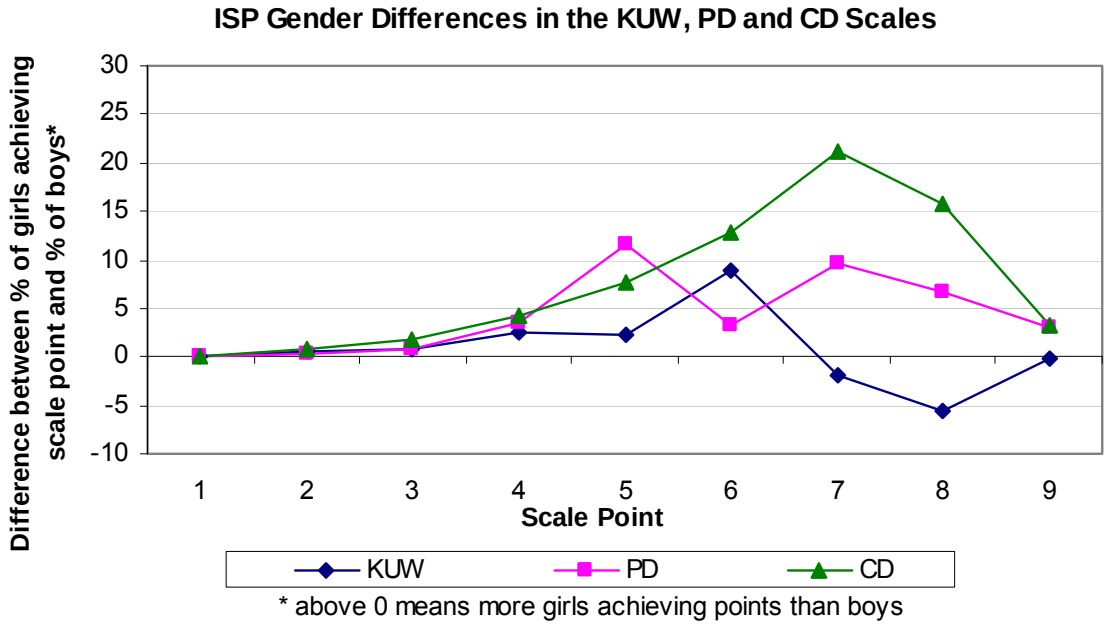
* above 0 means more girls achieving points than boys

Chart 5.7 Girls' Percentage Point Advantages: PSRN Achievement



* above 0 means more girls achieving points than boys

Chart 5.8 Girls' Percentage Point Advantages: KUW, PD and CD Achievement



5.5 Comparison of the Lowest 20% of Achievers with All Children

Examining the differences between the lowest 20% of achievers and all children, table 5.8 confirms that none of the individual points or scales has equal achievement (or an advantage) for those who record the lowest 20% of total point scores.

The largest differences occur in the Communication, Language & Literacy scales, followed by the Problem Solving, Reasoning & Numeracy scales. The percentage points difference between all children and the lowest achieving 20%. As well as being larger, the CLL and PSRN differences start at lower points on the scales – points 2-4, compared with points 5-9 for most other scales.

The very largest individual scale point differences are over 50 percentage points in size. For PSRN Calculating point 6, beginning to use the vocabulary of addition and subtraction, the gap between the lowest achieving 20% and all children was 57 percentage points. Just below this at 55 percentage points, the second largest gap was for CLL Linking Sounds & Letters point 7, using phonics to read simple words.

The earliest large differences on the scales are both from the Communications, Language & Literacy area. Linking Sounds & Letters point 4, naming and sounding letters of the alphabet, has a gap of 40 percentage points between all children and the lowest scoring 20% on total point scores. Also at point 4, the difference in the percentage of children able to write their own name plus other simple words was 47 percentage points.

Table 5.8 – ISP Achievement of the Lowest Scoring 20% Compared with All Children

Scales	Individual Scale Point % Achievement Differences: All Children Compared with the Lowest Achieving 20%									
	1	2	3	4	5	6	7	8	9	Average
PSE: Dispositions & Attitudes	1	2	2	8	9	38	45	45	12	18
PSE: Social Development	1	2	2	16	18	40	46	33	9	18
PSE: Emotional Development	1	7	8	19	35	48	47	43	9	24
CLL: Language for Communication and Thinking	1	2	12	23	27	45	51	37	9	23
CLL: Linking Sounds and Letters	2	13	7	40	42	51	55	33	11	28
CLL: Reading	1	3	19	23	47	54	53	32	7	27
CLL: Writing	1	8	21	47	45	54	46	27	5	28
PSRN: Numbers as labels for counting	1	2	8	13	32	30	45	38	15	20
PSRN: Calculating	2	6	20	35	49	57	53	27	6	28
PSRN: Shape, Space, and Measures	2	5	10	29	34	45	52	28	7	23
Knowledge and Understanding of the World	1	4	8	22	44	49	39	33	3	22
Physical Development	1	2	4	15	26	25	38	45	7	18
Creative Development	1	3	7	14	23	44	45	26	4	18

more than 10 percentage points difference
more than 25 percentage points difference
more than 40 percentage points difference

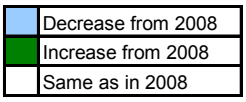
5.6 Comparison of the 2009 Data with 2008

Table 5.9 displays the percentage point differences in achievement of each individual scale point between 2008 and 2009. The maximum change was 3 percentage points, with few differences at all in the range of points 1-3, unsurprisingly as there was little scope for improvement with the vast majority of children achieving these points. Most of the small increases in the percentage of children achieving the points were in the range of points 4-6, whilst all but two scale points in the range 7-9 saw small decreases between 2008 and 2009.

The decreases are thought to be explained by moderation of EYFS Profile results becoming more robust and embedded each year. Nevertheless, due to increases in the percentage of children achieving some of the individual scale points in the PSE and CLL assessment areas, there was a 3 percentage point increase in the proportion of children achieving a Good Level of Development from 2008 to 2009.

Table 5.9 Individual Scale Point Achievement Changes: 2008 to 2009

Scales	Individual Scale Point (percentage points difference in the proportion achieving each scale point from 2008 to 2009)								
	1	2	3	4	5	6	7	8	9
PSE: DA	0	0	-1	0	0	1	1	-2	-2
PSE: SD	0	0	0	2	1	0	-1	-1	-2
PSE: ED	0	0	0	1	1	1	-1	-3	-2
CLL: LCT	0	0	0	1	0	0	-1	-3	-2
CLL: LSL	1	1	0	3	1	3	-2	-2	-2
CLL: R	0	0	-1	-1	0	-1	-1	-2	-2
CLL: W	0	0	0	1	0	0	-1	-2	-1
PSRN: NLC	0	0	0	0	0	0	-1	-2	-2
PSRN: C	0	1	0	0	1	-1	-1	-2	-1
PSRN: SSM	0	0	0	0	0	-1	-2	-3	-2
KUW	0	0	0	1	1	2	-1	-3	-1
PD	0	0	0	1	0	0	-1	-2	-2
CD	0	0	0	-1	-1	0	-2	-3	0



6. Subsequent Achievement – Analysis of Transitions from EYFS to Key Stages 1 and 2

Summary

- Analysis of interdependences between the various EYFS scales shows that all individual scales have significant positive correlations with all other scales. The Knowledge and Understanding of the World (KUW) scale shows the strongest correlation with other areas of assessment, with a mean coefficient of 0.68. This is closely followed by the Communication, Language & Literacy area (r=0.67) and Problem Solving, Reasoning & Numeracy (r=0.67). The Personal, Social & Emotional development, Creative Development, and Physical Development scales have slightly lower mean correlations with other scales of 0.63-0.64.
- For reading, writing and maths, the influence of prior attainment is stronger at high and low thresholds of Key Stage 1 achievement than for the expected level, with each additional point at EYFS making more difference to whether a child achieves level 1 or level 3 at KS1 than it does to whether they achieve the expected level (2b).
- Maths transitions from EYFS to KS1 differ from those in reading and writing in that more children achieved the expected level at KS1. At the same time, many more children achieved 7, 8 and 9 PSRN average points at EYFS.
- Tentatively, the influence of marginal extra points of EYFS prior attainment appears to be weaker over the longer interval to Key Stage 2 than for Key Stage 1. Transitions from EYFS to Key Stage 2 maths suggest that there may be a lower likelihood of catching up to the expected level after low EYFS performance than is the case for reading or writing – this in contrast with the pattern of KS1 transitions.
- Multilevel Modelling of children's progress between EYFS and Key Stage 1 confirms that most of the variation in KS1 average point scores occurs within schools, with only 12% of the variance found to be between schools. 52.5% of variation in KS1 results can be explained by prior attainment in the Problem Solving, Reasoning & Numeracy, and Communications, Language & Literacy scales. Adding the other EYFS scales to the model marginally increases the variance explained to 53.1%. Child characteristics such as gender, special educational needs and free school meals eligibility explained only a small extra portion of the variation in KS1 points scores, bringing the total proportion explained to 54.7%.

6.1 Introduction

This chapter examines the relationship between children's performance in the EYFS Profile and subsequent achievement at Key Stages 1 and 2. Section

6.2 begins by probing the interdependencies between different scales within the EYFS profile to establish how these might affect transitions to later Key Stages. Section 6.3 then presents probability and correlation analyses of the strength of the relationship between each of the EYFS Profile scales and KS1 point scores in Reading, Writing and Maths, plus overall average point scores.

Section 6.4 then examines how these correlations are reflected in the percentages of children achieving individual Key Stage 1 levels for each possible point score on related scales at EYFS. Section 6.5 presents a corresponding analysis of Key Stage 2 individual levels achievement to test whether the prior attainment dependencies are weaker over a longer time period. Finally, section 6.6 returns to Key Stage 1 transitions to pull together prior attainment at EYFS simultaneously with child characteristics information, modelling KS1 average point scores using multi-level regressions to apportion the variance between and within schools.

6.2 Correlation Between EYFSP Profile Scales

This section reports the results of correlation analyses to assess the levels of interdependence between the various EYFS scales. Table 6.1 summarises the correlations at a broad assessment area level, presenting the mean correlation coefficients for each area and all scales not in that area.

