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Minority Ethnic Pupils and Excellence in Cities: Final Report

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EXECUTIVE SUMMARY

The Excellence in Cities (EiC) policy was launched in 1999 with the aim of improving the attainment of all pupils in disadvantaged urban areas. Further Phases were launched in 2000 and 2001, by when EiC covered about a third of the secondary schools in England and over 60 per cent of the minority ethnic pupils in England attended schools in EiC areas. Overall, pupils from minority ethnic groups are more likely than those from White UK backgrounds to live in low income households. This is more evident for some ethnic groups than for other with, for example, almost two thirds of Pakistani and Bangladeshi households, and about a quarter of Black households, classified as low income. There are substantial differences between ethnic groups in terms of levels of attainment. Pupils from Chinese and Indian backgrounds generally have relatively high levels of attainment, with those from Black African, Bangladeshi and Pakistani backgrounds achieving below the national average.

This report makes use of the National Pupil Database (NPD) and information collected as part of the national evaluation of EiC to examine the background and attainment of minority ethnic pupils in EiC areas, and the extent to which EiC is associated with improved levels of attainment for these pupils.

The national datasets relate to attainment at the end of Key Stages 3 and 4, for the 2001/2002 and 2002/2003 academic years. Using the combined data for two years provides more robust findings, particularly in relation to the smaller ethnic groups, than would be obtained using results for a single year.

The national evaluation of EiC provided, for a sample of pupils, information about their involvement in the Gifted and Talented and Learning Mentor Strands of EiC, enabling the impact of these Strands on pupils from different ethnic backgrounds to be explored. Some of these pupils also completed questionnaires about their attitudes to school and to education as part of the national evaluation, and some results relating to the attitudes of pupils from minority ethnic groups are also reported.

The characteristics of minority ethnic pupils in EiC areas[1]

In EiC Phase 1 areas, almost 40 per cent of pupils were from minority ethnic backgrounds, with the single largest groups being those from Pakistani backgrounds (about eight per cent of all pupils in these areas) and from Black Caribbean and African backgrounds (each about five per cent). In Phase 2 areas, the proportion of pupils from minority ethnic backgrounds was much smaller, at about 16 per cent. In these areas, the only group representing more

[1] Information from NPD.

than five per cent of pupils consisted of those from Indian backgrounds. This was also the largest single group in Phase 3 areas, where five per cent of pupils were from Pakistani backgrounds and in total 27 per cent of pupils were from minority ethnic backgrounds.

There were differences between EiC and non-EiC areas (and indeed between Phases of EiC) as well as between Key Stages, in terms of the proportions of pupils who were male. These variations suggest natural short-term variation although boys from Black Caribbean, Black African and Black Other backgrounds seemed to be under-represented in EiC areas.

There were marked variations between ethnic groups in the proportions of pupils recorded as having English as an additional language, ranging from less than one per cent of those from White UK backgrounds and five per cent of those from Black Caribbean backgrounds to over 90 per cent of those from Bangladeshi backgrounds. Within each minority ethnic group, the highest proportions of such pupils were in Phase 1 and Phase 3 areas.

Pupils from some minority ethnic groups, notably those from Black Caribbean, Black African and Black Other backgrounds, were most likely to have identified special educational needs, while those from Indian and Chinese backgrounds were least likely. Levels of identification were higher in EiC areas, particularly those in Phase 1 and, to a lesser extent, Phase 3.

Higher than average levels of known entitlement to Free School Meals were seen in EiC areas, particularly those in Phase 1, and for some groups of pupils, such as those from Bangladeshi and Pakistani backgrounds. Almost 70 per cent of pupils from Bangladeshi backgrounds attending Phase 1 schools were known to be entitled to Free School Meals, and other groups where over 40 per cent of pupils were known to be entitled included those from Black African and Pakistani backgrounds in Phase 1 areas and those from Black African and Bangladeshi backgrounds in Phase 2 areas.

Pupils' involvement in the Gifted and Talented and Learning Mentor Strands of EiC[2]

Among pupils who were in Year 11 in 2002, those from minority ethnic groups were considerably less likely than those from White UK backgrounds to be identified as gifted and talented. The proportion varied from 10 per cent of those from White UK backgrounds to two per cent of those from Black Caribbean backgrounds. In 2003, there were relatively small differences between ethnic groups in the proportion of pupils being identified as gifted and talented and indeed for this cohort the highest proportion of gifted and

[2] Information from national evaluation. Due to relatively small sample sizes, the analysis for Year 11 pupils includes only those from White UK, White non-UK, Black Caribbean, Black African, Indian and Pakistani backgrounds. For Year 9 pupils, Black Other and Bangladeshi pupils are also included.

talented pupils was for those from Black African backgrounds. While some of this may represent short-term variation between cohorts, it also suggests that schools may have been increasing their repertoire of strategies used to identify gifted and talented pupils.

For Year 9 pupils, in 2002 there were variations between ethnic groups in relation to the proportions identified as gifted and talented, but these were less marked than among Year 11 pupils. Similarly, the differences between the 2002 and 2003 cohorts were smaller. Pupils from White UK and Indian backgrounds were the most likely to be identified as gifted and talented.

In both 2002 and 2003, slightly less than 30 per cent of Year 11 pupils had been referred to a Learning Mentor. In 2002, pupils from Black African backgrounds were considerably more likely than those from other backgrounds to report having seen a Mentor (although this is based on a small number of pupils and should be treated with some caution). Pupils from White non-UK and Black Caribbean backgrounds also had relatively high rates of referral. By 2003, there was very little difference between ethnic groups in the proportions referred.

In both 2002 and 2003, less than 20 per cent of Year 9 pupils reported having seen a Learning Mentor. Pupils from Indian and Bangladeshi backgrounds were considerably less likely to have seen a Mentor, as were pupils from Pakistani backgrounds who were in Year 9 in 2002, while pupils from Black Caribbean backgrounds were slightly more likely to have been referred.

Attainment at Key Stages 2, 3 and 4[3]

This section compares the levels of attainment of pupils in non-EiC areas and in Phase 1 areas, where EiC had been in place for longest. These results are descriptive statistics that describe observed differences between groups of pupils without taking account of background and contextual factors that may differ between the groups being compared.

Pupils completing Key Stage 4 in 2002 or 2003

Within each of the ethnic groups considered, pupils in EiC areas had lower levels of attainment, and made less progress, than those in non-EiC areas. While this is to be expected, given that EiC is targeted on disadvantaged areas, the analysis demonstrates different patterns of progress for different ethnic backgrounds and at different Key Stages.

Pupils from Black Caribbean backgrounds had considerably lower levels of attainment at Key Stages 2, 3 and 4 than those from White UK backgrounds. This gap seemed to widen over time but less so in EiC Phase 1 areas than in

[3] Information from NPD

non-EiC areas. There was a similar pattern for pupils from Black Other backgrounds.

Black African pupils also had lower levels of attainment than pupils from White UK backgrounds at Key Stages 2 and 3. However, during Key Stage 4, pupils from Black African backgrounds made relatively good progress and by the end of the Key Stage, their attainment was similar to that of White UK pupils in EiC Phase 1 areas, and slightly below that of White UK pupils in non-EiC areas.

There was a similar pattern for pupils from White non-UK, Pakistani and Bangladeshi backgrounds.

Pupils from Indian backgrounds generally started both Key Stages 3 and 4 with similar levels of attainment to those of pupils from White UK backgrounds, and there was relatively little difference between non-EiC and Phase 1 areas. During Key Stage 4 pupils from Indian backgrounds, in both non-EiC and Phase 1 areas, made greater progress than White UK pupils in non-EiC areas, while the progress of pupils from White UK backgrounds in Phase 1 areas was less than that of their peers in non-EiC areas.

Pupils from Chinese backgrounds had higher levels of attainment than those for pupils from Indian backgrounds, but the pattern of progress was similar.

Pupils completing Key Stage 3 in 2002 or 2003

In both non-EiC and Phase 1 areas, pupils from White UK backgrounds started Key Stage 3 with slightly higher levels of attainment than those of Black Caribbean pupils from the same areas. The difference in levels of attainment between pupils from Black Caribbean backgrounds and those from White UK backgrounds was greater at the end of Key Stage 3 than at the beginning, and the gap between non-EiC and Phase 1 areas had also widened.

There was no evidence to suggest that the progress of pupils from other minority ethnic backgrounds was greater in Phase 1 areas than in non-EiC areas.

Pupils' attainment and Strand involvement[4]

Pupils referred to a Learning Mentor generally had levels of attainment which were similar to or slightly lower than those of other pupils from the same ethnic background. For pupils from Black African backgrounds at all three Key Stages considered, and for pupils from Indian backgrounds at Key Stage 4 only, the difference between mentored and non-mentored pupils was rather greater. For pupils from Pakistani and Black Caribbean backgrounds, levels of

[4] Information from national evaluation.

attainment at Key Stage 4 were slightly higher for mentored pupils than for those not mentored.

Pupils identified as gifted and talented had higher levels of achievement at all three Key Stages than did pupils from the same ethnic backgrounds who were not part of the gifted and talented cohort. The only exceptions were for pupils from White non-UK and Black African backgrounds, but these were very small groups of pupils and this finding must therefore be treated with considerable caution.

Comparing the attainment of pupils in non-EiC and EiC areas[5]

The comparisons presented so far are based on descriptive statistics that do not take account of contextual and background factors that may be related to pupils' levels of attainment. These factors include gender, entitlement to Free School Meals, and identified special educational needs, as well as pupils' prior attainment. We now examine levels of attainment in non-EiC and Phase 1 areas taking account of these factors, and hence make comparisons between different groups of pupils on a more 'like-with-like' basis.

Key Stage 4

Three measures of attainment were considered:

- 'best 8' point score (the point score derived from each pupil's eight best GCSEs or equivalent, also known as the capped point score)
- total GCSE point score (uncapped point score)
- probability of achieving at least five GCSEs at grade C or equivalent (five good GCSEs).

Using the indicators based on GCSE point scores, in non-EiC areas pupils from all minority ethnic groups had higher levels of attainment than those from White UK backgrounds when school- and pupil-level factors (including attainment at the end of Key Stage 3) were taken into account.

Attending an EiC Phase 1 school was associated with improved attainment, relative to pupils from similar backgrounds in non-EiC areas, for:

- pupils from White non-UK, Black Caribbean, Black African, Bangladeshi and Chinese backgrounds (using points-based measures)
- pupils from Black Other and Other backgrounds (on all three measures considered, except for girls from Black Other backgrounds in relation to the probability of achieving five good GCSEs)
- pupils from Indian backgrounds (capped point score) and girls from Indian backgrounds (uncapped score)

[5] Information from NPD

- pupils from Pakistani backgrounds (capped score only) but with a reduced probability of achieving at least five good GCSEs.

Some of these differences may be associated with overall levels of attainment within different groups. For example, about 75 per cent of pupils from Chinese backgrounds achieve at least five good GCSEs. While EiC can improve point-based measures for this group, there is less scope for increasing the percentage reaching the threshold.

Key Stage 3

Findings in relation to the impact of EiC on minority ethnic pupils at Key Stage 3 were less positive than at Key Stage 4. Pupils from Chinese backgrounds had higher levels of attainment (taking into account school and pupil factors including attainment at the end of Key Stage 2) in EiC Phase 1 schools than did similar pupils in non-EiC schools (except for levels of attainment in English). For other groups, however, attainment in EiC schools was similar to, or (in the case of pupils from Pakistani backgrounds and, to a lesser extent, those from Indian backgrounds) slightly below, that of comparable pupils in non-EiC schools.

The Gifted and Talented and Learning Mentor Strands[6]

At both Key Stages 3 and 4, pupils identified as gifted and talented had higher levels of attainment than those of otherwise similar pupils not so identified (i.e. taking account of a range of school and pupil factors including prior attainment). Pupils referred to a Learning Mentor had slightly lower levels of attainment than those of similar pupils not referred to a Mentor. Overall, the impact of the Gifted and Talented and Learning Mentor Strands was the same for pupils from different ethnic groups, but there was tentative evidence to suggest that that the impact of being identified as gifted and talented was less (in terms of GCSE point score) for pupils from White non-UK backgrounds than for those from other ethnic backgrounds, and that for pupils from Black African backgrounds:

- at Key Stage 3, the impact of being identified as gifted and talented was less than for pupils from other ethnic groups-
- being referred to a Mentor was associated with improved levels of attainment in English at Key Stage 3 and the probability of achieving at least five good GCSEs including English and Mathematics.

Pupils' attitudes and achievements at the end of Key Stage 4[7]

Items from the questionnaires completed by pupils as part of the national evaluation of EiC were grouped together to form a number of attitude scales, and some exploration of the relationship between pupils' attitudes and their

6 Information from national evaluation.
7 Information from national evaluation.

achievements at the end of Key Stage 4 were carried out. As for the analysis of attainment reported above, this used multilevel modelling techniques in order to take account of school and pupil level factors such as entitlement to Free School Meals, gender and type of school attended. This exploratory analysis used data for pupils completing Key Stage 4 in 2002: it is therefore based on a relatively small data set and results should be treated with caution.

Pupils who scored most highly on the 'pupil attributes' scale had higher levels of attainment at the end of Key Stage 4 (having taken account of school and pupil characteristics) than those who scored less highly. High scores on this scale were associated with pupils who reported that they behave well in school, have good attendance, enjoy being at school, and want to stay in education post-16. The lowest scores on this scale tended to be for pupils from White UK and Black Caribbean pupils. Although this association cannot be taken as demonstrating a causal relationship between attitudes and attainment, it does suggest that strategies focussing on improving the attitudes to education of these pupils could be important levels for raising attainment in these groups.

Similarly, there was a weak but positive relationship between attainment and a scale that measured the extent to which pupils saw themselves as resourceful and well-organised. In this case, it was pupils from White UK backgrounds who had the least positive view of themselves, and this suggests another area where targeted strategies might be effective in reducing differentials in attainment between ethnic groups.

Recommendations

The most positive finding of the national evaluation of EiC (Kendall *et al.*, 2005) was that the policy had an impact on attainment in Mathematics at Key Stage 3, particularly in the most disadvantaged schools in Phase 1 areas. There were complex relationships between attainment at Key Stage 3 and school factors, such as the overall level of attainment in the school, and pupil factors, such as prior attainment. This report has provided some evidence that, at Key Stage 4, the attainment of pupils from minority ethnic backgrounds was higher in EiC Phase 1 areas than that of comparable pupils (taking into account a wide range of school and pupil factors including prior attainment) in non-EiC areas. The picture was by no means simple, with the extent of the difference varying depending on the measure of attainment used as well as the ethnic group considered and (in some cases) gender. The evidence in relation to attainment at the end of Key Stage 3 was more mixed, with only those pupils from Chinese backgrounds achieving higher levels in Phase 1 schools than otherwise similar pupils in non-EiC schools.

Pupils completing Key Stage 4 in summer 2004 and 2005 in Phase 1 areas will have had the whole of their secondary education in an EiC school, and their levels of attainment are important measures of the success of EiC in raising

standards in urban schools for all pupils but in particular for the many pupils in these areas from minority ethnic backgrounds. We therefore recommend that there should be further analysis of the achievements of pupils completing Key Stages 3 and 4 in these years, with an emphasis on exploring the relationship between involvement in EiC and attainment for pupils from minority ethnic groups, how this relationship is changing over time as EiC develops and becomes more embedded in schools, and the differences between the Phases of EiC. It would also be valuable to examine the extent to which the ethnic composition of the school is related to the levels of attainment of pupils from different ethnic backgrounds. For example, do pupils from a given minority ethnic background have higher levels of attainment if they are in school with substantial numbers of pupils from the same background rather than a school with relatively small numbers of pupils from similar backgrounds?