The Knowledge and Understanding of the World (KUW) scale shows the strongest interdependence with other areas of assessment, with a mean coefficient of 0.68. This is closely followed by the Communication, Language & Literacy area (0.67) and Problem Solving, Reasoning & Numeracy (0.67). The Personal, Social & Emotional development, Creative Development, and Physical Development scales have slightly lower mean correlations of 0.63-0.64. Please note that the correlations cannot be used to infer causal relationships or directions of causation.

Table 6.1 Summary of Between Area Correlations

Average Correlation Between All Scales Within the Assessment Area and All Other Scales In Different Assessment Areas	
CLL Average	0.67
PSRN Average	0.66
PSE Average	0.63
CD Average	0.64
KUW Average	0.68
PD Average	0.63

Table 6.2 provides a full set of correlations for all the EYFS scales. All combinations of scales have statistically significant correlations, with the strongest being between CLL Reading and CLL Linking Sounds & Letters, at 0.83. The joint weakest correlations, with coefficients of 0.55, are between PSRN Numbers and PSE Social Development / PSE Emotional Development.

Table 6.2 Correlations Between EYFS Scales

	PSE: Dispositions & Attitudes	PSE: Emotional Development	PSE: Social Development	CLL: Linking Sounds & Letters	CLL: Language for communication & thinking	CLL: Reading	CLL: Writing	PSRN: Numbers	PSRN: Shape, Space & Measure	PSRN: Calculating	Creative Development	Knowledge & Understanding of the World	Physical Development
PSE: Dispositions & Attitudes	1.00												
PSE: Emotional Development	0.71	1.00											
PSE: Social Development	0.70	0.81	1.00										
CLL: Linking Sounds & Letters	0.63	0.59	0.58	1.00									
CLL: Language for communication & thinking	0.73	0.72	0.69	0.68	1.00								
CLL: Reading	0.66	0.64	0.63	0.83	0.73	1.00							
CLL: Writing	0.64	0.61	0.60	0.82	0.67	0.81	1.00						
PSRN: Numbers	0.60	0.55	0.55	0.73	0.63	0.73	0.70	1.00					
PSRN: Shape, Space & Measure	0.65	0.64	0.62	0.72	0.72	0.76	0.70	0.73	1.00				
PSRN: Calculating	0.63	0.61	0.60	0.76	0.69	0.78	0.74	0.79	0.79	1.00			
Creative Development	0.65	0.65	0.64	0.59	0.70	0.64	0.63	0.56	0.66	0.61	1.00		
Knowledge & Understanding of the World	0.67	0.67	0.65	0.64	0.74	0.71	0.64	0.63	0.74	0.70	0.72	1.00	
Physical Development	0.66	0.63	0.62	0.58	0.66	0.62	0.62	0.58	0.65	0.61	0.67	0.67	1.00

Table 6.3 is a subset of table 6.2, highlighting those correlations which span *across* different areas of learning, and for which the coefficients are 0.65 or stronger. The grey shaded correlations are between Communication, Language & Literacy scales and Problem Solving, Reasoning & Numeracy scales, illustrating the relative strength of these interdependencies compared with other combinations of scales.

Table 6.3 Subset Showing Correlations of 0.65+ Spanning Different Areas of Learning

Scales		Correlation
PSRN: Calculating	CLL: Reading	0.78
PSRN: Calculating	CLL: Linking Sounds & Letters	0.76
PSRN: Shape, Space & Measure	CLL: Reading	0.76
PSRN: Calculating	CLL: Writing	0.74
Knowledge & Understanding of the World	PSRN: Shape, Space & Measure	0.74
Knowledge & Understanding of the World	CLL: Language for communication & thinking	0.74
PSE: Dispositions & Attitudes	CLL: Language for communication & thinking	0.73
PSRN: Numbers	CLL: Reading	0.73
PSRN: Numbers	CLL: Linking Sounds & Letters	0.73
PSRN: Shape, Space & Measure	CLL: Language for communication & thinking	0.72
PSRN: Shape, Space & Measure	CLL: Linking Sounds & Letters	0.72
PSE: Emotional Development	CLL: Language for communication & thinking	0.72
Creative Development	Knowledge & Understanding of the World	0.72
Knowledge & Understanding of the World	CLL: Reading	0.71
Knowledge & Understanding of the World	PSRN: Calculating	0.70
PSRN: Shape, Space & Measure	CLL: Writing	0.70
Creative Development	CLL: Language for communication & thinking	0.70
PSRN: Numbers	CLL: Writing	0.70
PSE: Social Development	CLL: Language for communication & thinking	0.69
PSRN: Calculating	CLL: Language for communication & thinking	0.69
Physical Development	Knowledge & Understanding of the World	0.67
PSE: Emotional Development	Knowledge & Understanding of the World	0.67
Creative Development	Physical Development	0.67
PSE: Dispositions & Attitudes	Knowledge & Understanding of the World	0.67
Creative Development	PSRN: Shape, Space & Measure	0.66
PSE: Dispositions & Attitudes	Physical Development	0.66
PSE: Dispositions & Attitudes	CLL: Reading	0.66
Physical Development	CLL: Language for communication & thinking	0.66
PSE: Dispositions & Attitudes	PSRN: Shape, Space & Measure	0.65
Physical Development	PSRN: Shape, Space & Measure	0.65
PSE: Social Development	Knowledge & Understanding of the World	0.65
PSE: Dispositions & Attitudes	Creative Development	0.65
PSE: Emotional Development	Creative Development	0.65

6.3 Transitions From EYFS to Key Stage 1 Point Scores

6.3.1 Probability of Achieving the Expected Level at Key Stage 1

At Key Stage 1, the expected level of achievement is level 2, or 13 points. Chart 6.1a shows the probability curve for achieving the expected level (or better) in reading, writing and maths for the range of possible average point scores at EYFS. The chances of reaching the expected level thresholds at Key Stage 1 increase with every additional point scored over the range of 2 to 9 scale points.

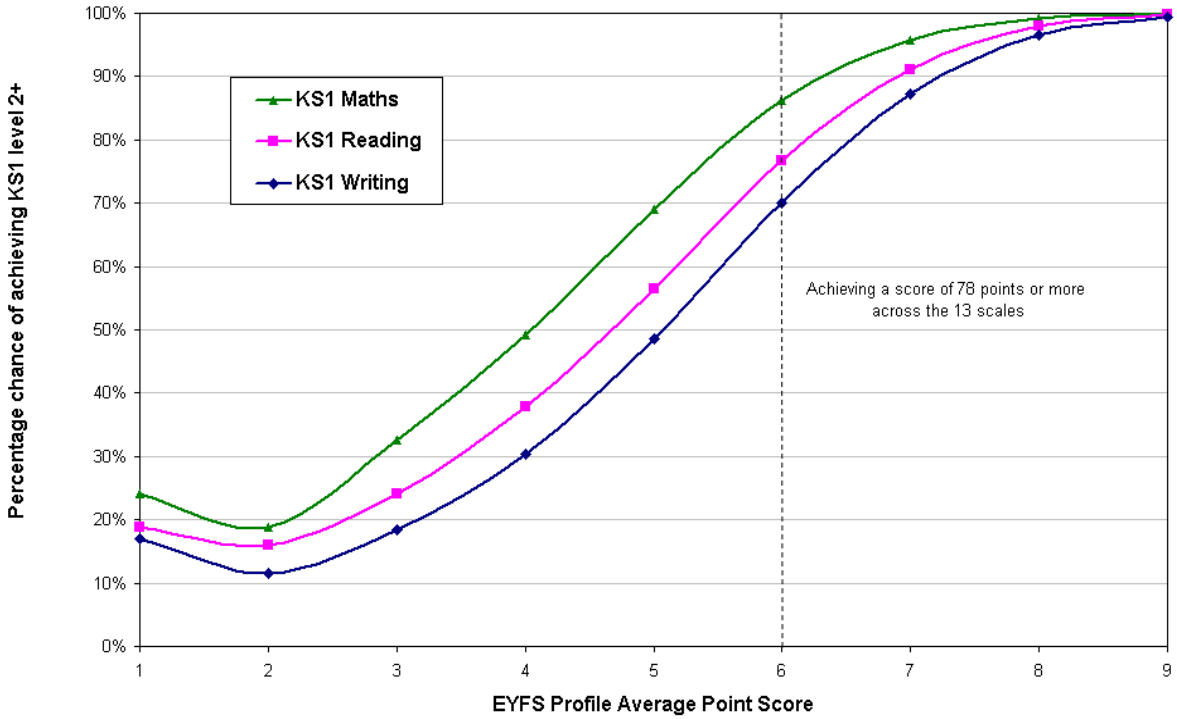
Looking at which KS1 subject the EYFS average point score had most influence on, this varies depending on the level of achievement at EYFS.

There is an unexplained kink in the curve with KS1 achievement probabilities falling between averages of 1 and 2 points per scale at EYFS.

For scale point totals in the range 3-5, one additional point at EYFS gives the largest gains in the probability of reaching the expected level at KS1 for maths (17-23 percentage points, compared with 8-18 ppts for reading and 7-19 ppts for writing).

However, for scale point totals in the range 6-8, the largest increases in the chances of reaching the KS1 threshold are for writing (10-21 ppts, compared with 7-14 ppts for reading and 3-17 ppts for maths).

Chart 6.1 - Probability of Achieving KS1 Level 2+ by EYFS Average Point Score



6.3.2 Point Score Correlations Between EYFS Separate Scales and KS1

To explore the strength of the interdependence between individual EYFS scales and the KS1 subjects, a correlation analysis is presented in table 6.4. This collapses the variation across the range of EYFS performance into average point scores, but allows the reader to assess which specific EYFS scales have the strongest correlations with each KS1 subject.

Looking first at the columns in table 6.4, a comparison of the correlation coefficients shows that KS1 reading is most linked to Communication, Language & Literacy at EYFS (r=0.68), and within that most correlated with CLL linking sounds and letters (r=0.66). The strongest association with KS1 writing is also CLL (r=0.67), and within that CLL writing (r=0.65). For KS1 maths, the interdependence is jointly strongest for Problem Solving, Reasoning & Numeracy and for Communication, Language & Literacy (both

r=0.64); within which, PSRN numbers and PSRN calculating (both r=0.62) are the most important individual scales.

Turning to the rows in table 6.4, each of the EYFS learning areas is most strongly associated with average point scores at KS1, rather than individual KS1 subjects. The Personal, Social & Emotional scales average is most linked to writing (r=0.50), of the KS1 subjects. For the Communications, Language & Literacy scales average, the strongest correlation with an individual KS1 subject is with reading (r=0.68); for the Problem Solving, Reasoning & Numeracy scales average, it is with KS1 reading and maths jointly (both r=0.64). Knowledge & Understanding of the World is most linked to KS1 maths (r=0.49), whereas Physical Development is most associated with KS1 writing (r=0.45), and Creative Development has the strongest correlations with reading and writing at KS1 (both r=0.45).

Table 6.4 – Correlation: 2007 EYFS Profile Scales and 2009 KS1 Teacher Assessments

Foundation Stage Profile 2007	KS1 Reading 2009	KS1 Writing 2009	KS1 Maths 2009	KS1 Average Point Score 2009
PSE: *Dispositions and Attitudes*	0.49	0.50	0.49	0.53
PSE: *Social Development*	0.44	0.45	0.42	0.47
PSE: *Emotional Development*	0.45	0.45	0.43	0.48
PSE Average	***0.49***	***0.50***	***0.48***	***0.53***
CLL: *Language for Communication and Thinking*	0.52	0.51	0.50	0.56
CLL: *Linking Sounds and Letters*	0.66	0.64	0.61	0.68
CLL: *Reading*	0.64	0.62	0.60	0.67
CLL: *Writing*	0.65	0.65	0.61	0.68
CLL Average	***0.68***	***0.67***	***0.64***	***0.71***
PSRN: *Numbers as Labels for Counting*	0.61	0.60	0.62	0.65
PSRN: *Calculating*	0.61	0.59	0.62	0.66
PSRN: *Shape, Space and Measures*	0.56	0.54	0.56	0.60
PSRN Average	***0.64***	***0.62***	***0.64***	***0.68***
Knowledge and Understanding of the World.	0.48	0.47	0.49	0.52
Physical Development.	0.44	0.45	0.44	0.48
Creative Development.	0.45	0.45	0.42	0.48
FSP Overall Average	***0.64***	***0.63***	***0.62***	***0.68***

6.4 Transitions From EYFS to Key Stage 1 Individual Levels

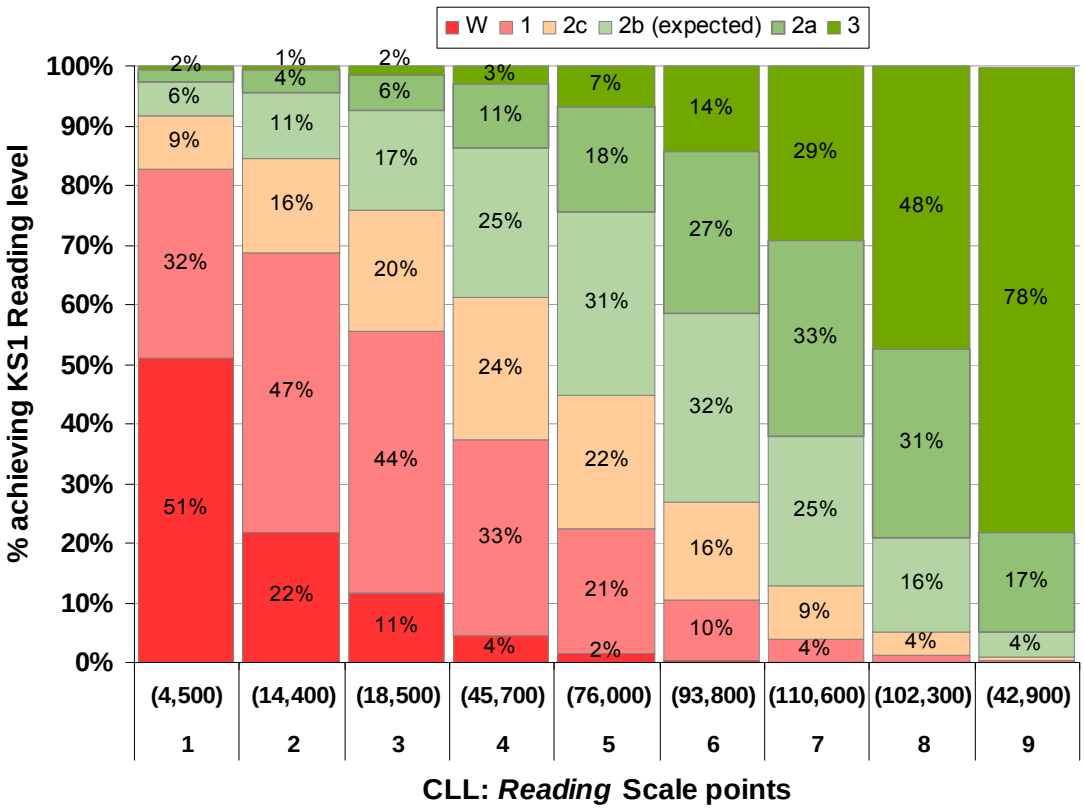
This section focuses on the transitions which are most equivalent between EYFS and KS1: reading-reading, writing-writing, and PSRN average-maths. Charts 6.2 to 6.4 display the percentages of children with a given number of scale points at EYFS who then go on to achieve each individual level at KS1.

In this way, the influence of prior attainment at different levels of achievement becomes apparent.

The horizontal axes provide the total number of points achieved in the EYFS Profile for that scale, whilst the vertical axes show the percentage of children reaching each KS1 level. The KS1 levels are identified according to the colour of the bar, using the key at the top of the chart.[12] The percentage within each bar represents the proportion of children in each prior attainment group who go on to achieve each of the levels at KS1. The number of children in each EYFS attainment group is shown in brackets above the EYFS scale points.

Chart 6.2 tells us that achievement of 5 scale point at EYFS reading is the threshold level of prior attainment at which it becomes more likely than not that a child will go on to reach the expected level of achievement in KS1 reading (L2b). The influence of prior attainment is stronger at high and low levels of Key Stage 1 achievement, with each additional point at EYFS making more difference to whether a child achieves level 1 or level 3 at KS1 than it does to whether they achieve the expected level, which falls between these thresholds.

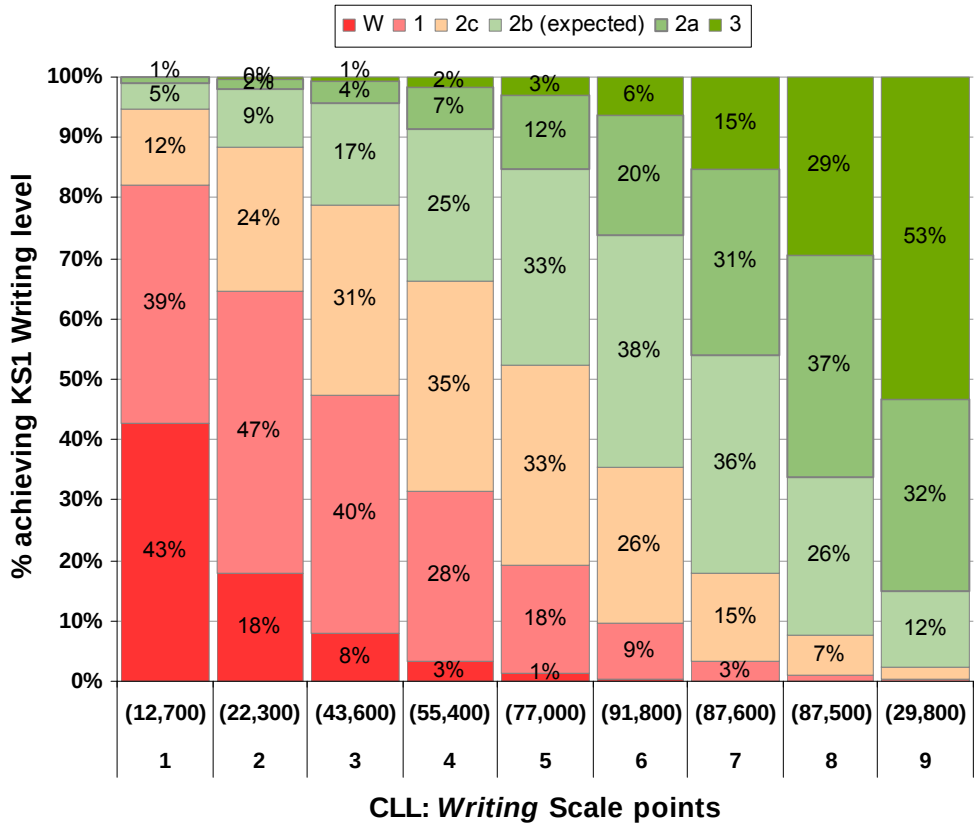
Chart 6.2 Transitions: EYFS CLL Reading to KS1 Reading.



[12] "W" represents pupils who were working towards a teacher assessment level but have not yet achieved the standards required for Level 1.

Chart 6.3 reveals a similar pattern of transitions for writing. However, fewer children achieve the expected level (L2b) in writing at KS1 than for reading; consequently, 6 points at EYFS are required to make it more likely than not that a child will go on to reach this level. Again, differences in EYFS achievement made more difference to lower (L1) and higher (L3) attaining children at KS1 than those with expected achievement levels (L2b).