This study has demonstrated that the differentials between ethnic groups tended to widen during secondary education, but that this process occurred at different stages for different groups. For example, pupils from Black Caribbean backgrounds seemed to make relatively poor progress during both Key Stages 3 and 4, while for those from Black African backgrounds relatively good progress during Key Stage 4 to some extent compensated for poor progress at the preceding Key Stage. Case studies of how EiC as a whole has been implemented in schools could help to illuminate why there are these differences between Key Stages and to identify good practice.

A study of Learning Mentors carried out as part of the national evaluation of EiC provides some information as to how pupils are identified for Learning Mentor support, the nature of the support provided and the outcomes in terms of levels of achievement (see for example Golden *et al.*, 2002, 2003; O'Donnell, 2003) but it was beyond the scope of that work to consider the Learning Mentor Strand in relation to the ethnic background of pupils. Further qualitative work in this area, and on the role of Learning Mentors in improving behaviour in school and reducing exclusions, would be of potential value both in further developing Learning Mentors in schools, but also in aiding understanding of how behaviour issues can be addressed in all schools.

Similarly, work within the national evaluation exploring the Gifted and Talented Strand (Pocklington *et al.*, 2002; Pocklington and Kendall, 2002; Kendall, 2003) looked at how the Gifted and Talented Strand was being implemented in schools, and at pupils' and teachers' perceptions of the Strand. Here again, further qualitative work looking at differences between ethnic groups in relation to the Strand would be valuable, not only for EiC schools but also for all schools as they seek to provide appropriate support and challenge to their most able pupils, whatever their background.

While such qualitative studies could certainly be undertaken, more quantitative studies in relation to the Learning Mentor and Gifted and talented Strands would be more challenging to implement without imposing burdens on schools in terms of data collection. There is no nationally available data identifying which pupils have been referred to a Learning Mentor, and for an in-depth evaluation of the impact of Learning Mentors on pupils from ethnic minorities, it would be important to be able to identify both the reasons for referral and the type and extent of support available. It would be valuable to establish the extent to which such pupil-level information was available within schools and Partnerships, the degree of compatibility between information from different sources, and whether the information could be linked to pupils' attainment. It would then be possible to establish whether a dataset sufficiently large to enable robust analysis could be derived.

Information as to whether a pupil has been identified as gifted and talented has recently been introduced into the Pupil Level Annual School Census, but this information is not available for earlier cohorts of pupils, and does not include any detail relating to why the pupil was identified as gifted or talented, or about how additional support was provided. Again, the pooling of data from a number of schools or Partnerships might enable more detailed analysis of the relationship between attainment and being identified as gifted and talented.

This report considered data relating to 2002 and 2003, and has demonstrated a positive association between attending a school in an EiC Phase 1 area and improved levels of attainment at the end of Key Stage 4 for pupils from all the main minority ethnic groups in England, although the evidence from the national evaluation of EiC has been more mixed in relation to pupils from White UK backgrounds. Further work, both to establish whether this pattern has continued since 2003 and in other Phases of EiC, and also to understand what has brought this about, are important if the lessons of EiC are to be identified and carried forward as the new relationship with schools and new forms of partnership between schools develop.

1. INTRODUCTION

In 2004, 17 per cent of pupils in maintained schools in England were classified as belonging to a minority ethnic group, and since 1997 the proportion of such pupils within the school population has increased substantially. There is considerable regional variation in the overall proportions of pupils from minority ethnic backgrounds. For example, in inner London, almost three quarters of pupils are from such backgrounds, whereas the corresponding figure for the North East is less than five per cent. Overall, pupils from minority ethnic groups are more likely to live in low income households than those from White UK backgrounds. There are also substantial differences between different minority ethnic groups. For example, almost two thirds of Pakistani/Bangladeshi households, and about a quarter of Black households, are classified as low income. There are also differences in levels of attainment, with pupils from Indian and Chinese backgrounds generally having relatively high levels of attainment while those from Black Caribbean, Bangladeshi and Pakistani backgrounds achieve below the national average.[8]

The Excellence in Cities (EiC) policy was launched in 1999 with the aim of improving the attainment of all pupils in urban areas, by providing targeted support and by encouraging and promoting collaboration between schools. Further Phases were launched in 2000 and 2001, by when EiC covered about a third of the secondary schools in England and over 60 per cent of the minority ethnic pupils in England attended schools in EiC areas. This report considers the background characteristics and attainment of minority ethnic pupils attending secondary schools in EiC areas, and then examines the impact of EiC on these pupils. Two specific Strands of EiC, the Gifted and Talented Strand which provides support for the most able five to ten per cent of pupils in each school, and the Learning Mentor Strand, providing support for pupils facing barriers to learning, are also examined.

The report draws on two main data sources:

- the National Pupil Databases (NPD) for 2002 and 2003, which provide, for each pupil, information on a range of background characteristics (such as age, gender, ethnicity, identified special educational needs and entitlement to Free School Meals) and end of Key Stage assessment data. This data was linked with information from NFER's Register of Schools to provide information about the characteristics of the school attended by each pupil, such as size, overall level of entitlement to Free School Meals and whether the school had Specialist status.

[8] This summary is derived from *Ethnicity and Education: the Evidence on Minority Ethnic Pupils* (DfES, 2005).

- surveys of Year 9 and Year 11 pupils in EiC areas which were carried out as part of the national evaluation of Excellence in Cities.[9]

The analysis of attainment at Key Stage 4 presented in this report is based on a combined dataset which includes pupils completing the Key Stage in summer 2002 and summer 2003. By considering these two cohorts together, the analysis is more robust, particularly in relation to the smaller minority ethnic groups where there may be substantial year-on-year differences for reasons not associated with EiC or with policy developments more generally. Results for the 2002 Year 11 cohort separately were presented in Kendall *et al.* (2004): key differences between the findings reported there and those for the combined cohorts are noted where appropriate. Similarly this report presents an analysis of the combined 2002 and 2003 Year 9 datasets, i.e. pupils completing Key Stage 3 in these years.

The NPD is derived by linking individual pupils' performance data (including attainment at earlier Key Stages) with background data collected by means of the Department for Education and Skills (DfES) Pupil Level Annual School Census (PLASC). There were some differences between 2002 and 2003 in the way in which pupil background data was collected in PLASC. For 2003, the list of available ethnicity categories was increased, mainly in relation to pupils of mixed heritage: to provide continuity with earlier analyses this paper retains the 2002 categorisation.[10] The implementation of the Code of Practice for pupils with special educational needs (DfES, 2001) also resulted in differences between 2002 and 2003 – in this report, we use the 2003 categorisation with Stages 1 and 2 under the preceding version of the Code of Practice (DFE, 1994) treated as equivalent to School Action under the revised Code and Stages 3 and 4 as equivalent to School Action Plus.

The following Chapter describes the characteristics of pupils from minority ethnic groups (Chapter 2) and examines the extent to which pupils from different backgrounds were involved in the Gifted and Talented and Learning Mentor Strands of EiC. Chapter 3 explores the relationship between ethnic background and attainment, both overall and in relation to the same two Strands. Chapter 4 presents an analysis of the relationship between participation in EiC and attainment for different ethnic groups, again both overall and in relation to the Gifted and Talented and Learning Mentor Strands. Chapter 5 examines some finding relating to the attitudes of pupils, and finally Chapter 6 provides a summary and conclusions.

[9] The evaluation was carried out by a consortium of the National Foundation for Educational Research, the Centre for Educational Research and the Centre for Economic Performance at the London School of Economics, and the Institute for Fiscal Studies. For further details, see Kendall *et al.* (2005) and a series of working papers at http://www.nfer.ac.uk/research-areas/excellence-in-cities.

[10] There is no straightforward method of recoding information collected using the 2002 coding system into the 2003 system, or vice versa. Information using the 2002 system was available for all the pupils considered in this report, but information using the 2003 system was not available for pupils completing Key Stage 4 in 2002.

2. THE CHARACTERISTICS OF MINORITY ETHNIC PUPILS IN EIC AREAS

This Chapter presents summary information relating to the characteristics of White UK and minority ethnic pupils in non-EiC and EiC areas in England. The results reported in this chapter are descriptive statistics: as such, they describe observed differences between groups of pupils without taking account of background and contextual factors which may differ between the groups being compared.

2.1 The ethnic background of pupils in EiC areas

Pupils in EiC areas are more likely than those in non-EiC areas to be from minority ethnic backgrounds, but there is considerable diversity between Phases 1, 2 and 3 in terms of the ethnic backgrounds of pupils attending schools in these areas. This can be illustrated with reference to the pupils completing Key Stages 4 and 3 in 2002 or 2003 (see Tables 2.1 and 2.2).

Table 2.1 The ethnic background of pupils completing Key Stage 4 in 2002 or 2003

	Non-EiC %	EiC Phase 1 %	EiC Phase 2 %	EiC Phase 3 %
White UK	91	61	84	73
White non-UK	2	4	2	4
Black Caribbean	1	5	1	3
Black African	<1	5	1	1
Black Other	<1	3	1	2
Indian	2	3	6	8
Pakistani	1	8	3	5
Bangladeshi	<1	4	1	2
Chinese	<1	1	<1	<1
Other	1	5	2	2
Total	**694,641**	**128,535**	**95,691**	**48,934**

Source: NPD for pupils completing Key Stage 4 in 2002 or 2003, excluding pupils whose ethnic origin was not recorded. There were about 24,000 such pupils in non-EiC areas, and less than 2,000 in each Phase of EiC.
Percentages may not sum to 100 because of rounding.
The non-EiC group includes a small number of pupils attending schools in Excellence Clusters.

Table 2.2 The ethnic background of pupils completing Key Stage 3 in 2002 or 2003

	Non-EiC %	EiC Phase 1 %	EiC Phase 2 %	EiC Phase 3 %
White UK	91	64	85	75
White non-UK	2	4	2	4
Black Caribbean	1	5	1	3
Black African	<1	4	1	1
Black Other	<1	3	1	2
Indian	2	3	5	7
Pakistani	1	7	2	5
Bangladeshi	<1	4	1	2
Chinese	<1	1	<1	<1
Other	1	5	2	2
Total	**693,562**	**122,833**	**91,742**	**46,991**

Source: NPD for pupils completing Key Stage 3 in 2002 or 2003, excluding pupils whose ethnic origin was not recorded. There were about 25,000 such pupils in non-EiC areas, 2,400 in Phase 1 areas, 2,000 in Phase 2 areas and 1,500 in Phase 3 areas.
Percentages may not sum to 100 because of rounding.
The non-EiC group includes a small number of pupils attending schools in Excellence Clusters.

Generally, the pattern was very similar for Year 9 and Year 11 pupils. Overall, about 13 per cent of pupils were in schools in EiC Phase 1 areas. Slightly more than 60 per cent of these pupils were from White UK backgrounds, compared with over 90 per cent of pupils in non-EiC schools. In Phase 1 areas, pupils from Pakistani backgrounds formed the largest minority ethnic group (about eight per cent), followed by those of Black Caribbean, Black African and Other backgrounds. Each of the White non-UK, Black Other, Indian and Bangladeshi groups represented three to four per cent of pupils, with pupils from Chinese backgrounds forming around one per cent of the cohort.

Pupils in Phase 2 areas represented about 10 per cent of all pupils. Of pupils in Phase 2 areas, about 85 per cent were from White UK backgrounds, and only the Indian and (to a lesser extent) Pakistani groups represented more than one or two per cent of Phase 2 pupils.

Overall, only about five per cent of pupils attended schools in Phase 3 areas. In these areas, over 70 per cent of pupils were from White UK backgrounds and the largest minority ethnic groups were from Indian (seven or eight per cent), Pakistani (five per cent) and White non-UK (four per cent) backgrounds.

These are, of course, figures for the whole of each Phase of EiC and the characteristics of pupils in an individual school, or within an area, may differ considerably from these overall figures.

2.2 Background characteristics of pupils[11]

Tables A1.1 to A1.11 of Appendix 1 give, for each ethnic group, a summary table showing the characteristics of Year 11 pupils[12] in non-EiC, Phase 1, Phase 2 and Phase 3 areas, in terms of their:

- gender
- English as an additional language (EAL) status
- identified special educational needs
- Free School Meal entitlement.

Tables A1.12 to A1.22 give similar information for pupils completing Key Stage 3 in 2002 or 2003.

We do not report on pupils whose ethnic background was not recorded, although figures for these pupils are included in Appendix 1 for completeness.

Gender

Generally, around half the pupils were male and, although there were some groups of pupils where the gender balance was different, these differences were not always consistent between ethnic backgrounds, Phases of EiC or between Year 9 and Year 11 pupils.

Among pupils from White UK backgrounds, the proportion of males was between 49 and 50 per cent for non-EiC and EiC areas, and for both Year 9 and Year 11 pupils.

For non-EiC areas, within most of the minority ethnic group considered, between 49 per cent and 51 per cent of Year 11 pupils were male. The only exceptions were that in these areas more than 51 per cent of pupils from Indian, Pakistani and Chinese backgrounds were male. For Year 9 pupils, the pattern was similar, but in this case the exceptions were those from Black Other backgrounds, where less than 49 per cent were male, and those from Pakistani backgrounds (52 per cent male).

In Phase 1 areas, less than 49 per cent of pupils from White non-UK, Black Caribbean, Black African and Other ethnic backgrounds (in both Year 9 and Year 11) were male, but for other minority ethnic groups the pattern was more complex. Less than 50 per cent of pupils were male among those from Black African backgrounds (Year 11 only) and from Bangladeshi and Chinese backgrounds (Year 9 only). In contrast, over 51 per cent of Year 11 pupils

11 This section is based on data from the NPD.
12 Composite tables for pupils completing Key Stage 4 in 2002 or 2003.

from Indian and Pakistani backgrounds were male, but the same did not hold for Year 9 pupils.

The pattern was different again in Phase 2 areas, where the proportion of males was less than 49 per cent for those from White non-UK backgrounds (Year 9 only), Black Caribbean backgrounds (Year 11 only) and Black Other backgrounds (Year 11 and Year 9). The proportion was greater than 51 per cent for those from Indian backgrounds (Year 11 and Year 9) and Pakistani backgrounds (Year 9 only). More extreme results were observed for some minority ethnic groups, with over 56 per cent of those from Chinese backgrounds (Year 9 and year 11) and less than 44 per cent of those from Bangladeshi backgrounds (Year 9) being male. Fifty two per cent of Year 11 pupils, but less than 49 per cent of Year 9 pupils, from Other backgrounds were male.

For Phase 3 areas, less than 49 per cent of pupils were male for those of Black African backgrounds (Year 11 only), Black Other and Bangladeshi backgrounds (Year 9 and Year 11 for both groups). In these areas, more than 51 per cent of pupils were male among those from White non-UK and other backgrounds (Year 9 only) and from Pakistani backgrounds (Year 9 and Year 11).

Generally, the differences between non-EiC areas and EiC areas suggest natural variation rather than consistent patterns, but among Year 11 pupils there were smaller proportions of males among those from Black Caribbean, Black African and Black Other backgrounds in EiC areas than in non-EiC areas.