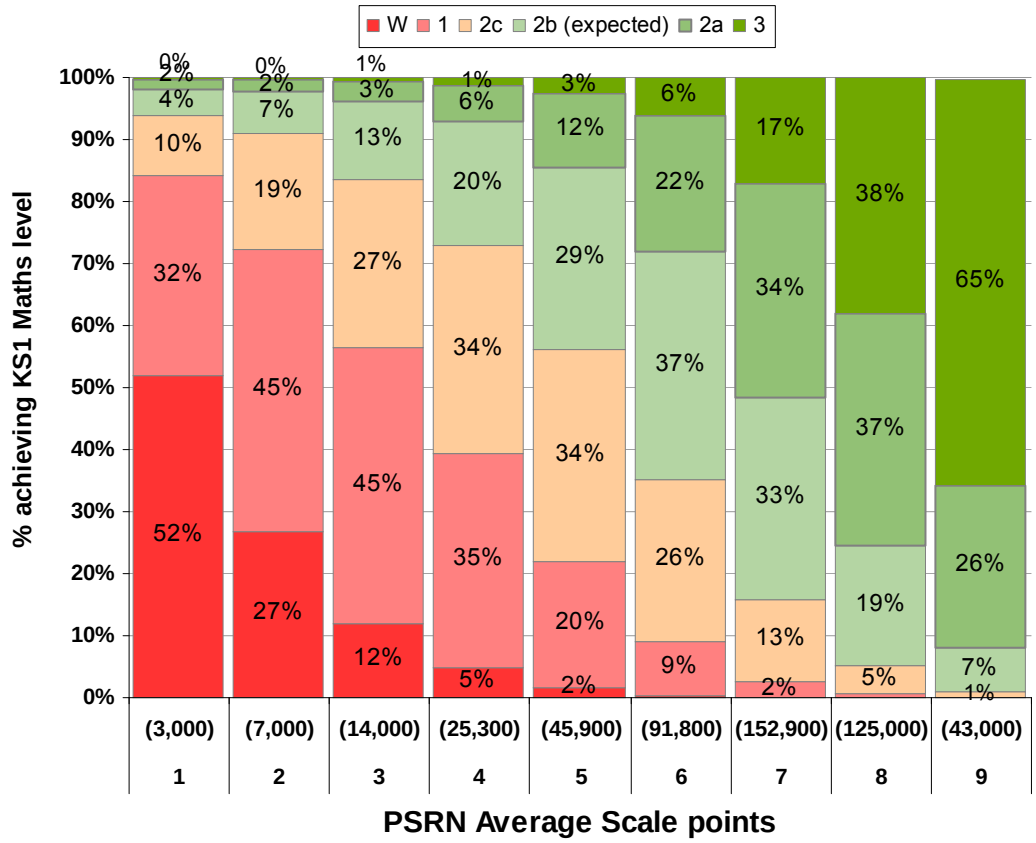
Chart 6.3 Transitions: EYFS CLL Writing to KS1 Writing.



As was the case with the reading and writing transitions, a similar pattern of transitions is observed in Chart 6.4 for maths. In fact, an average of 6 points across the PSRN scales at EYFS are required to make it more likely than not that a child will go on to reach the expected level in maths at KS1. However, many more children achieved 7, 8 and 9 PSRN average points at EYFS.

The pattern of greater influence of EYFS scores on low and high KS1 achievement thresholds (L1 and L3), than on middle thresholds such as L2b appears again for maths, as with reading and writing.

Chart 6.4 Transitions: EYFS Problem Solving, Reasoning & Numeracy to KS1 Maths.



6.5 Transitions From EYFS to Key Stage 2 Individual Levels

Data for transitions from EYFS to Key Stage 2 are not as reliable as those for the Key Stage 1 transitions because the EYFS cohort required for the analysis dates back to 2003. At that time the EYFS Profile assessments were still being embedded, so caution is required in interpreting the following analyses as the patterns observed might not be stable over time. Charts 6.5 to 6.7 are presented to give a general feel for the patterns of transition over a longer interval.[13]

Chart 6.5 suggests that achievement of 3 EYFS reading points is the threshold at which it becomes more likely than not that a child will achieve the expected level (L4) at KS2 reading. The influence of marginal extra points of EYFS prior attainment appears to be weaker over the longer interval to Key Stage 2. This can be seen in the gentler diagonal slopes formed by the thresholds between KS2 attainment levels.

[13] "B" represents pupils who were working below the level of the test.
"N" represents pupils who took the tests but failed to register a level.

Chart 6.5 Transitions: EYFS CLL Reading to KS2 Reading.

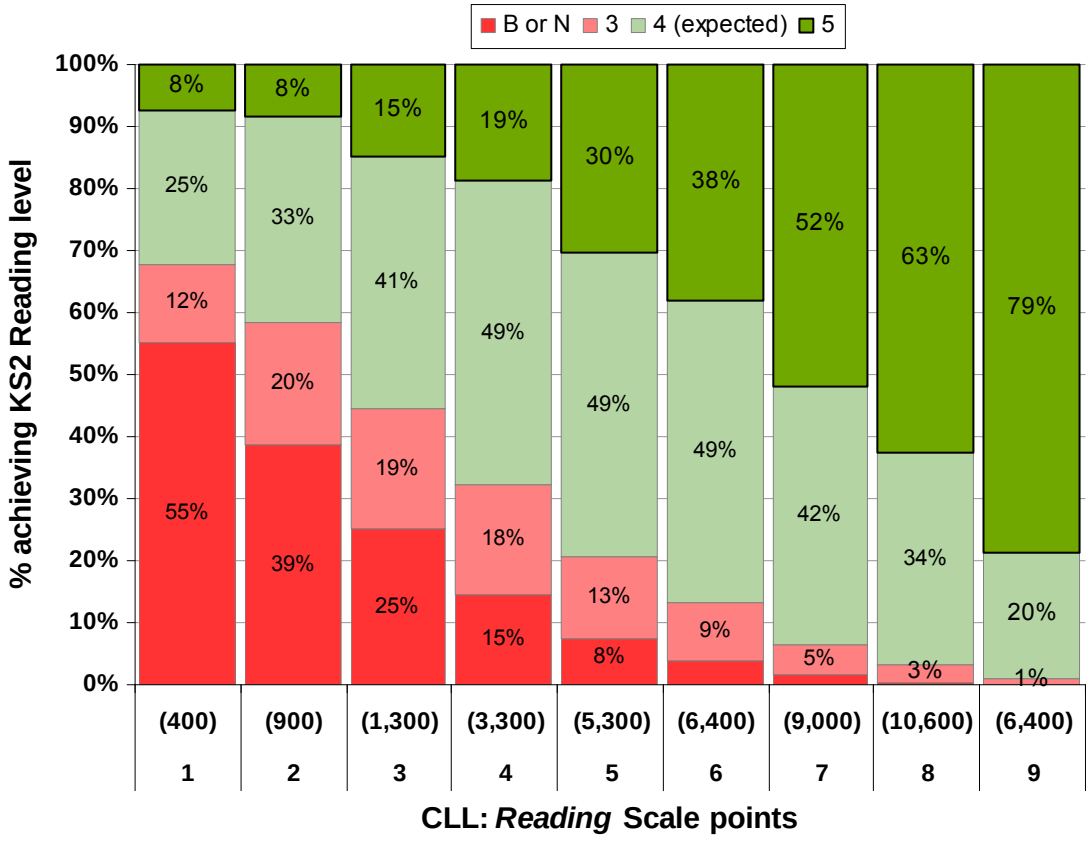


Chart 6.6 suggests that achievement of 4 EYFS writing points is the threshold at which it becomes more likely than not that a child will achieve the expected level (L4) at KS2 writing, possibly reflecting a lower likelihood of catching up to the expected level than for reading.

Chart 6.6 Transitions: EYFS CLL Writing to KS2 Writing.

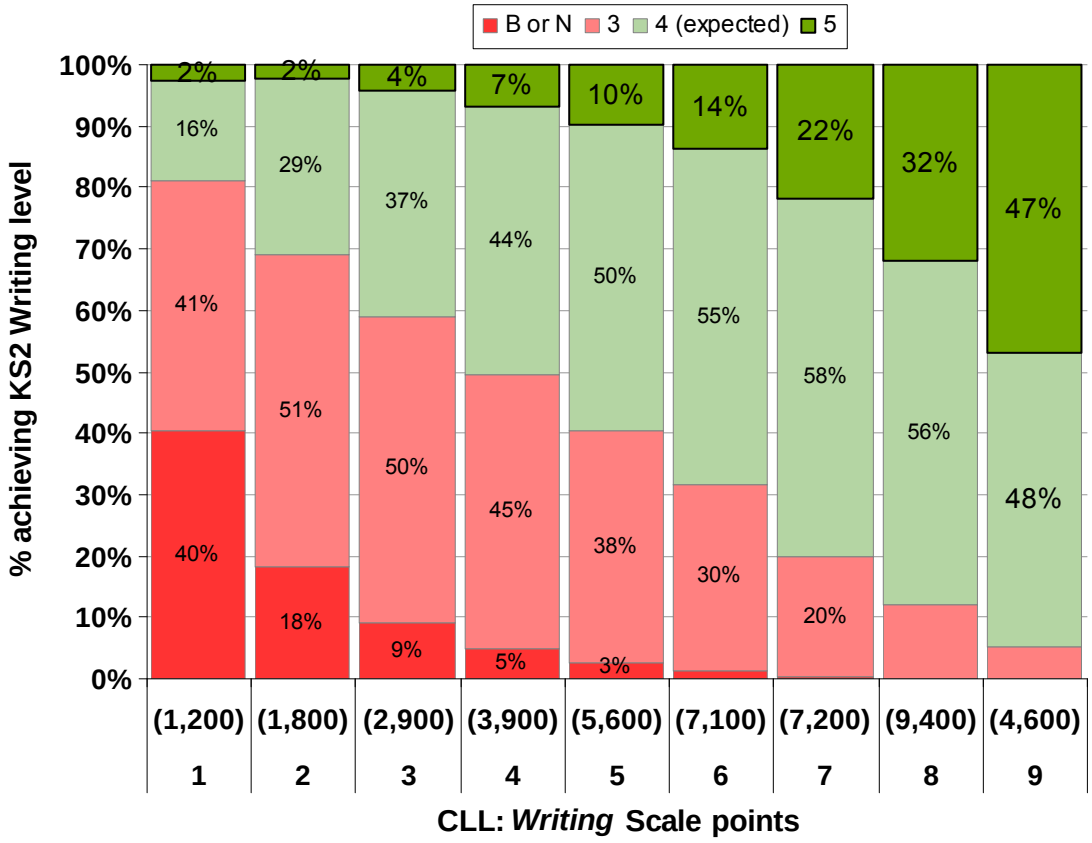
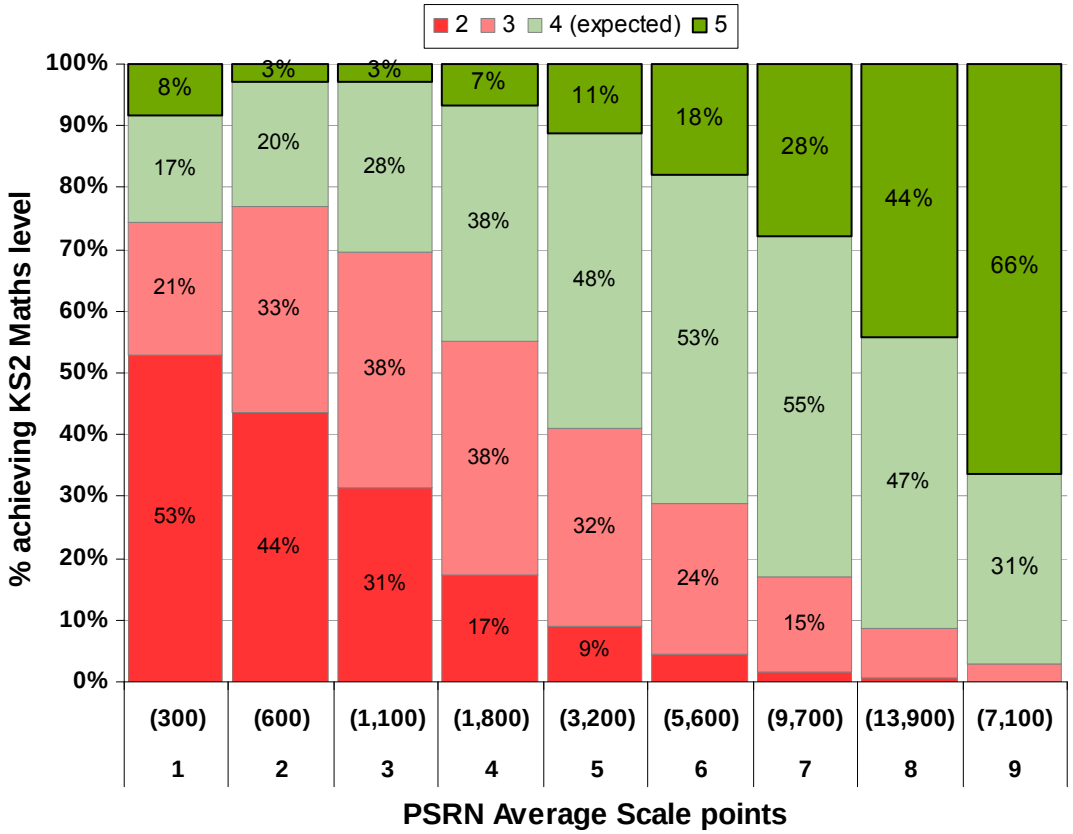


Chart 6.7 suggests that achievement of 5 EYFS writing points is the threshold at which it becomes more likely than not that a child will achieve the expected level (L4) at KS2 writing, possibly reflecting a lower likelihood of catching up to the expected level than for reading or writing.

Chart 6.7 Transitions: EYFS Problem Solving, Reasoning & Numeracy to KS2 Maths.



6.6 How Much Variation at KS1 is Explained by EYFS Prior Attainment?

This section makes use of multi-level modelling to look at how much of the variation in Key Stage 1 average points scores can be explained by a child's skills and development at the end of the Early Years Foundation Stage. This also allows us to estimate how much of the variation in KS1 APS is due to the identifiable characteristics of the children (known as *in-school variation*) and how much is due to variation between schools.

6.6.1 Methodology

Multi-Level Modelling (MLM) is a type of regression analysis that controls for the fact that children are clustered within schools. Children within schools tend to have more in common with each other than with children in other schools. MLM is a way of controlling for these school effects.

The model is built up in three steps:

Step 1: School effects
The first step is a null model, which contains no explanatory variables, but controls for the school attended at KS1 in the model specification.
Step 2: School effects and prior attainment
In the second step of the model, the only variables entered are the EYFS scale scores (the prior attainment).
Step 3: School effects, prior attainment plus demographic variables
In the third step, child level characteristics that are associated with attainment are added to the model, including age in year, gender, free school meal status and SEN status.

6.6.2 Estimates from the Model

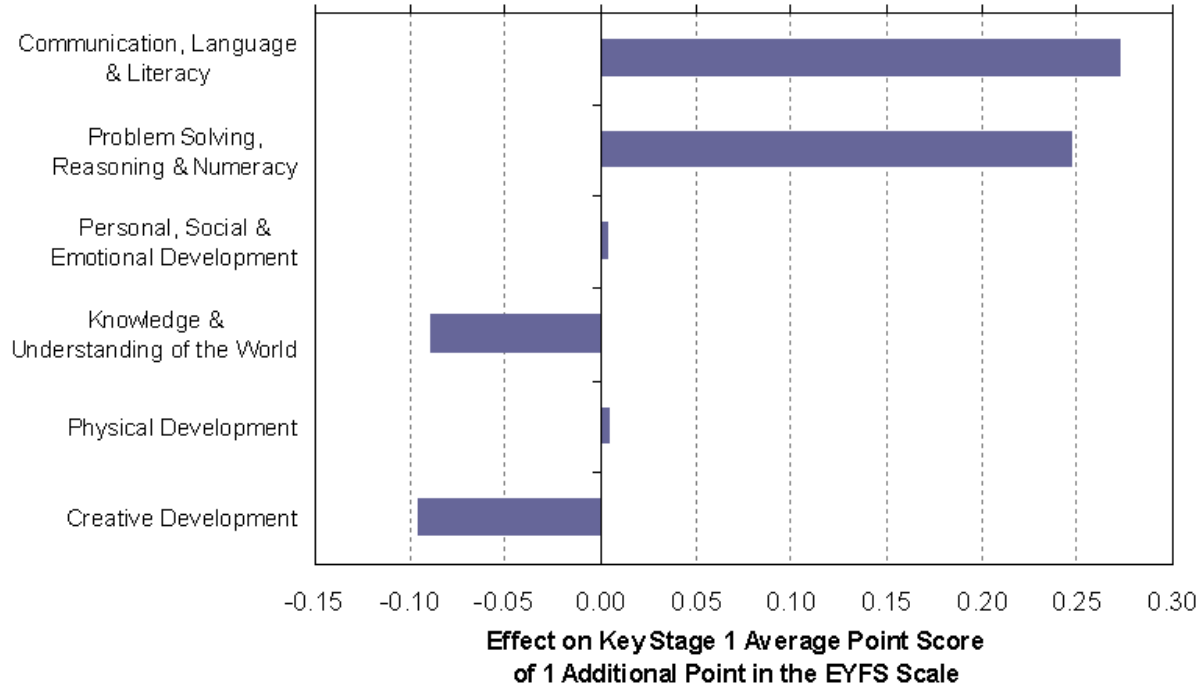
Step 1: School effects
As with other Key Stage transitions, most of the variation in KS1 average point scores occurs within schools. Only 12% of the variance is between schools. This leaves a lot of scope for explaining the variance to the individual within-school explanatory factors added in the subsequent steps.

Step 2: School effects and prior attainment
At step 2, it was found that 52.5% of variation in KS1 results can be explained by prior attainment in the Problem Solving, Reasoning & Numeracy, and Communications, Language & Literacy scales. Children with high scores in both these scales are very likely to achieve high scores at KS1. Adding the other scales to the model marginally increases the variance explained to 53.1%. The marginal size of the improvement is unsurprising given the degree of correlation between the various EYFS scales reported in section 6.1.

Chart 6.8a illustrates the relative influence of the assessment areas at EYFS on the Key Stage 1 average point scores, emphasising the importance of the

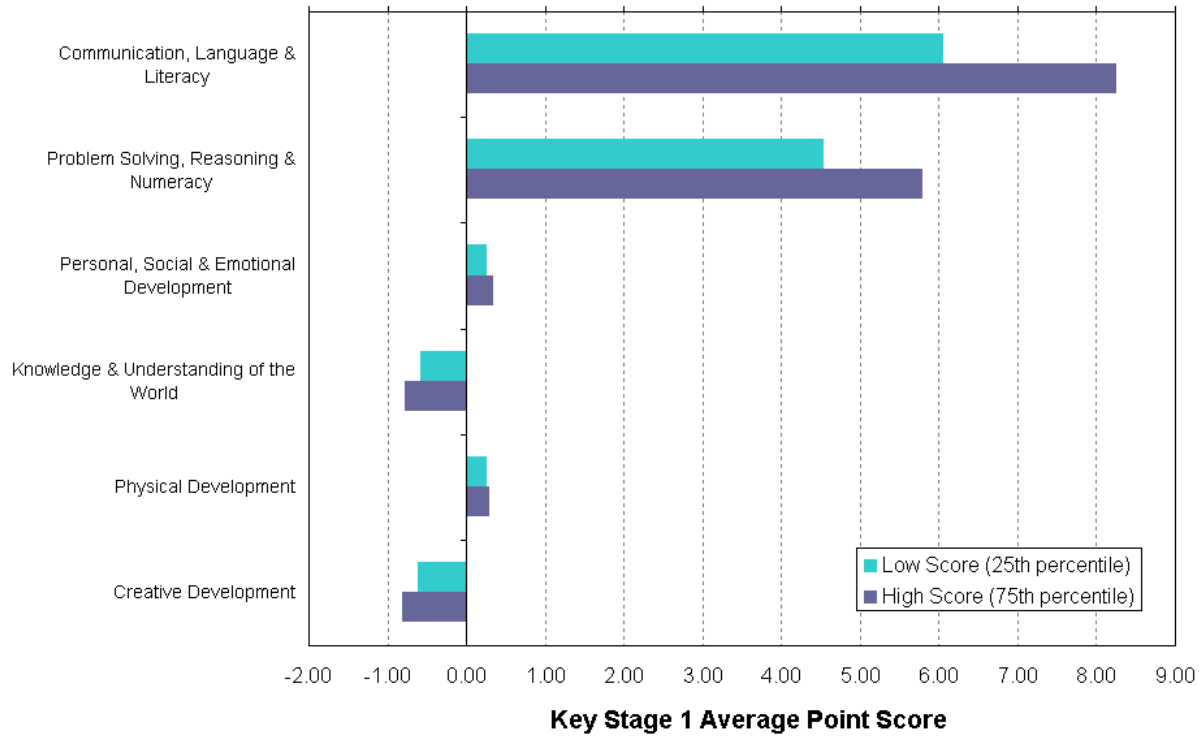
CLL and PSRN scales. These effects on KS1 point scores are associated with scoring 1 additional point in the relevant EYFS scale.