The reasons for these differences, within and between Key Stages and EiC/non-EiC areas (and indeed Phases within EiC) are unclear and, particularly for the smaller minority ethnic groups and in Phases 2 and 3, may simply reflect short-term variation. For example, of the pupils completing Year 11 in 2002 in EiC Phase 1 areas and from White non-UK backgrounds, less than 47 per cent were male. For the combined 2002 and 2003 cohorts, the corresponding figure is just over 50 per cent. Other contributory factors may include pupils being educated in the independent sector or at home, those being educated outside England (e.g. while living with relatives) and pupils 'missing' from the school system. However, some of findings, such as the high percentage of Phase 2 pupils from Chinese backgrounds who are male, may suggest emerging patterns.[13]

English as an additional language

At the end of Key Stage 4, less than one per cent of pupils from White UK backgrounds were recorded as having English as an additional language.

[13] But note the relatively small numbers of pupils from Chinese backgrounds in these areas.

Among other ethnic groups, the proportions of pupils with English as an additional language varied from about five per cent (Black Caribbean pupils) to over 90 per cent (those from Bangladeshi backgrounds). Within each minority ethnic group, the highest proportions of pupils with English as an additional language were generally in Phase 1 and Phase 3 areas.

Overall, the proportions noted for the combined 2002/2003 cohort were similar to those for the 2002 cohort alone.

The overall pattern at Key Stage 3 was similar but with some indication that the proportion of pupils with English as an additional language was slightly lower for these pupils than for those completing Key Stage 4 at the same time.

Special educational needs

As noted earlier, results are reported in terms of the stages defined by the 2001 Code of Practice (DfES, 2001), with Stages 1 and 2 treated as comparable to School Action, and Stages 3 and 4 to School Action Plus.

Overall, levels of identification were lower for Year 9 pupils than for those in Year 11. Among Year 9 pupils identified as having special educational needs, most were at School Action level, whereas the position was reversed at Year 11. By Year 11, about a quarter of those with identified special educational needs were at School Action level, but for pupils from Black Other backgrounds, the proportion was less than this, while for those from Bangladeshi backgrounds it was greater.

Less than 10 per cent of pupils from Chinese or Indian backgrounds had identified special educational needs, compared with 10 to 15 per cent of those from White UK, White non-UK, Pakistani, Bangladeshi and Other backgrounds. The highest proportions were seen among pupils from Black Caribbean, Black African and Black Other backgrounds.

Generally, within each ethnic group and for both Year 9 and Year 11 pupils, the lowest proportions of pupils with identified special educational needs were in non-EiC areas. The highest proportions were seen in Phase 1 areas, with Phase 2 areas being similar to non-EiC areas or with levels between those of non-EiC and Phase 1 areas. There were some exceptions to this. For example, there were relatively high levels of identification of special educational needs among Year 11 pupils from Black Caribbean, Black African and Black Other backgrounds in Phase 2 areas. Year 11 pupils from Pakistani backgrounds in Phase 2 areas were less likely than pupils from other areas to have identified special educational needs. Similarly, Year 11 pupils from Chinese backgrounds, and Year 9 pupils from Pakistani and Bangladeshi backgrounds, in Phase 2 and 3 areas were less likely than those from similar backgrounds but attending schools in non-EiC or Phase 1 areas to be so identified,

Entitlement to Free School Meals[14]

Entitlement to Free School Meals was generally slightly higher among Year 9 pupils than for those in Year 11. Overall, the highest levels of entitlement were for pupils from Pakistani and Bangladeshi backgrounds, with more than one in three such pupils in non-EiC areas known to be entitled. Fifteen to 25 per cent of pupils in non-EiC schools from Black Caribbean, Black African and Black Other backgrounds were known to be entitled to Free School Meals, as were slightly less than ten per cent of those from White UK, White non-UK and Indian backgrounds, and five per cent of those from Chinese backgrounds.

Overall levels of entitlement were considerably higher in Phase 1 areas, as would be expected given the targeted nature of the EiC policy. As in non-EiC areas, highest levels of entitlement, at almost 70 per cent, were for pupils from Bangladeshi backgrounds but levels of entitlement were over 40 per cent for pupils from Black African, Pakistani and Other backgrounds, and over 30 per cent for those from White non-UK, Black Caribbean, Black Other and Chinese backgrounds. The lowest levels of entitlement were for pupils from White UK and Indian backgrounds, which were also groups with relatively low levels of entitlement in non-EiC areas.

In Phase 2 areas, levels of entitlement were generally lower than those in Phase 1 areas, but with a similar pattern across ethnic groups. Pupils from Black African backgrounds, however, had the highest levels of entitlement within Phase 2 areas, at about 50 per cent, while over 40 per cent of pupils from Bangladeshi backgrounds were entitled to Free School Meals. The lowest level of entitlement (less than ten per cent) was for pupils from Chinese backgrounds.

Levels of entitlement in Phase 3 areas were lower than in Phase 1 areas, but showed a similar pattern across ethnic groups, with the highest levels of entitlement being for those from Pakistani and Bangladeshi backgrounds, and the lowest levels for those from White UK, Indian and Chinese backgrounds.

2.3 The Strands of EiC[15]

For pupils taking part in the Year 11 evaluation surveys in 2002 and 2003, we can identify which pupils were on the gifted and talented register at the time of the data collection in spring 2002 or spring 2003. From the questionnaires completed by pupils at the same time, we can identify which pupils had seen a Learning Mentor. Table 2.3 summarises the extent to which pupils from

[14] Strictly, available data relates to known entitlement to Free School Meals, and may underestimate the true level of entitlement. For simplicity, we refer to entitlement in this report.

[15] This section uses data from the evaluation surveys and related data collection carried out in 2002 and 2003. Sample sizes are, therefore, considerably smaller than for the results discussed in Sections 2.1 and 2.2.

different ethnic backgrounds and attending EiC schools were engaged in these two elements of EiC. (Note that some minority ethnic groups are excluded because there were too few pupils to provide robust conclusions. Similarly, information about which pupils had attended a Learning Support Unit or City Learning Centre is not reported.)

Table 2.3 Involvement in the Gifted and Talented and Learning Mentor Strands of EiC: Year 11 pupils

	Gifted and Talented Strand %		Learning Mentor Strand %		Number of pupils	
	2002	**2003**	**2002**	**2003**	**2002**	**2003**
White UK	10	12	29	28	6,664	8,797
White non-UK	7	9	34	28	101	371
Black Caribbean	4	12	35	26	136	308
Black African	2	13	48	29	52	333
Indian	6	11	27	27	277	421
Pakistani	5	10	31	27	309	620
Total	**10**	**11**	**29**	**27**	**7,539**	**10,850**

Source: EiC Year 11 Pupil Survey, Pupil Data Forms and NPD , 2002 and 2003
Note: Data on Gifted and Talented Strand derived from Pupil Data Forms and may under-estimate the proportion of pupils identified as gifted and talented. For about 27 per cent of pupils, information about whether they were identified as gifted and talented was not available. Involvement in Learning Mentor Strand based on self-report by pupils.

Table 2.3 shows the percentages of Year 11 pupils within each ethnic group identified as gifted and talented, or referred to a Learning Mentor, separately for 2002 and 2003.[16] In 2002, about 10 per cent of pupils overall were identified as gifted and talented, but there were marked differences between ethnic groups, with pupils from White UK backgrounds being most likely, and those from Black African backgrounds least likely,[17] to be identified as gifted and talented. (As elsewhere in this Chapter, these are observed percentages, and do not take account of school or pupil factors such as attainment.) For the 2003 Year 11 cohort, overall a slightly higher percentage of pupils were identified as gifted and talented, and there was considerably less variation between ethnic groups. In particular, pupils from Black African backgrounds were as likely as those from other backgrounds to be identified as gifted and talented. Some of these differences may relate to the quality of information provided by schools (for almost a third of pupils, information as to whether or not they were identified as gifted and talented was not provided). Also, the 2002 and 2003 cohorts represent two (non-overlapping) groups of schools, and some of this equalisation is no doubt due to the larger numbers of schools and pupils included in 2003 cohort. Nevertheless, Table 2.3 suggests that there was

[16] We report the two years separately in this case because of the marked difference in findings.
[17] But note that the sample included only 52 pupils from Black African backgrounds, 21 of whom were from the same school.

a distinct shift between 2002 and 2003 in terms of the ethnic background of pupils identified as gifted and talented.

In 2002, almost 30 per cent of pupils reported seeing a Learning Mentor. Pupils from White non-UK and Black Caribbean backgrounds were slightly more likely, and those from Black African backgrounds considerably more likely, to report seeing a Learning Mentor. For the 2003 cohort, there were no marked differences between the ethnic groups, and the overall proportion of pupils seeing a Learning Mentor had fallen slightly.

Within each ethnic group, there were some associations between the probability of being referred to a Mentor and various pupil-level factors, such as gender, English language status, special educational needs, entitlement to Free School Meals, and being identified as gifted and talented. Table 2.4, which is based on inspection of the proportion of pupils within specified sub-groups being referred to a Learning Mentor, summarises these observed differences.

Table 2.4 Ethnic background, pupil factors and the probability of being referred to a Learning Mentor (Year 11 pupils in 2002 and 2003)

	White UK	White non-UK	Black Caribbean	Black African	Indian	Pakistani
Boys v girls		+	+			
English as an additional language v English as first language	-		+	+	-	
Special educational needs v no identified needs		+	+			
Entitled to Free School Meals v not entitled						
Gifted and talented v not gifted and talented		-		-		-

Source: EiC Year 11 Pupil Survey, Pupil Data Forms and NPD, 2002 and 2003
Note: '+' indicates that the first-named group of pupils had a greater probability, and '–' a smaller probability, of being referred (as reported by pupils). A blank indicates that there was no difference.

Table 2.4 shows that:

- within the White non-UK and Black Caribbean groups, boys were more likely than girls with similar ethnic backgrounds to be referred to a Learning Mentor
- pupils from White UK and Indian backgrounds for whom English was an additional language were less likely than other pupils from the same backgrounds to be referred to a Learning Mentor, whereas the reverse was true for those from Black Caribbean and Black African backgrounds

- White non-UK and Black Caribbean pupils with special educational needs were more likely than other pupils from the same ethnic background to be referred
- pupils from White non-UK, Black African and Pakistani backgrounds were less likely to be referred to a Learning Mentor if they had been identified as gifted and talented (but note that this finding is based on small numbers of pupils).

Table 2.5 presents similar information to that in Table 2.4 but in relation to being identified as gifted and talented.

Table 2.5 Ethnic background, pupil factors and the probability of being identified as gifted and talented (Year 11 pupils in 2002 and 2003)

	White UK	White non-UK	Black Caribbean	Black African	Indian	Pakistani
Boys v girls						
English as an additional language v English first language					-	
Special educational needs v no identified needs					-	
Entitled to Free School Meals v not entitled						-
Seen a Learning Mentor v not seen a Mentor				-		

Source: EiC Year 11 Pupil Survey, Pupil Data Form sand NPD, 2002 and 2003.
Note: '+' indicates a greater probability, and '–' a smaller probability, of being identified as gifted and talented. A blank indicates that there was no difference.

Within ethnic groups, there was generally relatively little evidence of a relationship between pupil factors such as gender or special educational needs and being identified as gifted and talented. Pupils from Indian backgrounds were less likely to be identified as gifted and talented if they had English as an additional language or had identified special educational needs, and those from Pakistani backgrounds were less likely to be so identified if the were entitled to Free School Meals. Pupils from Black African backgrounds who had seen a Learning Mentor were less likely to be identified as gifted and talented than those who had not seen a Mentor.

Table 2.6 is similar to Table 2.3 and shows the percentages of pupils completing Key Stage 3 in 2002 or 2003 who were involved in the Gifted and Talented or Learning Mentor Strands of EiC.

Table 2.6 Involvement in the Gifted and Talented and Learning Mentor Strands of EiC: Year 9 pupils

	Gifted and Talented Strand %		Learning Mentor Strand %		Number of pupils	
	2002	**2003**	**2002**	**2003**	**2002**	**2003**
White UK	8	10	18	16	7,517	8,779
White non-UK	13	0	17	25	122	8
Black Caribbean	5	12	24	22	365	464
Black African	7	4	19	20	312	344
Black Other	7	9	18	20	113	79
Indian	8	11	12	9	745	519
Pakistani	4	7	9	20	522	321
Bangladeshi	5	5	10	10	101	98
Total	**8**	**11**	**17**	**17**	**9,797**	**10,612**

Source: EiC Year 9 Pupil Survey, Pupil Data Forms and NPD, 2002 and 2003.
Note: Data on Gifted and Talented Strand derived from Pupil Data Forms and may under-estimate proportion of pupils identified as gifted and talented. For about 38 per cent of pupils, information about whether they were identified as gifted and talented was not available. Involvement in Learning Mentor Strand based on self-report by pupils.

The overall percentage of pupils identified as gifted and talented is rather less than that shown in Table 2.3 for Year 11 pupils, but this is no doubt in part due to the very high percentage of Year 9 pupils for whom there was missing data in respect of whether they were part of the gifted and talented cohort. As for the Year 11 cohort in 2002, there were marked differences between ethnic groups, although in this case pupils from Pakistani and Bangladeshi backgrounds were those least likely to be identified as gifted and talented, and those from White non-UK backgrounds most likely. For the 2003 cohort, the overall proportion identified as gifted and talented was slightly higher, but (unlike the 2003 Year 11 cohort), there were still marked differences between ethnic groups, with pupils from Black African and Bangladeshi backgrounds least likely to be identified. (Note that information was available for only eight White non-UK pupils.)

The overall percentage of pupils saying they had seen a Learning Mentor was substantially lower for Year 9 pupils than for Year 11 pupils. There may be a number of factors contributing to this, including targeting of Learning Mentor resources at older pupils and less accurate reporting by younger pupils. In both 2002 and 2003, Year 9 pupils from Indian and Bangladeshi backgrounds were less likely than their peers to report having seen a Learning Mentor. While pupils from Pakistani backgrounds were less likely than those from other groups to report seeing a Learning Mentor in 2002, this variation was not apparent for the 2003 Year 9 cohort. The 2002 and 2003 cohorts were from non-overlapping groups of schools and some of this difference may reflect school level differences, but the magnitude of the change and the numbers of

pupils involved suggest a substantial change in referral patterns between 2002 and 2003.

Table 2.7 Ethnic background, pupil factors and the probability of being referred to a Learning Mentor (Year 9 pupils in 2002 and 2003)

	White UK	White non-UK	Black Caribbean	Black African	Black Other	Indian	Pak-istani	Bangla-deshi
Boys v girls		-	+		+			
English as additional language v English as first language	-			+				
Special educational needs v no identified needs	+		+	+	+	+	+	+
Entitled to Free School Meals v not entitled	+			+	+			
Gifted and talented v not gifted and talented		-		-	-			

Source: EiC Year 9 Pupil Survey, Pupil Data Forms and NPD, 2002 and 2003.
Note: + indicates that the first-named group of pupils has a greater probability, and – a smaller probability, of being referred (as reported by pupils). A blank indicates that there was no difference.

Table 2.7 is similar to Table 2.4 but relates to the Year 9 cohort. Among Year 9 pupils:

- boys from Black Caribbean and Black Other backgrounds were more likely than girls from the same backgrounds to be referred to a Learning Mentor, but the difference was reversed for pupils from White non-UK backgrounds
- pupils from White UK backgrounds with English as an additional language were less likely than those with English as their first language to be referred to a Learning Mentor, while the reverse was true for those from Black African backgrounds
- those with identified special educational needs were more likely to report having seen a Learning Mentor than other pupils from the same ethnic background, except for pupils from White non-UK backgrounds (but note that this was a relatively small group consisting of only 130 pupils)
- among pupils from White UK, Black African and Black Other backgrounds, those entitled to Free School Meals were more likely than other pupils from the same groups to report having see a Mentor
- gifted and talented White non-UK, Black African and Black Other pupils were less likely than those not so identified to say they had seen a Mentor.

Table 2.8 is like Table 2.5 and considers the characteristics of pupils identified as gifted and talented, this time in relation to pupils in Year 9.

- Boys from White non-UK backgrounds were less likely to be identified as gifted and talented than girls from the same backgrounds.
- Among pupils from White UK backgrounds, those with English as an additional language were more likely to be identified as gifted and talented. For pupils from Black Caribbean backgrounds, having English as an additional language was associated with a lower probability of being identified as gifted and talented.
- For all the ethnic groups considered except Black Other, those with identified special educational needs were less likely to be identified as gifted and talented.
- Being entitled to Free School Meals was associated with a lower probability of being identified as gifted and talented for pupils from White non-UK, Black African and Black other backgrounds.
- Mentored White non-UK pupils were less likely than those not having seen a Mentor to be identified as gifted and talented.

Table 2.8 Ethnic background, pupil factors and the probability of being identified as gifted and talented (Year 9 pupils in 2002 and 2003)

	White UK	White non-UK	Black Caribbean	Black African	Black Other	Indian	Pak-istani	Bangla-deshi
Boys v girls		–						
English as additional language v English as first language	+		–					
Special educational needs v no identified needs	–	–	–	–		–	–	–
Entitled to Free School Meals v not entitled		–		–	–			
Seen a Learning Mentor v not seen a Mentor		–						

Source: EiC Year 9 Pupil Survey, Pupil Data Forms and NPD, 2002 and 2003.
Note: '+' indicates that the first-named group of pupils has a greater probability, an '–' a smaller probability, of being identified as gifted and talented. A blank indicates that there was no difference.

2.4 Summary

This Chapter has examined the characteristics of pupils from minority ethnic backgrounds, and has demonstrated the marked difference between and within ethnic groups in relation not only to involvement with EiC but also in relation

to Phase within EiC. The Chapter has shown that there were substantial variations between ethnic groups in the proportions of pupils identified as gifted and talented or referred to a Learning Mentor, with some evidence that these differences were smaller in 2003 than in 2002.

3. THE ATTAINMENT OF MINORITY ETHNIC PUPILS AT KEY STAGES 2, 3 AND 4

This Chapter considers the achievements of pupils at the end of Key Stages 2, 3 and 4 in EiC areas compared to those in non-EiC areas. As in Chapter 2, Chapter 3 reports descriptive statistics: as such, the findings describe observed differences between groups of pupils without taking account of background and contextual factors which may differ between the groups being compared.

The data presented in Appendix 2 is derived from the 2002 and 2003 NPD. It summarises the Key Stage 2, 3 and 4 attainments of each ethnic group, for pupils completing Key Stage 4 in 2002 or 2003.[18] It also includes Key Stage 2 and 3 results for those completing Key Stage 3 in 2002 and 2003.

3.1 Pupils completing Key Stage 4 in 2002 or 2003

Tables A2.1 to A2.11 in Appendix 2 summarise the achievements of pupils within each ethnic group at the end of Key Stages 2, 3 and 4, for all pupils completing Key Stage 4 in maintained secondary schools in England in 2002 or 2003. The measures presented in the tables are:

- point scores for Key Stage 2 average level and for each of English, Mathematics and Science
- similar measures for Key Stage 3
- pupils' 'best 8' GCSE scores (also known as the capped point score)[19]
- average GCSE point score
- proportion of pupils achieving at least five GCSEs at grade C or better (five good GCSEs).

Note that these pupils completed Key Stage 2 in 1997 (for the 2002 Year 11 cohort) and 1998 (for the 2003 Year 11 cohort), and Key Stage 3 in 2000 or 2001. All the Key Stage 2 results and some of the Key Stage 3 results (depending on Phase of EiC) therefore pre-date the implementation of EiC.

[18] For Key Stages 2 and 3, we use a scale derived by taking the level achieved, multiplying this by six, and adding three. Hence level 4 is recorded as 27, and level 5 as 33. On the assumption that one level represents two years of progress, one point on this scale is equivalent to about one term of progress.

[19] Where an A* grade is scored as eight, A as seven, etc.

At the end of Key Stage 2, the differences between non-EiC areas and each Phase of EiC were relatively small – considerably smaller than the differences between ethnic groups. Lowest average levels of attainment were seen for pupils from Pakistani and Bangladeshi backgrounds, and the highest average levels were for pupils from Chinese backgrounds. Results for non-EiC areas were generally slightly higher than those for EiC areas, although the differences were quite small, usually less than one score point or a sixth of a level.

By the end of Key Stage 3, the differences between EiC and non-EiC areas had tended to widen to about two score points or a third of a level, although there was considerable variation around this figure. The differences between ethnic groups had also increased. For example, White UK pupils in non-EiC areas had an average Key Stage 2 score of 26.2, while pupils from Black Caribbean backgrounds in the same areas had average scores of 24.7, a difference of a quarter of a level. By the end of Key Stage 3 the difference was over 3 points or over half a level.

Although attainment at the end of Key Stage 4 is not expressed in the same 'units' as achievement at earlier Key Stages, it is possible to discern some patterns of change. For example, at the end of Key Stage 2, the performance of pupils from Indian backgrounds in non-EiC areas was slightly lower than that of White UK pupils in the same areas (by about 0.5 of a point). By the end of Key Stage 3, the difference had been reversed, with pupils from Indian backgrounds achieving an average point score slightly higher than that of pupils from White UK backgrounds. Over 70 per cent of the pupils from Indian backgrounds achieved at least five good GCSEs, with an average capped point score of 42.3. The corresponding figures for White UK pupils were 57 per cent and 37.4 points. The difference in point scores is equivalent to one grade higher on each of five GCSEs. There was a similar pattern in EiC areas.

These different patterns can also be considered graphically. For example, Figures 3.1 to 3.3 contrast the performance trajectories of Black Caribbean, Black African and Indian pupils with those of pupils from White UK backgrounds for non-EiC and EiC Phase 1 areas. In each case, the performance of White UK pupils in non-EiC areas was taken as a baseline against which the performance of other groups was compared, using the average levels achieved at Key Stages 2 and 3 and the capped point score at Key Stage 4. This presentation is helpful in demonstrating patterns of achievement. However, it is important to note that, as the capped point score is not directly comparable with levels achieved at earlier stages, these results should be treated with some caution.

Figure 3.1 Pupils from White UK and Black Caribbean backgrounds

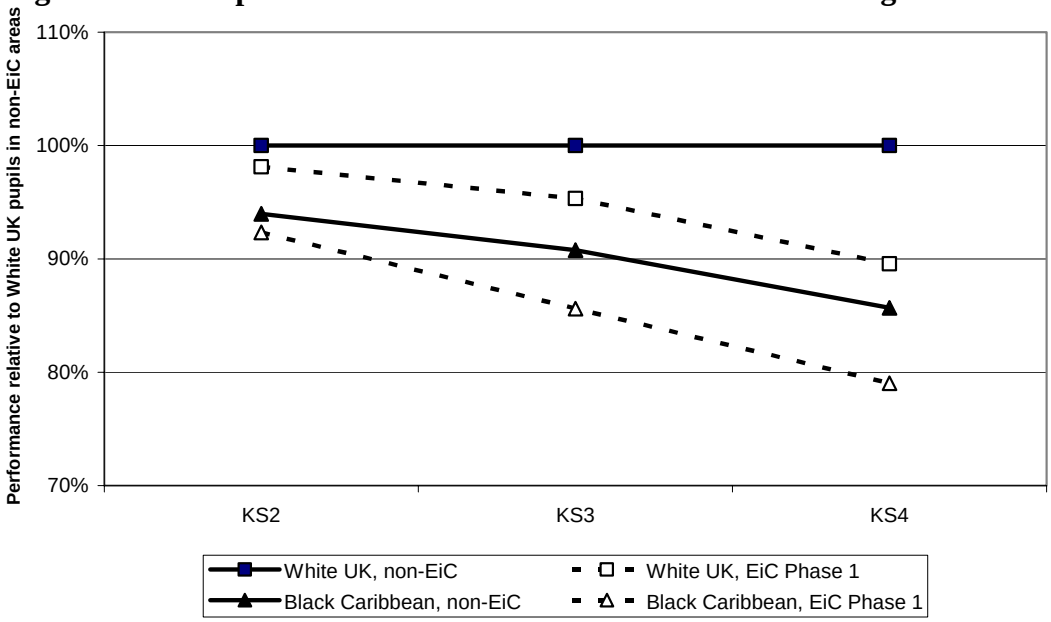


Figure 3.1 demonstrates a number of features.

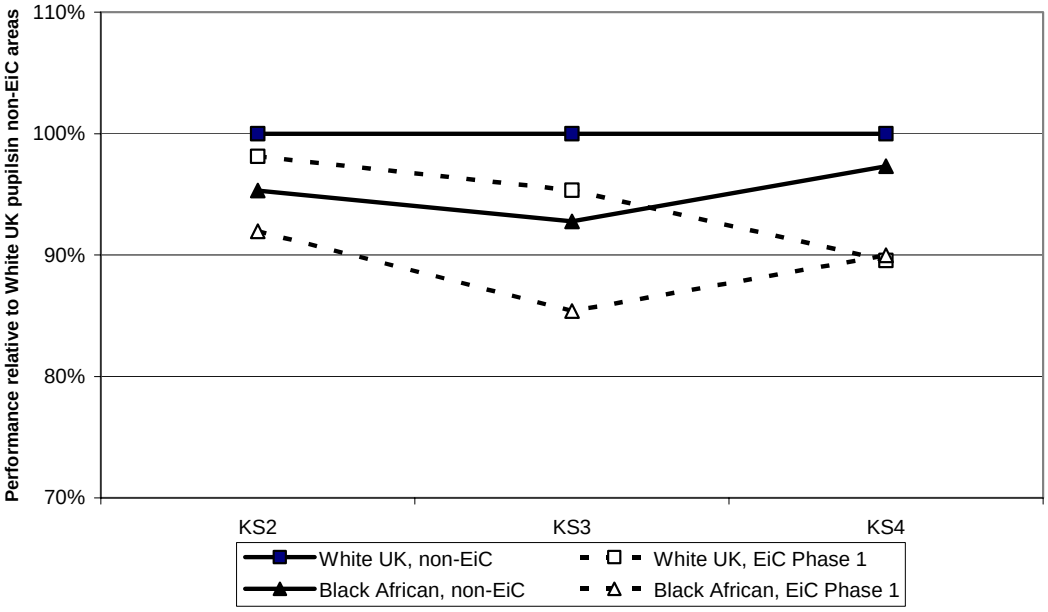
- For pupils from White UK backgrounds, the difference in attainment between pupils in non-EiC and EiC Phase 1 areas at the end of Key Stage 2 was quite small. Although pupils from Black Caribbean backgrounds had lower levels of attainment at this point in their education, there was again relatively little difference between non-EiC and Phase 1 areas.
- The progress of pupils from Black Caribbean backgrounds in both non-EiC areas and in Phase 1 areas, as well as that of pupils from White UK backgrounds in non-EiC areas, was less than that of pupils from White UK backgrounds in non-EiC areas.
- There are indications that the difference in performance between non-EiC and Phase 1 areas for pupils from Black Caribbean backgrounds was less at the end of Key Stage 4 than for pupils from White UK backgrounds, and that the difference between pupils from White UK and Black Caribbean backgrounds was less in Phase 1 areas than in non-EiC areas: this may indicate that EiC was contributing to the attainment levels achieved by pupils from Black Caribbean backgrounds in these areas.

The pattern was similar for pupils from Black Other backgrounds, although within non-EiC areas there was less of a decline (relative to White UK pupils) during Key Stages 3 and 4.

Figure 3.2 presents similar information for pupils from Black African backgrounds, again in comparison with pupils from White UK backgrounds. Although pupils from White UK backgrounds in Phase 1 areas finished Key Stage 2 with levels of attainment only slightly below those of pupils from similar backgrounds in non-EiC areas, and above those of pupils from Black African backgrounds, by the end of Key Stage 4 their levels of achievement

were considerably lower. In contrast, pupils from Black African backgrounds and attending non-EiC schools were closer in levels of achievement to pupils from White UK backgrounds in the same areas at the end of Key Stage 4 than at Key Stage 2, although they appear to make relatively poor progress during Key Stage 3. Pupils from Black African backgrounds attending Phase 1 schools show a similar pattern of progress during Key Stage 4, but they started from low levels achievement at Key Stage 2. Although their lack of progress during Key Stage 3 contributes to low levels at Key Stage 4, they finished secondary education with similar levels of attainment to those of pupils from White UK backgrounds in the same areas.

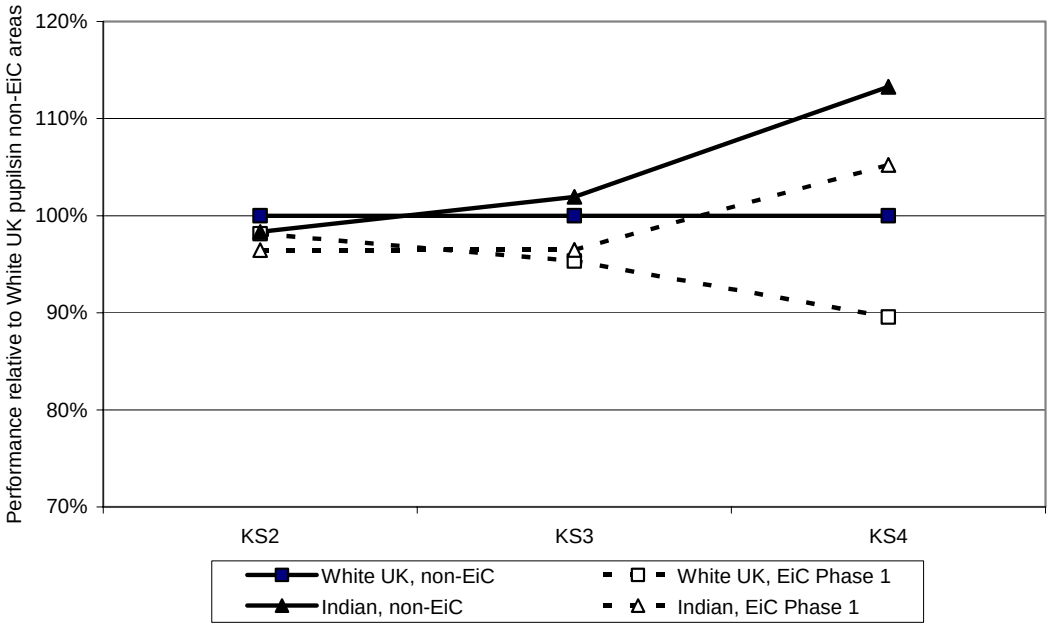
Figure 3.2 Pupils from White UK and Black African backgrounds



The chart for pupils from White non-UK backgrounds was similar to that shown in Figure 3.2, except that in non-EiC areas (but not in Phase 1 areas), pupils from White non-UK backgrounds had higher levels of attainment than pupils from White UK backgrounds at the end of Key Stage 2 and that this difference increased at each Key Stage.