Chart 6.8a Modelled Relationship Between 1 EYFS Scale Point & KS1 Achievement



As the EYFS assessment areas have differing maximum point scores depending on the number of scales they contain, it is necessary to check that the relationships seen in chart 6.8a are not just artefacts of the scoring system. This is achieved in chart 6.8b, by estimating the effects for scoring at the upper and lower quartiles for each area. The relative sizes of the effects are unaltered by this check confirming that CLL and PSRN are the most influential for KS1 average point scores.

Chart 6.8b Modelled Relationship Between EYFS Scale Scores & KS1 Achievement

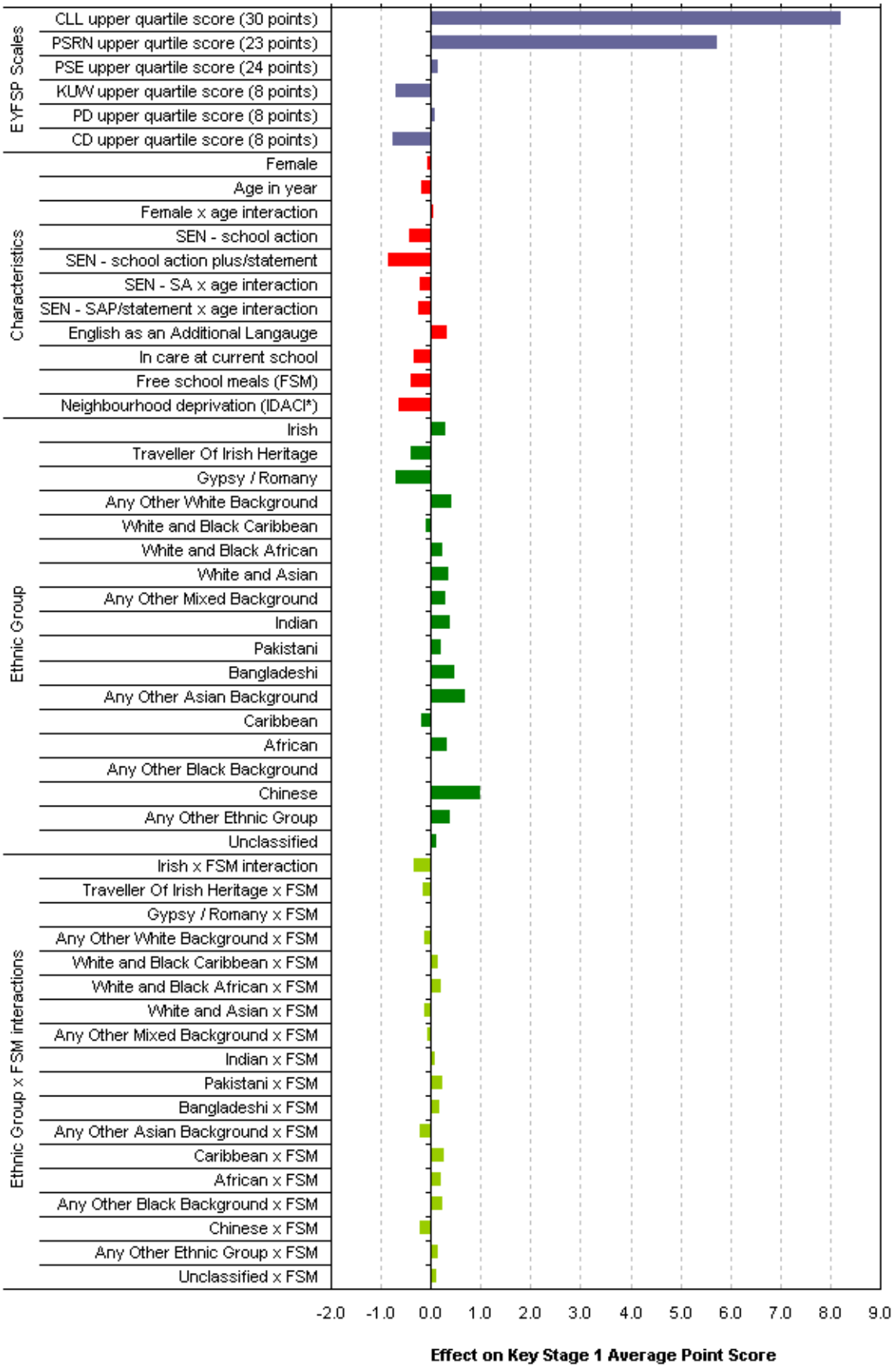


Step 3: School effects, prior attainment plus demographic variables
Child characteristics such as gender, special educational needs and free school meals eligibility explained only a small extra fraction of the variation in KS1 points scores, bringing the total proportion explained to 54.7%. Nevertheless, the model estimates for these characteristics are interesting in their capacity to shed light on widening or narrowing gaps between underachieving children and the rest between EYFS and Key Stage 1.

Chart 6.9 displays the Key Stage 1 average point score differences associated with the EYFS scales and the characteristics that were entered in steps 2 and 3 of the model. Chapter 4 described the EYFS performance for children with various characteristics; comparing those findings with the Key Stage 1 modelling reveals that achievement gaps widen between EYFS and KS1 (but by less than 1 KS1 point) for children with special educational needs, those eligible for free school meals or living in deprived areas, children known to be in care and those known to be of Gypsy/Roma or Traveller of Irish Heritage ethnic backgrounds.

Other groups are seen to reduce the achievement gaps they experience at EYFS (again by less than one KS1 point). These include Black Caribbean, Bangladeshi and Pakistani children, and those learning English as an additional language. Boys also make fractional progress towards catching up with girls.

Chart 6.9 Modelled Relationship: EYFS Scales, Characteristics & KS1 Achievement



7. Summary of Findings

The analyses presented in this paper draw together much of what has been learned about achievement at the Early Years Foundation Stage since full national data were first collected. The range of material covered includes national and Local Authority trends in performance & inequality; progress & benchmarking; the interrelationships between performance, inequality & deprivation; characteristics of children with low achievement; the particular abilities and knowledge children at EYFS have mastered; and transitions to Key Stages 1 and 2.

The summary bullet points from each substantive chapter are collected together here for ease of reference.

Performance and Inequality at the Local Level - Analysis of EYFS Profile Achievement in 2009

- Nationally, there has been a consistent increase in performance on the Early Years Foundation Stage Profile; the proportion of five year olds reaching a Good Level of Development has increased from 45% in 2006 to 52% in 2009; LA results in 2009 ranged from 35% - 60%.
- The Achievement Gap, which measures inequality in achievement on the EYFSP, has narrowed from 38% in 2006 to 34% in 2009, with LA results for 2009 ranging from 25% - 40%.
- Of children in the highest performing fifth of LAs, 60% achieved a Good Level of Development; children in the lowest performing fifth of LAs are only half as likely to achieve the standard, averaging 30%.
- In the fifth of LAs with the most equal achievement, the average Achievement Gap was 30%; the fifth with the most unequal achievement has a larger gap of 37%.
- EYFS achievement, and inequality in that achievement, are both spread unevenly across England; the South West contains high proportions of LAs with good performance and of LAs with low inequality between the lowest scoring children and their peers.
- Local Authorities with higher area deprivation (IDACI) tend to have marginally lower rates of achievement of a Good Level of Development; approximately 14% of the variation in performance across LAs is explained by area deprivation.
- Local Authorities with higher area deprivation (IDACI) also tend to have slightly larger Achievement Gaps; approximately 11% of the variation in achievement inequality across LAs is explained by area deprivation.

Progress at the Local Level - Changes in EYFSP Achievement from 2007-2009

- The majority of Local Authorities (74%) have made progress both by increasing their percentage of children achieving a Good Level of

Development, and by narrowing their Achievement Gaps between the lowest achieving children and their peers, between 2007 and 2009.

- On both measures, LAs with better performance in 2007 generally tended to make less progress by 2009; this fits with the general observation that once a high percentage of children have reached an achievement threshold, those remaining tend to be the most difficult to progress.
- Progress in a given LA can be compared with that of other LAs with similar contexts (Statistical Neighbours); the fairest comparisons also account for the starting points of the LAs or use standardised measures of progress.
- Absolute progress on the Good Level of Development measure in LAs ranged from an increase of 25 percentage points, to a decline of 8 percentage points between 2007 and 2009; relative progress using Statistical Neighbour analysis ranged from 17 percentage points more than expected, to 15 percentage points fewer than expected.
- Absolute progress in narrowing the Achievement Gaps in LAs varied from a gap decrease of 10 percentage points, to a gap increase of 5 percentage points between 2007 and 2009. Relative progress in narrowing the gaps using Statistical Neighbour analysis varied from 6 percentage points more than expected, to 8 percentage points less than expected.
- Eleven Local Authorities have lower than average percentages of children achieving a Good Level of Development, larger than average Achievement Gaps, *and* are making less progress on both fronts than their Statistical Neighbours.
- Twenty-three Local Authorities scattered across England have achievement that is average or better, Achievement Gaps that are average sized or smaller, *and* are making more progress than their Statistical Neighbour groups on both fronts.