Figure 3.3 shows the progress of pupils from Indian backgrounds and has a different pattern again. The difference between White UK and Indian pupils at Key Stage 2 was small and levels of attainment in Phase 1 areas were only slightly below those in non-EiC areas. During Key Stage 3, levels of progress were broadly similar for non-EiC and Phase 1 areas, and for pupils from White UK and Indian backgrounds. However, pupils from Indian backgrounds (in both non-EiC and EiC areas) made considerably greater progress during Key Stage 4 than pupils from White UK backgrounds, whereas pupils from White UK backgrounds and attending Phase 1 schools made least progress.

Figure 3.3 Pupils from White UK and Indian backgrounds



The pattern for pupils from Pakistani and Bangladeshi backgrounds was similar to that for Black African pupils (see Figure 3.2).

For pupils from Chinese backgrounds, the picture was similar to that for Indian pupils, although the overall levels of attainment were greater for pupils from Chinese backgrounds than for those from Indian backgrounds.

It is clear from these examples that there are complex relationships between pupils' progress, their ethnic background, and their involvement in EiC. These relationships are examined in more detail in Chapter 4.

3.2 Pupils completing Key Stage 3 in 2002 or 2003

Tables A2.12 to A2.22 in Appendix 2 summarise the achievements of pupils within each ethnic group at the end of Key Stages 2 and 3, for all pupils completing Key Stage 3 in maintained secondary schools in England in 2002 or 2003. The measures presented in the tables are:

- point scores for Key Stage 2 average level and for each of English, Mathematics and Science
- similar measures for Key Stage 3.

These pupils competed Key Stage 2 in 1999 (for the 2002 Year 9 cohort) and 2000 (for 2003 Year 9 cohort). Some of these Key Stage 2 results (depending on Phase of EiC) therefore pre-date the implementation of EiC.

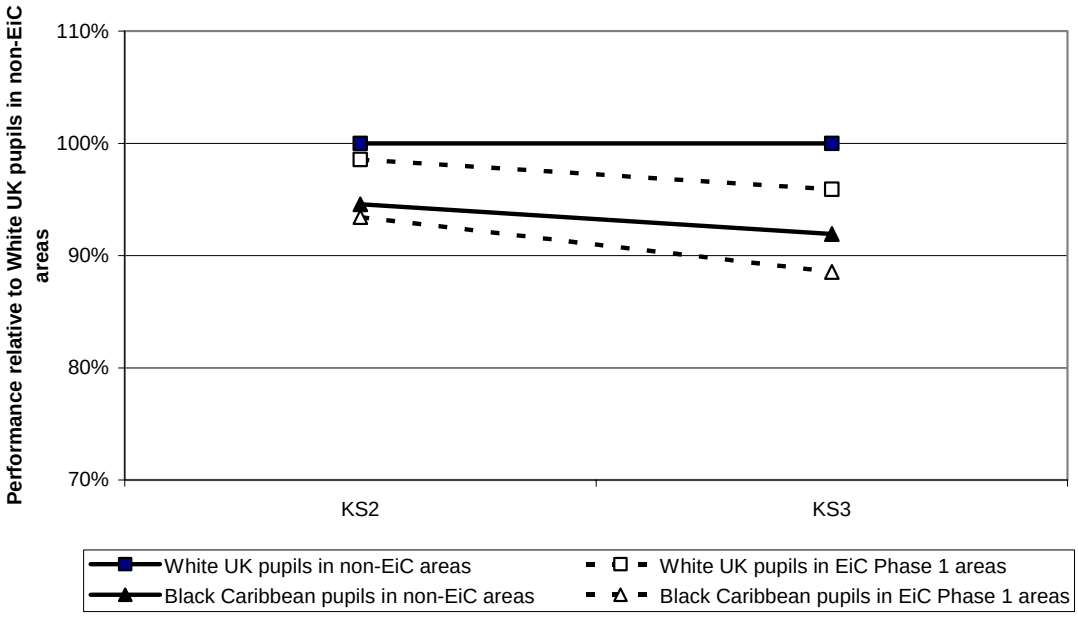
Although within each ethnic group levels of attainment at the end of Key Stage were generally slightly higher in non-EiC areas than in EiC areas, the differences were relatively small and generally smaller than the differences between ethnic groups. As in the analysis of Year 11 pupils (see Section 3.1), the lowest average levels of attainment were seen for pupils from Pakistani and Bangladeshi backgrounds, and the highest average levels were for pupils from Chinese backgrounds.[20]

Again mirroring the analysis of Year 11 pupils, the differences between EiC and non-EiC areas had tended to widen, to about two score points or a third of a level, by the end of Key Stage 3, although there was considerable variation around this figure. The differences between ethnic groups had also increased. For example, White UK pupils in non-EiC areas had an average Key Stage 2 score of 27.6, while pupils from Pakistani backgrounds in the same areas had average scores of 25.3, a difference of 2.3 points. By the end of Key Stage 3 the difference was almost 3 points.

The progress during Key Stage 3 of pupils from White non-UK backgrounds was very similar to that for pupils from White UK backgrounds in both non-EiC and Phase 1 areas, although pupils from White UK backgrounds had slightly higher levels of attainment than those from White UK backgrounds in non-EiC areas and slightly lower levels in Phase 1 areas.

As we did for pupils completing Year 11, we can plot the relative progress of different groups of pupils (see Figures 3.4 to 3.8).

Figure 3.4 Pupils from White UK and Black Caribbean backgrounds



[20] Note also that average Key Stage 2 levels for the Year 9 cohorts (who completed Key Stage 2 in 1999 or 2000) were generally about one or two points higher than for the Year 11 pupils considered in this paper, who completed Key Stage 2 in 1997 or 1998.

Figure 3.4 shows that pupils from White UK backgrounds and attending schools in EiC Phase 1 areas made less progress during Key Stage 3 than did pupils from similar ethnic backgrounds in non-EiC areas Pupils from Black Caribbean backgrounds started Key Stage 3 with lower levels of attainment than those of pupils from White UK backgrounds, and made less progress during the Key Stage.

Figure 3.5 Pupils from White UK and Black African backgrounds

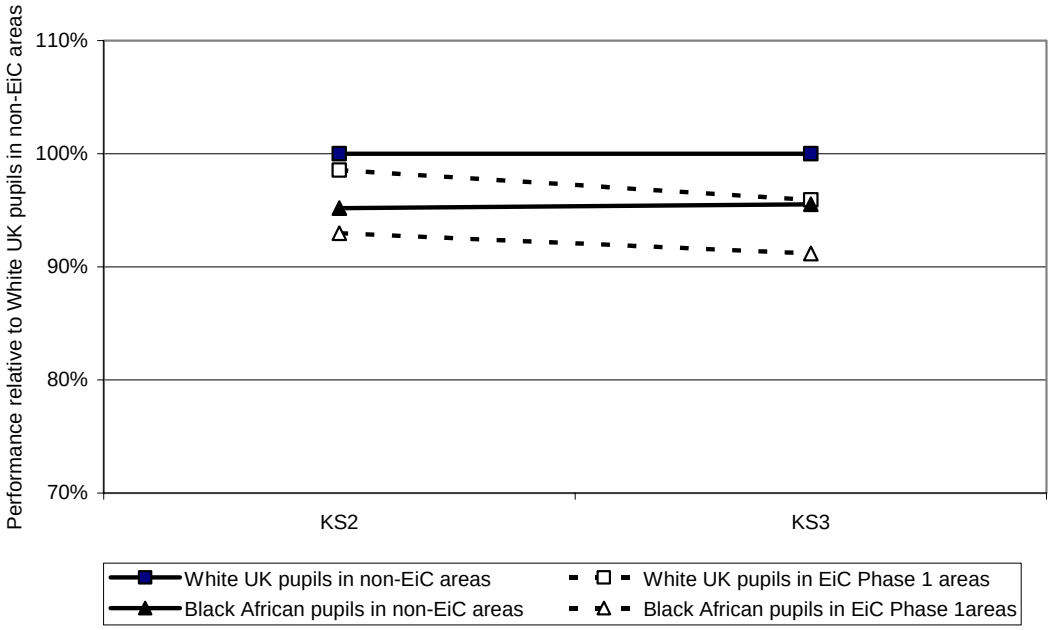
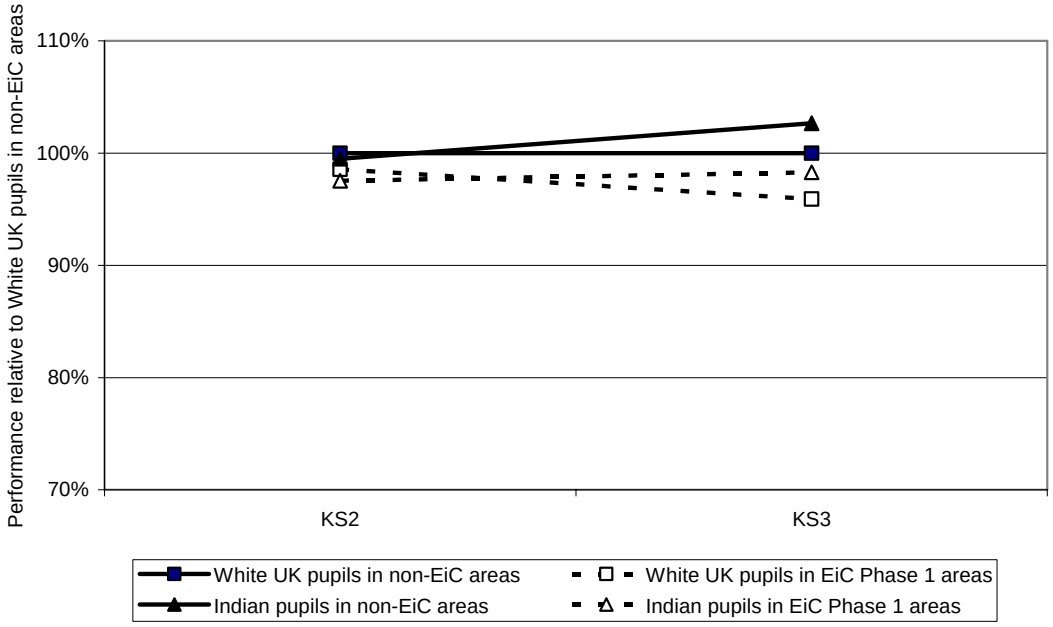


Figure 3.5 shows that pupils from Black African backgrounds, in both non-EiC and Phase 1 areas, started Key Stage 3 with lower levels of attainment than those of pupils from White UK backgrounds. The figure also suggests that, in non-EiC areas, pupils from Black African backgrounds made slightly more progress than did White UK pupils, i.e. the gap between the groups reduced during the Key Stage. Pupils from both groups attending Phase 1 schools made less progress during Key Stage 3 than those in non-EiC areas.

There was a similar pattern for pupils from Black Other backgrounds, although the relative lack of progress compared with those from White UK backgrounds was more marked, particularly in Phase 1 areas. There was, therefore, a greater difference between pupils from White UK and Black Other backgrounds in Phase 1 areas than in non-EiC areas.

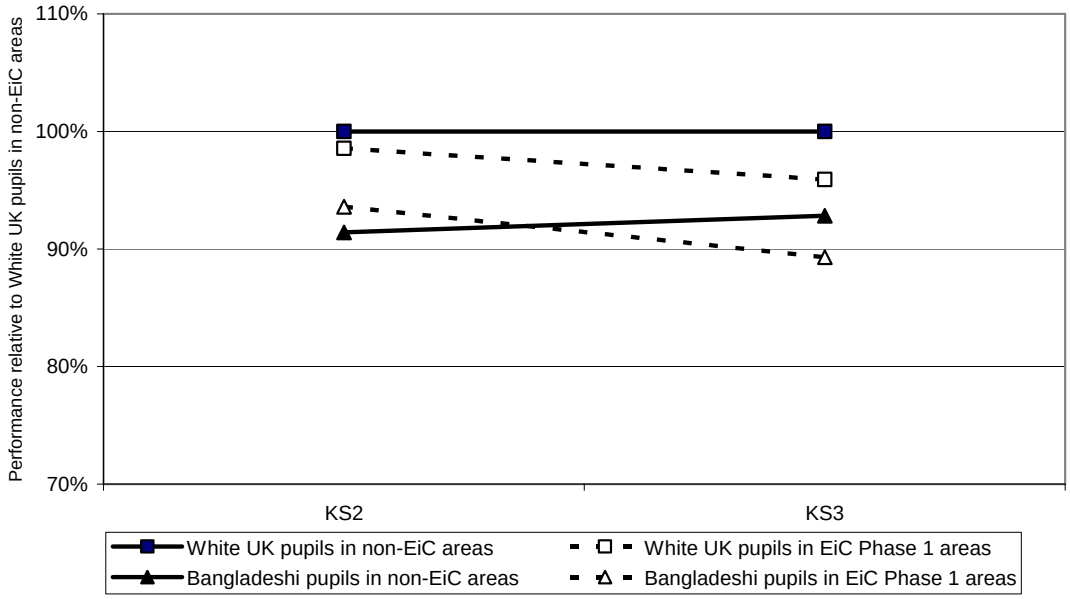
Figure 3.6 Pupils from White UK and Indian backgrounds



There was relatively little difference in progress between pupils from White UK backgrounds and those from Indian backgrounds in non-EiC or Phase 1 areas, although least progress was for those from White UK backgrounds and attending Phase 1 schools.

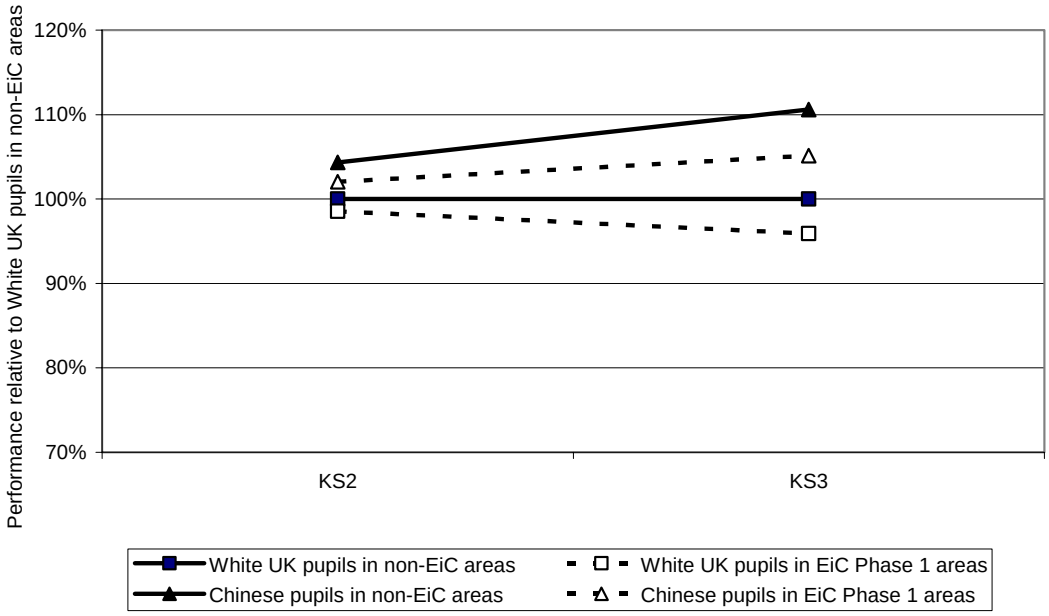
The pattern for pupils from Pakistani backgrounds was similar to that for pupils from Black Caribbean backgrounds (see Figure 3.4 above).