Characteristics of Low Achievers on the EYFS Profile

- From 2006-2009, the Achievement Gap has narrowed as a result of a steady and consistent rise in the average points score for the lowest 20% of achievers, while the median score for all children has remained static.
- In 2009, children with statements of SEN were over-represented in the lowest 20% of achievers at EYFS, making up 5% of this group, but only 1% of all children. Those with SEN but without statements accounted for 23% of low achievers, compared with 8% of all children. Other over-represented groups were children eligible for Free School Meals, those learning English as an Additional Language, and boys.
- In 2009, children in Minority Ethnic groups accounted for 47% of the lowest 20% of achievers at EYFS, but only 39% of the population as a whole. Looking at major ethnic categories beneath this total, Asian children were over-represented in the low achieving group (10% vs. 7% of all children); as were Black children (6% vs. 4%); by contrast, children of mixed ethnicity were slightly under-represented.

- Collectively, children with FSM, SEN and/or Minority Ethnic status account for 60% of the lowest achieving fifth of children; area deprivation was the largest known factor for identifying the remaining 40% of low achievers, but explained little of the variation in point scores within this group.
- Logistic regression modelling of multiple simultaneous characteristics reveals that the odds of being in the lowest achieving 20% of children at EYFS are increased for children living in deprived areas, for children born later in the school year, for boys and for children known to be in care, and well as for those with SEN, eligible for FSM or in minority ethnic groups.
- Deprivation and low achievement are overlapping, but are not synonymous. Half of the lowest achieving fifth of children live in the 30% most deprived areas; alternatively, over one quarter of children living in the 30% most deprived areas achieve scores within the lowest fifth at EYFS. Almost half (45%) of children in the 2009 EYFS cohort fell into either the lowest scoring fifth and/or the 30% most deprived areas of residence.

What Five Year Olds Know and Can Do – Analysis of Individual Scale Points

- Averaged across the individual scales, 98% of children achieve the "stepping stone" scale points (1-3): there is a steady decline in the proportion achieving each subsequent point in the range 4-8, the "early learning goals". Very few children achieve point 9 on any of the scales, i.e. few are working consistently beyond the early learning goals.
- Of the personal, social and emotional development scale points, the tasks achieved by children least often all relate to cultures and beliefs.
- Of the communication, language & literacy scales, writing scale points, e.g. holding a pencil and using it effectively to form recognisable letters (70%), were generally achieved by fewer children than those on the reading scales, e.g. understanding of the elements of stories (84%). More achieved the linking sounds & letters points, e.g. hearing and saying sounds in words (86%); the highest achievement was in language for communication & thinking, e.g. using language to imagine and recreate roles and experiences (91%).
- Of the problem solving, reasoning & numeracy scales, points from numbers as labels for counting, e.g. counting 10 everyday objects reliably (91%), were achieved by the greatest percentages of children, followed by those from shape, space & measures, e.g. describing the shape and size of solids and flat shapes (82%). Generally, the calculating scale points were achieved by the fewest children, e.g. 64% were able to find one more or less than a number from 1-10.
- The scale points with the four largest gender differences occur in points 5-8 of the writing and creative development scales. For example, writing for different purposes and in different forms (74% of girls; 53% of boys), has a gap of 21 percentage points, as does using imagination in creative activities and tasks (71% of girls; 50% of boys).

- The largest achievement differences between all children and the lowest achieving 20% are greater than 50 percentage points. For example, the gap was 57 percentage points for beginning to use the vocabulary of addition and subtraction. Using phonics to read simple words had a difference of 55 percentage points.
- The earliest substantial differences between all children and the lowest scoring 20% on total point scores are at point 4 in Communications, Language & Literacy. Naming and sounding letters of the alphabet had a gap of 40 percentage points; writing their name and simple words had a 47 percentage point difference.
- Between 2008 and 2009, most of the (small) increases in the percentages of children achieving scale points were in the range of points 4-6. All but two scale points in the range 7-9 saw small decreases, thought to be explained by moderation of EYFS Profile results becoming more robust and embedded.

Subsequent Achievement – Analysis of Transitions from EYFS to Key Stages 1 and 2

- Analysis of interdependences between the various EYFS scales shows that all individual scales have significant positive correlations with all other scales. The Knowledge and Understanding of the World (KUW) scale shows the strongest interdependence with other areas of assessment, with a mean coefficient of 0.68. This is closely followed by the Communication, Language & Literacy area (r=0.67) and Problem Solving, Reasoning & Numeracy (r=0.67). The Personal, Social & Emotional development, Creative Development, and Physical Development scales have slightly lower mean correlations with other scales of 0.63-0.64.
- For reading, writing and maths, the influence of prior attainment is stronger at high and low thresholds of Key Stage 1 achievement than for the expected level, with each additional point at EYFS making more difference to whether a child achieves level 1 or level 3 at KS1 than it does to whether they achieve the expected level (2b).
- Maths transitions from EYFS to KS1 differ from those in reading and writing in that more children achieved the expected level at KS1. At the same time, many more children achieved 7, 8 and 9 PSRN average points at EYFS.
- Tentatively, the influence of marginal extra points of EYFS prior attainment appears to be weaker over the longer interval to Key Stage 2 than for Key Stage 1. Transitions from EYFS to Key Stage 2 maths suggest that there may be a lower likelihood of catching up to the expected level after low EYFS performance than is the case for reading or writing – this in contrast with the pattern of KS1 transitions.
- Multilevel Modelling of children's progress between EYFS and Key Stage 1 confirms that most of the variation in KS1 average point scores occurs within schools, with only 12% of the variance found to be between schools. 52.5% of variation in KS1 results can be explained by prior attainment in the Problem Solving, Reasoning & Numeracy,

and Communications, Language & Literacy scales. Adding the other EYFS scales to the model marginally increases the variance explained to 53.1%. Child characteristics such as gender, special educational needs and free school meals eligibility explained only a small extra portion of the variation in KS1 points scores, bringing the total proportion explained to 54.7%.

The following LAs are known to have a weak correlation to their Statistical Neighbours and hence have been excluded from Statistical Neighbour analysis.

Brent
Camden
City of London
Greenwich, Hackney
Haringey
Harrow
Islington
Kensington & Chelsea
Leicester
Lewisham
Luton
Manchester
Newham
Richmond upon Thames
Southwark
Tower Hamlets
Waltham Forest
Wandsworth
Westminster

Annex B List of LA Results in Relation to Statistical Neighbour Performance

2007 and 2009 Odds ratio: A value greater than 1 means GLD was better than Statistical Neighbours or that Achievement Gap was worse than Statistical Neighbours
Changes in Odds Ratios: +ve = better for Good Level of Development; -ve = better for Achievement Gap

	Good Level of Development					Achievement Gap				
LA Name	2007 % achieving	2009 % achieving	2007 Odds Ratio (LA/SN mean)	2009 Odds Ratio (LA/SN mean)	2007-09 Change in Odds Ratio	2007 % gap	2009 % gap	2007 Odds Ratio (LA/SN mean)	2009 Odds Ratio (LA/SN mean)	2007-09 Change in Odds Ratio
Barking and Dagenham*	26	47	0.6	0.9	0.38	35	34	0.9	0.9	0.08
Barnet*	47	57	0.9	1.1	0.17	36	30	1.0	0.9	-0.15
Barnsley	21	46	0.4	0.8	0.47	42	36	1.1	1.0	-0.06
Bath and North East Somerset	53	57	1.2	1.1	-0.10	30	32	0.8	1.1	0.24
Bedford Borough*	49	47	0.9	0.7	-0.27	35	36	1.0	1.2	0.17
Bexley	45	49	0.9	0.9	-0.06	38	33	1.1	1.0	-0.10
Birmingham*	40	51	1.1	1.1	0.01	39	36	1.0	1.0	0.07
Blackburn with Darwen	46	55	1.2	1.3	0.09	40	33	1.1	0.9	-0.19
Blackpool	38	39	0.9	0.7	-0.21	35	37	0.9	1.1	0.20
Bolton	53	51	1.3	1.0	-0.34	37	34	1.0	1.0	-0.02
Bournemouth	52	57	1.2	1.2	0.01	35	30	1.1	0.9	-0.18
Bracknell Forest	44	51	0.7	0.8	0.10	35	29	1.0	0.9	-0.16
Bradford	40	47	0.8	0.9	0.04	44	39	1.3	1.2	-0.12
Brighton and Hove	51	56	1.2	1.1	-0.04	35	32	1.0	1.0	-0.03
Bristol, City of	48	50	1.1	0.9	-0.24	38	34	1.1	1.0	-0.07
Bromley	48	53	0.9	0.9	0.01	35	34	1.0	1.1	0.04
Buckinghamshire	49	56	1.1	1.1	0.04	34	33	1.0	1.1	0.14
Bury	46	45	0.7	0.7	-0.04	35	33	1.1	1.0	-0.06
Calderdale	49	50	1.0	0.9	-0.04	36	34	1.0	1.0	0.02
Cambridgeshire	58	50	1.5	0.8	-0.69	31	32	0.8	1.0	0.21
Central Bedfordshire*	49	53	1.0	0.9	-0.04	35	31	1.1	1.0	-0.06
Cheshire East*	64	61	1.7	1.2	-0.48	34	32	1.0	1.0	0.05
Cheshire West and Chester*	64	60	1.5	1.1	-0.35	34	32	1.0	1.1	0.04
Cornwall	47	52	1.0	1.1	0.06	34	32	1.0	1.0	0.01
Coventry	41	49	0.9	1.0	0.06	38	34	1.1	1.0	-0.10
Croydon	49	52	1.3	1.0	-0.30	36	35	0.9	1.0	0.12
Cumbria	43	44	0.8	0.7	-0.09	35	33	1.0	1.0	-0.01
Darlington	53	51	1.1	0.9	-0.20	38	38	1.1	1.2	0.13
Derby	46	54	1.2	1.2	0.06	35	36	0.9	1.1	0.17
Derbyshire	55	61	1.4	1.4	0.08	36	33	1.1	1.0	-0.03
Devon	40	47	0.7	0.8	0.07	36	34	1.0	1.1	0.05
Doncaster	46	54	1.2	1.2	-0.03	32	33	0.7	0.9	0.18
Dorset	55	64	1.4	1.6	0.12	33	28	0.9	0.8	-0.07
Dudley	35	43	0.6	0.7	0.09	41	36	1.2	1.1	-0.12
Durham	37	49	0.7	0.9	0.19	41	35	1.2	1.0	-0.20
Ealing*	44	51	1.0	1.0	-0.03	42	35	1.2	1.0	-0.17
East Riding of Yorkshire	50	45	0.9	0.6	-0.27	33	33	0.9	1.1	0.16
East Sussex	50	55	1.2	1.1	-0.13	32	30	0.9	0.9	0.06
Enfield	38	48	0.8	0.8	0.07	43	37	1.2	1.1	-0.12
Essex	41	45	0.8	0.7	-0.09	38	34	1.2	1.1	-0.03
Gateshead	45	45	1.2	0.8	-0.41	35	31	0.9	0.8	-0.04
Gloucestershire	55	59	1.4	1.3	-0.06	34	30	0.9	0.9	-0.02
Halton	44	47	0.9	0.8	-0.10	34	31	0.8	0.9	0.00
Hammersmith and Fulham*	49	51	1.4	1.1	-0.25	38	34	1.0	1.0	-0.01
Hampshire	45	51	0.9	0.9	0.04	34	33	1.0	1.0	0.06
Hartlepool	38	48	0.9	0.9	0.01	46	39	1.4	1.2	-0.16
Havering	55	56	1.3	1.1	-0.15	31	28	0.9	0.8	-0.04
Herefordshire	48	46	1.0	0.7	-0.25	35	34	1.0	1.1	0.08
Hertfordshire	52	60	1.0	1.2	0.20	35	31	1.0	1.0	-0.01
Hillingdon	51	57	1.3	1.3	-0.04	38	36	1.0	1.1	0.07
Hounslow*	37	47	0.8	0.8	0.08	39	36	1.0	1.0	0.02
Isle of Wight	49	49	1.1	0.9	-0.15	27	27	0.7	0.8	0.06
Kensington & Chelsea	43	54	0.7	1.0	0.36	33	33	0.9	1.0	0.11
Kent	43	51	0.8	0.9	0.10	33	30	0.9	0.9	-0.03
Kingston Upon Hull, City of	35	42	0.9	0.8	-0.13	43	35	1.2	1.0	-0.16
Kingston upon Thames*	50	57	1.0	1.0	0.01	34	31	1.0	1.0	0.00
Kirklees	49	54	1.1	1.2	0.09	37	35	1.0	1.0	0.02
Knowsley	36	51	0.8	1.2	0.32	33	30	0.8	0.8	-0.02
Lambeth*	30	45	0.7	1.0	0.29	42	36	1.1	1.0	-0.10
Lancashire	52	54	1.1	1.1	-0.07	34	33	1.0	1.0	0.06
Leeds	47	51	0.9	0.9	0.04	38	36	1.1	1.1	-0.05
Leicestershire	48	54	1.1	1.1	-0.04	33	30	0.9	1.0	0.03
Lincolnshire	46	47	0.9	0.8	-0.15	35	35	1.0	1.1	0.14
Liverpool	37	47	0.9	1.0	0.07	38	36	1.0	1.0	0.07
Medway	43	52	0.9	1.0	0.13	37	34	1.1	1.1	0.01
Merton*	52	57	1.3	1.2	-0.15	34	32	0.8	0.9	0.08