Figure 3.7 Pupils from White UK and Bangladeshi backgrounds



Pupils from Bangladeshi backgrounds started Key Stage 3 with lower levels of attainment, in both non-EiC and Phase 1 areas, than those of pupils from White UK backgrounds. Pupils from Bangladeshi backgrounds in non-EiC areas made more progress than those from White UK backgrounds in the same areas, but the reverse was the case in Phase 1 areas.

Figure 3.8 Pupils from White UK and Chinese backgrounds



Pupils from Chinese backgrounds started Key Stage 3 with higher levels of attainment than pupils from White UK backgrounds, and made more progress during the Key Stage, most markedly for those in non-EiC areas. At both the start and the end of Key Stage 3, the difference between pupils from White UK backgrounds and those from Chinese backgrounds was the same in Phase 1 areas as it was in non-EiC areas.

While consideration of progress during Key Stage 3 is necessarily less complex than when we examine progress over two Key Stages, even here the variations between minority ethnic groups demonstrate the importance of disaggregating results as far as is reasonable within available sample sizes.

3.3 Attainment and Strand involvement: Year 11 pupils

This section makes use of data from the national evaluation surveys.

Tables 3.1 and 3.2 summarise the attainments of pupils at the end of Key Stages 2, 3 and 4 (for pupils completing Key Stage 4 in 2002 or 2003) by ethnic background and whether or not the pupil reported seeing a Learning Mentor (Table 3.1) and by whether or not the pupil was identified by his or her school as being gifted and talented (Table 3.2). As noted earlier, all the Key

Stage 2 results, and some of those for Key Stage 3, relate to the period before the implementation of EiC. Note also that, for some minority ethnic groups, these results are based on small numbers of pupils and should be treated with some caution. For example, the results for Black African pupils identified as gifted and talented are based on less than 25 pupils. As elsewhere in this Chapter, these are descriptive statistics which do not take account of background and contextual differences between groups of pupils.

Table 3.1 The achievements of pupils seeing a Learning Mentor (Year 11 pupils completing Key Stage 4 in 2002 or 2003)

		Not seeing a Mentor		Seeing a Mentor	
		Mean score	Number of pupils	Mean score	Number of pupils
White UK	KS2 Average	25.5	10,519	25.4	4,152
	KS3 Average	32.8		32.6	
	Best 8 Score	33.9		33.4	
White non-UK	KS2 Average	25.7	266	25.3	109
	KS3 Average	32.5		32.0	
	Best 8 Score	34.6		34.9	
Black Caribbean	KS2 Average	24.0	279	24.1	112
	KS3 Average	30.3		30.5	
	Best 8 Score	31.1		31.7	
Black African	KS2 Average	24.7	148	23.6	78
	KS3 Average	32.2		30.1	
	Best 8 Score	37.4		35.8	
Indian	KS2 Average	24.7	470	24.6	170
	KS3 Average	32.5		32.5	
	Best 8 Score	38.2		37.1	
Pakistani	KS2 Average	23.0	588	23.3	238
	KS3 Average	29.2		29.4	
	Best 8 Score	31.4		32.6	

Source: National evaluation surveys and NPD, 2002 and 2003

Table 3.1 demonstrates that the attainment levels of pupils referred to a Learning Mentor were broadly similar to those of pupils not referred. (Results for 2002 alone are given in Appendix 3, Table A3.1.) There were some notable differences between ethnic groups both in terms of overall levels of attainment and in the extent of differences between those who had seen a Mentor and those who had not but overall, for all the ethnic groups considered (except for pupils from Black African backgrounds), the difference in attainment between those referred and those not referred were small at Key Stages 2, 3 or 4.

Among White pupils from UK and non-UK backgrounds, there were relatively small differences in levels of attainment between pupils who reported seeing a Mentor and those who did not. This was similar to the finding for the 2002

Year 11 cohort alone, but note that the overall level of attainment of the combined cohorts was rather lower than that of the 2002 cohort alone.

For Black Caribbean pupils, results were very similar at Key Stages 2 and 3 for the 2002 cohort alone and for the combined cohorts, with little difference between mentored and non-mentored pupils. For the 2002 cohort alone, mentored pupils had lower levels of attainment at Key Stage 4 than those not mentored, whereas for the combined cohort the position was reversed.

For pupils from Black African backgrounds, both the 2002 cohort alone and the combined 2002/2003 cohort showed lower levels of attainment at all three Key Stages for those pupils who had a seen a Mentor, although the difference at Key Stage 4 was much less marked for the combined cohort than for the 2002 cohort alone (with difference in capped point score of 8.7 and 1.6 points respectively). This may be again be associated with changed patterns of referral (see Table 2.1).

The results relating to pupils from Indian backgrounds were similar for the 2002 and for the combined 2002/2003 cohorts, with little difference between mentored and non-mentored pupils at Key Stage 2 or 3, and some evidence of higher performance among those not mentored at Key Stage 4.

Among pupils from Pakistani backgrounds, results at Key Stages 2 and 3 indicated little difference between mentored and not mentored pupils, with those mentored having slightly higher scores at Key Stage 4, in contrast with pupils from Black African and Indian backgrounds.

Whether or not an individual pupil is referred to a Learning Mentor will depend on a range of factors, including the pupil's own levels of attainment, behaviour and attitudes, but also on the wider context of the school which he or she attends. Information about the reasons for referral, and the scope and nature of the support offered by Mentors, were not available as part of this evaluation, and further work in this area would help to establish how Mentors can be used most effectively in schools.

Table 3.2 summarises the attainment levels of pupils in relation to whether or not they were identified as gifted and talented. Note that this table is based on relatively small numbers of pupils within each minority ethnic group, and should therefore be treated with caution.[21] As would be expected when examining levels of attainment without taking account of other background and contextual factors, the attainment at Key Stages 2 and 3 of pupils of the combined 2002/2003 Year 11 cohorts identified as gifted an talented was generally higher than that of pupils not so identified, although in some cases

[21] A similar analysis for the 2002 cohort alone was not carried out because of the very small numbers of gifted and talented pupils in some minority ethnic groups.

the differences were quite small.[22] For White UK, Black Caribbean, Indian and pupils from Pakistani backgrounds, there were also differences in favour of gifted and talented pupils at Key Stage 4. However, the performance of gifted and talented pupils from White non-UK and Black African backgrounds at the end of Key Stage 4 was slightly lower than that of pupils not so identified, but note that only 32 pupils from White non-UK backgrounds, and 22 from Black African backgrounds, were identified as gifted and talented, and so these results should be treated with considerable caution.

Table 3.2 The achievements of gifted and talented pupils (Year 11 pupils completing Key Stage 4 in 2002 or 2003)

		Gifted and talented			
		No		Yes	
		Mean score	Number of pupils	Mean score	Number of pupils
White UK	KS2 Average	25.2	9,591	27.2	1,635
	KS3 Average	32.3		35.9	
	Best 8 Score	32.8		39.9	
White non-UK	KS2 Average	25.2	209	26.4	32
	KS3 Average	31.8		32.6	
	Best 8 Score	33.0		32.4	
Black Caribbean	KS2 Average	23.9	224	24.4	36
	KS3 Average	29.8		31.5	
	Best 8 Score	30.0		32.6	
Black African	KS2 Average	23.9	127	25.0	22
	KS3 Average	31.1		31.8	
	Best 8 Score	36.0		35.8	
Indian	KS2 Average	24.6	398	26.1	56
	KS3 Average	32.3		35.3	
	Best 8 Score	37.5		43.1	
Pakistani	KS2 Average	23.3	481	24.3	71
	KS3 Average	29.6		31.4	
	Best 8 Score	32.1		35.8	

Source: National evaluation surveys and NPD, 2002 and 2003
Note: Results for pupils of unknown status excluded.

[22] Some pupils would be included in the gifted and talented register because of their talents in areas such as music or sport, which would not necessarily be associated with high levels of attainment in end of Key Stage 2 and 3 assessments or in relation to a broad measure of attainment such as the 'best 8' GCSE score.

3.4 Attainment and Strand involvement: Year 9 pupils

Tables 3.3 and 3.4 are similar to Tables 3.1 and 3.2, but show the Key Stage 2 and Key Stage 3 attainments for pupils completing Key Stage 3 in 2002 or 2003. Some of the Key Stage 2 results relate to the period before the implementation of EiC. Information was available for less than 200 pupils in each of the White non-UK, Black Other and Bangladeshi groups, and findings in relation to these groups should be treated with caution.

Table 3.3 shows that, within each ethnic group, the end of Key Stage 2 attainments of pupils referred to a Learning Mentor were slightly lower than those of pupils not referred. By the end of Key Stage 3, these differences had increased slightly. This is in contrast with the findings for pupils completing Key Stage 4 in 2002 or 2003, where the differences between mentored and non-mentored pupils (except for those from Black African backgrounds) were very small.

Table 3.3 The achievements of pupils seeing a Learning Mentor (Year 9 pupils completing Key Stage 3 in 2002 or 2003)

		Not seeing a Mentor		Seeing a Mentor	
		Mean score	Number of pupils	Mean score	Number of pupils
White UK	KS2 Average	27.0	12,294	25.4	2,404
	KS3 Average	33.5		30.6	
White non-UK	KS2 Average	27.1	80	26.0	16
	KS3 Average	34.1		33.4	
Black Caribbean	KS2 Average	25.8	542	25.1	157
	KS3 Average	31.7		30.2	
Black African	KS2 Average	25.6	392	25.3	96
	KS3 Average	32.5		31.7	
Black Other	KS2 Average	25.5	129	24.4	31
	KS3 Average	31.3		29.6	
Indian	KS2 Average	27.0	1,012	26.4	119
	KS3 Average	34.5		33.3	
Pakistani	KS2 Average	24.9	646	23.3	91
	KS3 Average	31.3		28.3	
Bangladeshi	KS2 Average	24.4	164	23.2	18
	KS3 Average	31.6		30.7	

Source: National evaluation surveys and NPD, 2002 and 2003

Table 3.4 shows that the attainment at both Key Stages 2 and 3 of pupils identified as gifted and talented was higher than that of pupils from similar ethnic backgrounds who were not part of the gifted and talented cohort. These differences were generally about four or five points at Key Stage 2 and about

six or seven points (one level or slightly more) at Key Stage 3. For pupils from Pakistani backgrounds, the differences were slightly greater at both Key Stages 2 and 3.

Table 3.4 The achievements of gifted and talented pupils (pupils completing Key Stage 3 in 2002 or 2003)

		Gifted and talented			
		No		Yes	
		Mean score	Number of pupils	Mean score	Number of pupils
White UK	KS2 Average	26.1	8,346	30.7	1,369
	KS3 Average	32.1		39.7	
White non-UK	KS2 Average	25.0	38	29.9	15
	KS3 Average	30.4		39.8	
Black Caribbean	KS2 Average	24.8	414	29.9	68
	KS3 Average	30.6		37.2	
Black African	KS2 Average	25.2	273	29.3	47
	KS3 Average	31.8		37.4	
Black Other	KS2 Average	25.0	83	28.7	13
	KS3 Average	30.4		37.2	
Indian	KS2 Average	25.7	487	30.3	111
	KS3 Average	33.1		39.9	
Pakistani	KS2 Average	24.0	463	30.2	40
	KS3 Average	30.2		39.5	
Bangladeshi	KS2 Average	23.7	139	29.8	8
	KS3 Average	30.9		38.4	

Source: National evaluation surveys and NPD, 2002 and 2003
Note: Results for pupils of unknown status excluded.

3.5 Summary

The summary statistics presented in this chapter, show that, within each of the ethnic groups considered, pupils in EiC areas had lower levels of attainment, and made less progress, than those in non-EiC areas. While this is to be expected, given that EiC is targeted on disadvantaged areas, the analysis demonstrates different patterns of progress for different ethnic backgrounds and at different Key Stages. These results do not take account of the different social circumstances of pupils in non-EiC and EiC areas, or between different ethnic groups which, as was shown in Chapter 2, are substantial.

Chapter 3 has also presented some findings in relation to pupils' participation in the Learning Mentor and Gifted and Talented Strands of EiC. Pupils referred to a Learning Mentor generally had levels of attainment which were similar to or slightly lower than those of other pupils from the same ethnic

background. For pupils from Black African backgrounds at all three Key Stages considered, and for pupils from Indian backgrounds at Key Stage 4 only, the difference was rather greater. For pupils from Pakistani and Black Caribbean backgrounds, levels of attainment at Key Stage 4 were slightly higher for mentored pupils than for those not mentored.

Pupils identified as gifted and talented had higher levels of achievement at all three Key Stages than did pupils from the same ethnic backgrounds who were not part of the gifted and talented cohort. The only exceptions were for pupils from White non-UK and Black African backgrounds, but these were very small groups of pupils and this finding must therefore be treated with considerable caution.

Chapter 4 presents some findings in relation to participation in EiC in general and these two Strands in particular, taking into account the pupils' own circumstances and those of the schools that they attend.

4. COMPARING THE ATTAINMENTS OF PUPILS IN NON-EIC AND EIC AREAS

This Chapter focuses on the attainment of pupils from different minority ethnic backgrounds in EiC Phase 1 and non-EiC schools, taking into account a range of school- and pupil-level characteristics as well as attainment at the end of the preceding Key Stage.[23] This analysis uses data from the NPD and was carried out using multilevel modelling techniques. This approach takes account of the hierarchical nature of the data (pupils are grouped within schools, which are in turn grouped within local authorities), and also allows the exploration of interactions between different pupil- and school-level characteristics.

We used data for the combined 2002 and 2003 cohorts as this should yield more stable estimates than those based on a single cohort. Similarly, by limiting consideration to pupils in non-EiC and Phase 1 areas, the interpretation of the findings is simplified and we obtain a better estimate of the likely longer term impact of EiC on pupils from minority ethnic groups.

For pupils completing Key Stage 4 in 2002 or 2003, the same outcome measures are considered as in Chapter 3, namely:

- 'best 8' point score (the point score derived from each pupil's eight best GCSEs or equivalent, also known as the capped point score)
- total GCSE point score (uncapped point score)
- probability of achieving at least five GCSEs at grade C or equivalent (five good GCSEs).

Similarly, for pupils completing Key Stage 3 in 2002 or 2003, we consider the level achieved in each of English, Mathematics, and Science, and the overall average level.

The pupils on whom the Key Stage 3 analysis in this section is based entered secondary school in autumn 1999 (for the 2002 Year 9 cohort) or autumn 2000 (for the 2003 Year 9 cohort). EiC was launched in Phase 1 areas in autumn 1999, and these pupils were, therefore, in schools which were involved with EiC for the whole of their Key Stage 3 experience, although it should be noted that EiC took time to become established in schools and some pupils, particularly those completing Year 9 in 2002, may not have had the

[23] In other words, the analysis of attainment at the end of Key Stage 4 takes into account pupils' level of attainment at the end of Key Stage 3, and that for attainment at the end of Key Stage 3 takes into account pupils' level of attainment at the end of Key Stage 2.

opportunity to benefit from EiC to the same extent as pupils from subsequent cohorts. The pupils on whom the analysis of Key Stage 4 outcomes is based started this Key Stage in autumn 2000 (for the 2002 Year 11 cohort) or 2001 (for the 2003 cohort). The whole of their Key Stage 4 experience was, therefore, in a school in which there had been time for the systems and approaches of EiC to become established.

Further information on the multilevel models used in Sections 4.1 and 4.2 are given in Appendix 4.

4.1 Key Stage 4

Section 3 presented summary data on the attainments of pupils from different ethnic groups: this section examines how attainment at Key Stage 4 relates to ethnic origin and involvement in EiC, having taken account of other factors which may be related to differential progress, such as gender and entitlement to Free School Meals, as well as attainment at the end of Key Stage 3. In other words, we seek to examine whether the attainments of EiC and non-EiC pupils were similar when the comparison is made on a like-with-like basis.

The NPD provided information on almost 700,000 pupils attending non-EiC schools and almost 130,000 attending schools in EiC Phase 1 areas. Table 2.1 summarises the ethnic background of these pupils and for convenience part of it is reproduced here as Table 4.1.

Table 4.1 The ethnic background of pupils completing Key Stage 4 in 2002 or 2003

	Non-EiC %	Phase 1 %
White UK	91	61
White non-UK	2	4
Black Caribbean	1	5
Black African	<1	5
Black Other	<1	3
Indian	2	3
Pakistani	1	8
Bangladeshi	<1	4
Chinese	<1	1
Other	1	5
Total	**694,641**	**128,535**

Source: NPD for pupils completing Key Stage 4 in 2002 or 2003, excluding pupils whose ethnic origin was not recorded
Percentages may not sum to 100 because of rounding
The non-EiC group includes a small number of pupils attending schools in Excellence Clusters

In Phase 1 areas, almost 40 per cent of pupils did not have a White UK background, compared with less than ten per cent of those in non-EiC areas.

Attainment level and ethnic background

Chapter 3 showed that the attainment of pupils from most minority ethnic groups was below that of pupils from White UK backgrounds both at the beginning of Key Stage 3 and at the end of Key Stage 4. These comparisons did not take account of school and pupil factors and some of the differences may be attributable to differences in the composition of the groups being compared, for example in relation to levels of entitlement to Free School Meals.

Once these differences were taken into account, we found that, for each of the ethnic groups considered here, attainment at the end of Key Stage 4 was higher than that of similar White UK pupils (that is, pupils from White UK backgrounds with similar levels of attainment at Key Stage 3, with similar characteristics, and attending similar schools). This was the case for each of the three outcome measures considered (capped and uncapped point score, and the probability of achieving five good GCSEs). The only exception was for Black Other pupils, where the probability of achieving five good GCSEs was similar to that of comparable White UK pupils.

Pupils' progress is related to factors such as gender, ethnicity and prior attainment: it may also be related to inter-relationships between these factors. For example, we may find that, within one ethnic group, those attending Phase 1 schools have higher levels of attainment than otherwise similar pupils attending non-EiC schools while, for a different ethnic group, the reverse is true. Here we consider differences in progress related to ethnicity, gender and whether the pupil attended an EiC Phase 1 school or a non-EiC school.

One approach would be to consider an 'average' pupil and compare such a pupil with other pupils who differ in terms of just one of the characteristics of interest. However, this creates difficulties in interpretation where the characteristics of primary interest, such as ethnicity and participation in EiC, define categories of pupils – there are no pupils of 'average' gender or 'average' ethnicity. Instead, we take as a baseline the attainment of a specific subset of pupils and compare other groups of pupils with this baseline. In this case, we choose to use as our baseline boys from White UK backgrounds and attending non-EiC schools. The attainment of other groups (differing in terms of any combination of gender, ethnicity and attending an EiC school) can then be built up from this baseline in an additive process. The choice of baseline is arbitrary, but for participation in EiC and ethnicity it is reasonable to take the largest categories (non-EiC, White UK) as the basis for comparisons.

Consider the capped point score. Table 4.2 shows that, within non-EiC schools, boys from all the minority ethnic groups had considerably higher

levels of attainment than similar[24] boys (that is, when factors such as attainment at the end of Key Stage 3, entitlement to Free School Meals and other individual and school level characteristics were taken into account) from White UK backgrounds. This is shown by the positive values in Column 1. For example, the capped point score of Black African boys was 2.36 points higher than that of similar White UK boys. This is equivalent to achieving, say, six GCSEs at grade C and two at grade B rather than eight at grade C. Boys from Black Other backgrounds had capped scores 0.41 points higher that those of similar boys from White UK backgrounds.

Table 4.2 Relative progress using the capped GCSE point score: summary of significant coefficients

	1	2	3	4
	Non-EiC		EiC Phase 1	
			Additional effect associated with being:	
Ethnic Group	**Effect of ethnic group (relative to White UK)**	**Female** (See Note 3)	**In an EiC Phase 1 school** (See Note 4)	**Female and in an EiC Phase 1 school** (See Note 5)
White non-UK	0.59		1.12	
Black Caribbean	0.51	0.50	0.67	
Black African	2.36	0.59	0.85	
Black Other	0.41		0.73	-0.51
Indian	1.81		0.46	
Pakistani	1.50	1.04	0.41	
Bangladeshi	1.77	1.02	0.84	
Chinese	1.18		1.33	
Other	0.92		1.11	

Note 1: Coefficients show relative progress during Key Stage 4.
Note 2: Non-significant coefficients not shown.
Note 3: This is in addition to the overall effect associated with being female rather than male, which was 2.30 points.
Note 4: The overall progress of pupils attending EiC Phase 1 schools was not significantly different to that of similar pupils attending non-EiC schools. The values in this column indicate additional progress for certain ethnic groups in EiC schools.
Note 5: These values represent additional progress for female pupils from particular ethnic groups in EiC, over and above those shown in Column 3.

Perhaps the most important information in this table in the context of this report is Column 3, which compares boys in EiC Phase 1 schools with similar boys from the same ethnic background in non-EiC schools. Again, all the values in this column are positive, indicating that attending an EiC Phase 1 school was associated with higher attainment by amounts ranging from slightly less than half a point for Indian and Pakistani boys up to 1.3 points for

[24] All the results in this Chapter are based on comparisons between similar pupils, i.e. they take account of school and pupil characteristics, including prior attainment, in order to ensure that comparisons are made on a like-for-like basis.

boys from Chinese backgrounds. This is in contrast to pupils from White UK backgrounds, where there was no difference between boys from non-EiC and EiC Phase 1 areas (see Note 4 to Table 4.2).

For all the minority ethnic groups considered except for those from Black Other backgrounds, the increment in attainment associated with being in an EiC Phase 1 school was the same for boys and girls: this is indicated by the blanks in Column 4 of Table 4.2. For girls from Black Other backgrounds, the 'added value' associated with attending a Phase 1 school was less than that for boys, by just over half a point, as shown by the value of -0.51 in Column 4 of Table 4.2.

Table 4.2 also allows us to make other sorts of comparison, such as comparing boys from minority ethnic backgrounds in EiC Phase 1 areas with otherwise similar White UK boys in the same areas. For example, the increment in attainment for Bangladeshi boys compared with White UK boys in Phase 1 areas was 3.61 points – 1.77 points because we are considering Bangladeshi boys (Table 4.2, Column 1) plus an additional effect for Bangladeshi boys in Phase 1 areas of 0.84 points (Table 4.2, Column 3).

Table 4.2 therefore allows us to make a range of detailed comparisons between groups of pupils defined by ethnic background, gender and participation in EiC, but most importantly, the overall pattern of the Table demonstrates that pupils from all minority ethnic groups had higher levels of attainment at Key Stage 4 (taking into account school and pupil factors including attainment at the end of Key Stage 3) in EiC Phase 1 areas than in non-EiC areas, and that the relationship between attending an EiC school and attainment varied not only between ethnic groups but also between boys and girls from the same minority ethnic background.

Table 4.3 shows similar information to that in Table 4.2, but in relation to the uncapped, rather than the capped, score. For those pupils entered for eight GCSEs – a substantial proportion of the cohort – the uncapped and capped point scores will be the same and it is, therefore, not surprising that the overall pattern of Table 4.3 is similar to that of Table 4.2. In this case, there was no evidence that the scores of pupils from Pakistani backgrounds or those of boys from Indian backgrounds differed between EiC and non-EiC areas. For other groups, attending an EiC school was associated with higher scores than those of similar pupils in non-EiC areas, the differences ranging from 0.68 points (for Indian girls) to 1.79 points (pupils from Chinese backgrounds).

Table 4.3 Relative progress using the uncapped GCSE point score: summary of significant coefficients

	1	2	3	4
	Non-EiC		EiC Phase 1	
		Additional effect associated with being:		
Ethnic Group	**Effect of ethnic group (relative to White UK)**	**Female** (See Note 3)	**In an EiC Phase 1 school** (See Note 4)	**Female and in an EiC Phase 1 school** (See Note 5)
White non-UK	1.01		1.29	
Black Caribbean	0.50	0.71	0.75	
Black African	2.67	0.91	0.89	
Black Other	0.51		0.75	
Indian	2.73			0.68
Pakistani	2.00	1.34		
Bangladeshi	1.89	1.39	1.28	
Chinese	1.91	0.90	1.79	
Other	1.22		1.36	

Note 1: Coefficients show relative progress during Key Stage 4.
Note 2: Non-significant coefficients not shown.
Note 3: This is in addition to the overall effect associated with being female rather than male, which was 3.16 points.
Note 4: The overall progress of pupils attending EiC Phase 1 schools was not significantly different to that of similar pupils attending non-EiC schools. The values in this column indicate additional progress for certain ethnic groups in EiC schools.
Note 5: These values represent additional progress for female pupils from particular ethnic groups in EiC, over and above those shown in Column 3.

Similar analysis was carried out in relation to the proportions of pupils achieving at least five good GCSEs. Table 4.4 has the same structure as the preceding tables, but instead of differences expressed in score points it shows the odds ratios derived using logistic regression techniques. Odds ratios greater than 1.0 show that a greater than expected proportion of the group in question achieved five good GCSEs, while a value of less than 1.0 shows a reduced proportion. For example, in non-EiC areas pupils from Black African, Indian, Pakistani, Bangladeshi and Chinese backgrounds were considerably more likely than otherwise similar pupils from White UK backgrounds to reach this threshold, but the difference between White UK and Black Other pupils was not significant.

Table 4.4 Relative progress using the probability of achieving at least five good GCSEs: summary of significant odds ratios

	1	2	3	4
	Non-EiC		EiC Phase 1	
			Additional effect associated with being:	
Ethnic Group	**Effect of ethnic group (relative to White UK)**	**Female** (See Note 3)	**In an EiC Phase 1 school** (See Note 4)	**Female and in an EiC Phase 1 school** (See Note 5)
White non-UK	1.23			
Black Caribbean	1.10	1.21		
Black African	1.84	1.24		
Black Other			1.27	0.78
Indian	1.75	1.24		
Pakistani	1.75	1.25	0.85	
Bangladeshi	1.88	1.23		
Chinese	1.79			
Other	1.15	1.16	1.23	

Note 1: Coefficients show relative progress during Key Stage 4.
Note 2: Non-significant coefficients not shown.
Note 3: This is in addition to the overall effect associated with being female rather than male, which was an odds ratio of 1.83.
Note 4: The odds ratio for attending EiC Phase 1 schools relative to attending a non-EiC school was 1.14. The values in this column indicate additional progress for certain ethnic groups in EiC schools.
Note 5: These values represent additional progress for female pupils from particular ethnic groups in EiC, over and above those shown in Column 3.

There was an overall association between attending an EiC school and an increased probability of achieving five good GCSEs, with an odds ratio of 1.14 (see Note 4 to Table 4.4). In other words, in general pupils attending an EiC Phase 1 school were more likely than those attending a non-EiC school to achieve at least five good GCSEs. There was an additional 'EiC effect' for some minority ethnic groups, with pupils from Black Other and Other backgrounds having a greater probability of achieving this threshold. However, pupils from Pakistani backgrounds attending Phase 1 schools appeared to have a reduced probability (as shown by the odds ratio of less than 1) of achieving this target. Black Other girls in EiC Phase 1 schools had a reduced probability relative to similar boys in the same schools, and their chances were no better than those of other groups in EiC schools.

4.1.1 Comparison with findings for 2002

When the 2002 Year 11 cohort was analysed separately (see Kendall *et al.*, 2004), the impact of EiC was seen to vary by ethnic group and by gender within ethnic group. In both non-EiC and Phase 1 areas, pupils from minority ethnic groups had levels of attainment at the end of Key Stage 4 comparable to, or better than, that of similar pupils from White UK background. The

findings for the combined 2002 and 2003 cohorts were similar, but with more evidence of an 'EiC impact' for pupils from minority ethnic backgrounds, particularly in relation to the capped point score. Some of these differences between the two years may be attributable to the larger sample size, but they suggest that EiC schools may be developing strategies to ensure that pupils from minority ethnic backgrounds make as much progress as possible during Key Stage 4.

4.2 Key Stage 3

This section is based on the performance at Key Stage 3 of about 672,000 pupils in non-EiC areas and 116,000 in EiC Phase 1 areas who completed the Key Stage in 2002 or 2003.

Table 2.2 summarised the ethnic background of these pupils and part of this table is given again here as Table 4.5.

Table 4.5 The ethnic background of pupils completing Key Stage 3 in 2002 or 2003

	Non-EiC %	Phase 1 %
White UK	91	64
White non-UK	2	4
Black Caribbean	1	5
Black African	<1	4
Black Other	<1	3
Indian	2	3
Pakistani	1	7
Bangladeshi	<1	4
Chinese	<1	1
Other	1	5
Total	**693,562**	**122,833**

Source: NPD for pupils completing Key Stage 3 in 2002 or 2003, excluding pupils whose ethnic origin was not recorded. There were about 25,000 such pupils in non-EiC areas, 2,400 in Phase 1 areas, 2,000 in Phase 2 areas and 1,500 in Phase 3 areas.
Percentages may not sum to 100 because of rounding.
The non-EiC group includes a small number of pupils attending schools in Excellence Clusters.

Tables 4.6 to 4.9 present similar information to that given in Tables 4.2 to 4.4, but in relation to four outcome measures at Key Stage 3: the average level obtained, and the levels obtained for each of Mathematics, English and Science separately. For each of these tables, the coefficients are expressed in terms of additional months of progress, on the assumption that one level represents the average progress over two years. As for the corresponding

findings in relation to Key Stage 4 outcomes presented earlier in this Chapter, these analyses take account of school- and pupil-level factors, including pupils' attainment at the end of Key Stage 2.

Table 4.6 Relative progress using the average Key Stage 3 level: summary of significant coefficients (months of progress)

	1	2	3	4
	Non-EiC		**EiC Phase 1**	
			Additional effect associated with being:	
Ethnic Group	**Effect of ethnic group (relative to White UK)**	**Female** (See Note 3)	**In an EiC Phase 1 school** (See Note 4)	**Female and in an EiC Phase 1 school** (See Note 5)
White non-UK	0.6			
Black Caribbean	-2.7	1.4		
Black African		1.2		
Black Other	-2.0	1.2		
Indian	2.2		-1.3	1.0
Pakistani			-1.3	
Bangladeshi	1.4			
Chinese	5.4		2.0	
Other	1.4			

Note 1: Coefficients show relative progress during Key Stage 3.
Note 2: Non-significant coefficients not shown.
Note 3: This is in addition to the overall effect associated with being female rather than male, which was 0.8 months.
Note 4: The overall progress of pupils attending EiC Phase 1 schools was not significantly different to that of similar pupils attending non-EiC schools. The values in this column indicate additional progress for certain ethnic groups in EiC schools.
Note 5: These values represent additional progress for female pupils from particular ethnic groups in EiC, over and above those shown in Column 3.