	Good Level of Development					Achievement Gap				
LA Name	2007 % achieving	2009 % achieving	2007 Odds Ratio (LA/SN mean)	2009 Odds Ratio (LA/SN mean)	2007-09 Change in Odds Ratio	2007 % gap	2009 % gap	2007 Odds Ratio (LA/SN mean)	2009 Odds Ratio (LA/SN mean)	2007-09 Change in Odds Ratio
Middlesbrough	29	44	0.6	0.8	0.25	42	38	1.2	1.2	-0.01
Milton Keynes	48	54	0.9	1.0	0.08	38	33	1.2	1.1	-0.11
North East Lincolnshire	39	44	0.8	0.7	-0.04	35	36	0.9	1.1	0.21
Newcastle upon Tyne	42	46	1.1	0.9	-0.17	43	39	1.2	1.2	-0.03
Norfolk	52	48	1.2	0.9	-0.37	34	35	1.0	1.1	0.16
North Lincolnshire	52	52	1.3	1.0	-0.26	37	39	1.0	1.2	0.25
North Somerset	41	58	0.8	1.2	0.45	34	31	1.0	1.0	0.00
North Tyneside	55	54	1.3	1.0	-0.24	31	33	0.8	0.9	0.16
North Yorkshire	51	56	1.0	1.0	0.07	35	31	1.1	1.0	-0.10
Northamptonshire	46	54	0.9	1.1	0.13	34	32	1.0	1.0	-0.02
Northumberland	62	59	1.5	1.2	-0.29	31	32	0.8	0.9	0.10
Nottingham*	42	53	1.2	1.2	0.01	42	33	1.1	0.9	-0.26
Nottinghamshire	46	49	0.9	0.8	-0.05	36	35	1.0	1.1	0.07
Oldham	39	47	0.8	0.9	0.13	39	39	1.1	1.3	0.18
Oxfordshire	47	52	0.8	0.9	0.02	37	33	1.2	1.1	-0.07
Peterborough	39	48	0.8	0.9	0.06	36	35	1.0	1.0	0.08
Plymouth	44	51	1.0	1.0	-0.01	33	32	0.9	0.9	0.07
Poole	59	62	1.5	1.4	-0.18	31	31	0.8	1.0	0.13
Portsmouth	51	54	1.4	1.1	-0.22	34	34	0.9	1.0	0.09
Reading	41	54	0.7	1.0	0.27	38	34	1.1	1.0	-0.11
Redbridge*	44	49	0.9	0.9	-0.08	39	35	1.0	1.0	0.00
Redcar and Cleveland	44	48	1.0	0.9	-0.14	40	33	1.1	0.9	-0.19
Rochdale	43	46	1.0	0.9	-0.11	37	35	1.0	1.0	0.01
Rotherham	37	50	0.9	1.0	0.13	46	36	1.4	1.0	-0.31
Rutland	61	65	1.5	1.6	0.09	28	33	0.7	1.1	0.34
Salford	52	53	1.7	1.2	-0.50	35	34	0.9	1.0	0.11
Sandwell	41	45	1.2	0.8	-0.31	39	38	1.0	1.1	0.11
Sefton	48	47	0.9	0.8	-0.13	32	32	0.9	0.9	0.06
Sheffield	40	49	0.9	1.0	0.05	39	36	1.0	1.0	0.01
Shropshire	43	58	0.8	1.3	0.49	37	29	1.1	0.9	-0.23
Slough*	43	46	1.1	0.9	-0.26	40	37	1.0	1.0	0.06
Solihull	64	66	1.6	1.5	-0.03	31	30	0.9	0.9	0.07
Somerset	45	53	0.9	1.0	0.14	34	31	1.0	1.0	-0.01
South Gloucestershire	46	50	1.0	0.9	-0.10	33	30	0.9	0.9	-0.01
South Tyneside	26	46	0.6	0.9	0.37	37	34	0.9	0.9	0.03
Southampton	39	48	0.8	0.9	0.09	37	36	1.0	1.1	0.05
Southend-on-Sea	45	55	0.9	1.2	0.22	35	33	1.1	1.1	0.01
St. Helens	51	57	1.2	1.2	0.00	33	32	0.8	0.9	0.09
Staffordshire	57	63	1.4	1.6	0.12	32	28	0.9	0.8	-0.08
Stockport	54	57	1.0	1.1	0.03	33	31	1.0	1.0	-0.02
Stockton-on-Tees	65	63	1.9	1.6	-0.34	36	33	1.0	1.0	-0.05
Stoke-on-Trent	43	51	1.3	1.2	-0.15	41	36	1.0	1.0	-0.01
Suffolk	46	46	0.9	0.8	-0.16	37	35	1.1	1.2	0.05
Sunderland	44	53	1.2	1.2	-0.04	41	37	1.1	1.1	-0.01
Surrey	58	61	1.5	1.3	-0.15	32	31	0.9	1.0	0.10
Sutton	52	62	1.2	1.4	0.26	35	32	1.0	0.9	-0.04
Swindon	54	56	1.2	1.1	-0.14	34	33	1.0	1.1	0.07
Tameside	43	49	0.8	0.9	0.04	37	34	1.0	1.0	0.00
Telford and Wrekin	37	48	0.8	0.9	0.17	42	34	1.2	1.0	-0.27
Thurrock	41	45	0.8	0.7	-0.03	33	37	0.9	1.2	0.30
Torbay	42	46	0.8	0.8	-0.01	32	31	0.9	0.9	0.02
Trafford	58	63	1.2	1.3	0.18	34	31	1.0	1.0	-0.04
Wakefield	32	47	0.6	0.8	0.19	41	38	1.1	1.2	0.08
Walsall	39	49	0.9	1.0	0.11	37	33	1.0	0.9	-0.02
Warrington	56	60	1.0	1.2	0.16	32	29	0.9	0.9	-0.04
Warwickshire	49	56	1.0	1.1	0.15	33	30	0.9	0.9	-0.05
West Berkshire	46	56	0.8	1.0	0.24	33	27	0.9	0.8	-0.13
West Sussex	45	50	0.9	0.9	-0.07	37	34	1.1	1.1	-0.01
Wigan	56	59	1.5	1.3	-0.17	35	32	0.9	0.9	0.03
Wiltshire	53	57	1.2	1.2	-0.08	36	29	1.0	0.9	-0.13
Windsor and Maidenhead	45	53	0.8	0.9	0.10	33	30	1.0	0.9	-0.02
Wirral	46	52	0.9	1.0	0.13	34	31	0.9	0.9	-0.03
Wokingham	29	47	0.4	0.7	0.30	40	32	1.3	1.0	-0.21
Wolverhampton	30	45	0.6	0.8	0.24	44	39	1.3	1.2	-0.12
Worcestershire	36	45	0.6	0.7	0.07	38	35	1.1	1.2	0.05
York	62	58	1.4	1.1	-0.34	33	32	1.0	1.0	0.06

* These LAs are known to have a moderate similarity to their Statistical Neighbours and hence their results should be treated with caution. LAs with a very weak similari
been removed from this table.
The 4 Bedfordshire and Cheshire LAs, were newly created from two previous LAs, and hence should also be treated with caution.

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