Whereas pupils from minority ethnic backgrounds generally had higher levels of attainment than similar pupils from White UK backgrounds at Key Stage 4, the pattern at Key Stage 3 was more complex. Columns 1 and 2 of Table 4.6 show that pupils from White non-UK, Indian, Bangladeshi, Chinese and Other backgrounds (and girls from Black African backgrounds) had higher scores than similar White UK pupils (taking into account gender and a range of other factors including Key Stage 2 attainment): this was equivalent to amounts ranging from less than a month of progress for White non-UK pupils to over five months for those from Chinese backgrounds. For pupils from Black Caribbean and Black Other backgrounds, boys had lower scores, and girls had higher scores, than their White UK peers.

There was also less evidence of a relationship between attending an EiC Phase 1 school and attainment than was seen at Key Stage 4. Only pupils from Chinese backgrounds, and girls from Indian backgrounds, had higher levels of

attainment (equivalent to one or two months of progress) in Phase 1 schools than their peers in non-EiC schools. For boys from Indian backgrounds and pupils from Pakistani backgrounds, attending an EiC school was associated with lower attainment.

Findings in relation to Mathematics (see Table 4.7) were again complex. In non-EiC areas, pupils from Indian, Chinese and Other backgrounds, and boys from Pakistani and Bangladeshi backgrounds, had higher scores than similar White UK pupils (by amounts ranging from about a month of progress to over eight months). Pupils from Black Caribbean, Black African and Black Other backgrounds, along with girls from Pakistani and Bangladeshi backgrounds, had lower levels of attainment than similar White UK pupils: the differences ranged from one to three months of progress.

Only pupils from Chinese backgrounds had higher scores in Phase 1 schools than in non-EiC schools: again, the difference was quite marked, being equivalent to about three months of progress. Pupils from Black Other, Pakistani and Bangladeshi backgrounds had lower levels of attainment than their non-EiC peers.

Table 4.7 Relative progress using the Key Stage 3 Mathematics level: summary of significant coefficients (months of progress)

	1	2	3	4
	Non-EiC		**EiC Phase 1**	
		Additional effect associated with being:		
Ethnic Group	**Effect of ethnic group (relative to White UK)**	**Female** (See Note 3)	**In an EiC Phase 1 school** (See Note 4)	**Female and in an EiC Phase 1 school** (See Note 5)
White non-UK				
Black Caribbean	-3.7			
Black African	-1.5			
Black Other	-2.6		-1.2	
Indian	3.3		-0.7	
Pakistani	1.1	-1.2	-1.3	
Bangladeshi	2.8	-1.8		
Chinese	8.4		3.0	
Other	1.3			

Note 1: Coefficients show relative progress during Key Stage 3.
Note 2: Non-significant coefficients not shown.
Note 3: This is in addition to the overall effect associated with being female rather than male: girls made 1.6 months less progress than boys.
Note 4: The overall progress of pupils attending EiC Phase 1 schools was not significantly different to that of similar pupils attending non-EiC schools. The values in this column indicate additional progress for certain ethnic groups in EiC schools.
Note 5: These values represent additional progress for female students from particular ethnic groups in EiC, over and above those shown in Column 3.

The findings for English (Table 4.8) are more straightforward, with pupils from all minority ethnic backgrounds except Black Caribbean and Black Other having higher levels of attainment (by the equivalent of one to four months of progress) than those from White UK backgrounds. Although the statistical modelling takes into account whether or not pupils have English as their first language, information as to their level of fluency in English was not available, and some of this additional progress may be associated with increasing fluency. The additional progress was particularly marked for Bangladeshi, Chinese and Indian pupils.

Pupils from most ethnic backgrounds had higher scores in Phase 1 schools (by slightly less than two months of progress – see Note 4 to Table 4.8) than in non-EiC schools: the exceptions were pupils from Black African and Pakistani backgrounds, and boys from Indian backgrounds. Girls from Indian backgrounds attending Phase 1 schools, however, had higher scores than expected.

Table 4.8 Relative progress using the Key Stage 3 English level: summary of significant coefficients (months of progress)

	1	2	3	4
	Non-EiC		**EiC Phase 1**	
		Additional effect associated with being:		
Ethnic Group	**Effect of ethnic group (relative to White UK)**	**Female** (See Note 3)	**In an EiC Phase 1 school** (See Note 4)	**Female and in an EiC Phase 1 school** (See Note 5)
White non-UK	1.2			
Black Caribbean				
Black African	2.6		-1.0	
Black Other				
Indian	3.6		-1.8	1.6
Pakistani	2.3		-1.6	
Bangladeshi	4.5			
Chinese	4.3			
Other	2.1			

Note 1: Coefficients show relative progress during Key Stage 3.
Note 2: Non-significant coefficients not shown.
Note 3: This is in addition to the overall effect associated with being female rather than male; girls made 7.0 months more progress than boys.
Note 4: The overall progress of pupils attending EiC Phase 1 schools was significantly greater than that of similar pupils attending non-EiC schools, by 1.7 months. The values in this column indicate additional progress for certain ethnic groups in EiC schools.
Note 5: These values represent additional progress for female pupils from particular ethnic groups in EiC, over and above those shown in Column 3.

Finally, Table 4.9 summarises the findings in relation to Science at Key Stage 3. This suggests that, for most minority ethnic backgrounds, boys had lower

scores and girls had higher scores than their White UK peers, although both boys and girls from Chinese backgrounds had higher levels of attainment than comparable pupils from White UK backgrounds. The only significant findings in relation to attending a Phase 1 school were that pupils from Chinese backgrounds had higher scores than expected, and pupils from White non-UK and Indian backgrounds, along with Pakistani girls, had slightly lower scores than their peers attending non-EiC schools.

Table 4.9 Relative progress using the Key Stage 3 Science level: summary of significant coefficients (months of progress)

	1	2	3	4
	Non-EiC		**EiC Phase 1**	
		Additional effect associated with being:		
Ethnic Group	**Effect of ethnic group (relative to White UK)**	**Female** (See Note 3)	**In an EiC Phase 1 school** (See Note 4)	**Female and in an EiC Phase 1 school** (See Note 5)
White non-UK	0.4		-0.7	
Black Caribbean	-3.9	2.6		
Black African	-1.5	2.2		
Black Other	-2.9	2.2		
Indian		1.3	-0.7	
Pakistani	-3.6	2.1		-1.7
Bangladeshi	-1.5	1.5		
Chinese	4.2		2.0	
Other	0.7			

Note 1: Coefficients show relative progress during Key Stage 3.
Note 2: Non-significant coefficients not shown.
Note 3: This is in addition to the overall effect associated with being female rather than male; girls made 3.1 months less progress than boys.
Note 4: The overall progress of pupils attending EiC Phase 1 schools was not significantly different from that of similar pupils attending non-EiC schools. The values in this column indicate additional progress for certain ethnic groups in EiC schools.
Note 5: These values represent additional progress for female pupils from particular ethnic groups in EiC, over and above those shown in Column 3.

4.3 Attainment in relation to Strand involvement

Although the relationships between involvement in the Gifted and Talented and Learning Mentor Strands and attainment were generally similar across all ethnic groups, there were some exceptions.

- At the end of Key Stage 3, pupils who were identified as gifted and talented had higher average levels of attainment (taking English, Mathematics and Science together), than otherwise similar pupils attending EiC schools who had not been identified, taking a range of

school and pupil characteristics and attainment at the end of Key Stage 2 into account. The difference was about 2.3 points, i.e. just under 0.4 of a level or about nine months of progress. For pupils from Black African backgrounds, the effect associated with being gifted and talented was rather less, but still positive at just over one point or a sixth of a level (about four months of progress). It is important to note that these comparisons take account of a wide range of school- and pupil-level factors, including pupils' prior attainment, and the results therefore indicate that being identified as gifted and talented was associated with higher levels of attainment than those achieved by pupils with similar levels of prior attainment but who were not so identified.

- For English at Key Stage 3, there was evidence of a positive association between attainment and having seen a Mentor only for pupils from Black African backgrounds. Overall, pupils who had seen a Mentor achieved lower grades for English than did comparable non-mentored pupils in the same schools, by about 0.6 points or 0.1 of a level. In contrast, pupils from Black African backgrounds who had seen a Mentor had scores about 0.1 levels higher than those of comparable non-mentored pupils in the same schools.
- There was also a positive association between being mentored and attainment (as measured by the probability of achieving at least five GCSEs at grade C or better including English and Mathematics) for pupils from Black African backgrounds, although a similar relationship was not found using any five good GCSEs.
- Overall, pupils who were identified as gifted and talented, had capped point scores at GCSE about half a point higher than otherwise similar pupils in EiC schools (i.e. pupils with similar prior attainment but not identified as part of the gifted and cohort.). Pupils from White non-UK backgrounds had higher capped point scores at GCSE than other similar pupils in EiC schools, by almost 1.4 points. However, gifted and talented pupils from White non-UK backgrounds had rather lower scores than expected, by over 2.7 points.

Note that these findings are based on quite small numbers of pupils – for example, the sample included less than 50 Year 11 gifted and talented pupils from Black African backgrounds – and should be treated with some caution.

Further details are given in Morris and Rutt (2005).

4.4 Summary

Key Stage 4

Using indicators based on GCSE point scores, in non-EiC areas pupils from all minority ethnic groups had higher levels of attainment than those from White UK backgrounds when school- and pupil-level factors (including attainment at the end of Key Stage 3) were taken into account. Attending an EiC Phase 1

school was associated with improved attainment, relative to pupils from similar ethnic backgrounds, for:

- pupils from White non-UK, Black Caribbean, Black African, Bangladeshi and Chinese backgrounds (using points-based measures)
- pupils from Black Other and Other backgrounds (on all three measures considered, except for girls from Black Other backgrounds in relation to the probability of achieving five good GCSEs)
- pupils from Indian backgrounds (capped point score) and girls from Indian backgrounds (uncapped score)
- pupils from Pakistani backgrounds (capped score only) but with a reduced probability of achieving at least five good GCSEs.

Some of these differences may be associated with overall levels of attainment within different groups. For example, about 75 per cent of pupils from Chinese backgrounds achieve at least five good GCSEs: while EiC can improve point-based measures for this group, there is relatively little scope for increasing the percentage reaching the threshold.

Key Stage 3

Findings in relation to the impact of EiC on minority ethnic pupils at Key Stage 3 were less positive than at Key Stage 4. Pupils from Chinese backgrounds had higher levels of attainment (taking into account school and pupil factors including attainment at the end of Key Stage 2) in EiC Phase 1 schools than did similar pupils in non-EiC schools (except for English), but for other groups attainment in EiC schools was similar to, or (in the case of pupils from Pakistani backgrounds and, to a lesser extent, those from Indian backgrounds) slightly below, that of comparable pupils in non-EiC schools.

The Gifted and Talented and Learning Mentor Strands

At both Key Stages 3 and 4, pupils identified as gifted and talented had higher levels of attainment than those of otherwise similar pupils not so identified (i.e. taking account of a range of school and pupil factors including prior attainment). Pupils referred to a Learning Mentor had slightly lower levels of attainment than those of similar pupils not referred to a Mentor. Overall, the impact of the Gifted and Talented and Learning Mentor Strands was the same for pupils from different ethnic groups, but there was tentative evidence to suggest that that the impact of being identified as gifted and talented was less (in terms of GCSE point score) for pupils from White non-UK backgrounds than for those from other ethnic backgrounds, and that for pupils from Black African backgrounds:

- at Key Stage 3, the impact of being identified as gifted and talented was less than for pupils from other ethnic groups

- being referred to a Mentor was associated with improved levels of attainment in English at Key Stage 3 and the probability of achieving at least five good GCSEs including English and Mathematics.

5. PUPILS' ATTITUDES AND ACHIEVEMENTS AT THE END OF KEY STAGE 4

In this Chapter, which is adapted from Kendall *et al.* (2004), we explore the attitudes and achievements of the sample of pupils in EiC Phase 1, 2 and 3 areas who completed the pupil survey in spring 2002 when they were in Year 11. This relatively small dataset does not include any non-EiC pupils, and so does not provide further evidence relating to the impact of EiC in raising achievement of pupils from minority ethnic backgrounds relative to that of similar pupils in non-EiC areas. The surveys do, however, provide information about variations between ethnic groups in terms of pupils' attitudes to and perceptions of school and learning. For this analysis, we focus on pupils' attainment at the end of Key Stage 4 taking into account both school and pupil level factors, including attainment at the end of Key Stage 2.[25]

The questionnaire for Year 11 pupils asked them about learning at school and at home, out-of-school activities, use of ICT, and behaviour and attendance, as well as their attitudes to school, to education post-16 and to employment. Pupils also provided information about their home background.

Items from the questionnaire were grouped to form a number of scales.[26] Each such scale provides a measure of one aspect of pupils' experience of school and of education. By combining a number of individual questions from the questionnaire in this way to form a single scale, we obtain a more reliable and robust measure of pupils' attitudes than would be possible if we considered each item singly. Details of these scales are given in Appendix 5.

Statistical modelling of the relationship between attitudes and attainment at the end of Key Stage 4 was carried out using multilevel modelling techniques.

This Chapter focuses on three key measures of attainment:

- the 'best 8' GCSE point score
- the probability of achieving at least five GCSEs at grade C or better
- the probability of achieving GCSEs at grade C or better in English, Mathematics and at least three other subjects.

[25] Note that this is not the same measure of prior attainment as used in Chapter 4.

[26] The statistical technique of factor analysis was used to derive these scales. Factor analysis allows a large number of correlated variables to be summarised as a small number of 'super variables' or factors.

The relatively small numbers of pupils from minority ethnic groups, and the small number of schools which they attended, must be borne in mind when considering the findings given below. Table 5.1 shows the numbers of included in the analysis.

Table 5.1 Pupils included in analysis of attitudes and attainment at the end of Key Stage 4

	Number of pupils
White UK	6,664
White non-UK	101
Black Caribbean	136
Black African	52
Indian	277
Pakistani	309
Total	**7,539**

Source: NPD data for pupils completing EiC Year 11 survey in 2002
Note: The number of pupils varies slightly between outcome measures

Pupils who scored most highly on the 'pupil attributes' scale had higher levels of attainment at the end of Key Stage 4 (having taken into account school and pupil factors including prior attainment) than otherwise similar pupils scoring less highly on this scale. High scores on this scale were associated with pupils who reported that they behave well at school, have good attendance, enjoy being at school, and want to stay in education post-16. Pupils from Black African, Indian and Pakistani background had relatively high mean scores on this scale (8.1, 8.1 and 8.8 respectively), with those from White non-UK backgrounds having lower scores (6.7). The lowest scores tended to be for pupils from White UK (mean score 5.1) or Black Caribbean backgrounds (mean score 5.4). This may suggest that school strategies which focus on improving the attitudes to education of pupils from Black Caribbean and White UK backgrounds could be an important lever in raising attainment for these groups of pupils.

The second scale associated with improved attainment at the end of Key Stage 4, although to a lesser extent than for the 'pupil attributes' scale, was related to pupils' perception of themselves as well organised, good at using resources, socially well integrated, with a positive self-image, and resourceful. Pupils from a White UK background had lower scores for this scale, i.e. had a less positive view of themselves, than pupils from other backgrounds (particularly those of Black African heritage). This suggests another area where targeted strategies might reduce differentials in progress between ethnic groups.

Pupils were asked whether they had experienced a variety of teaching and learning methods, e.g. working as a whole class, working in small groups and using ICT, and whether they had found these helpful. Those pupils who said

they had experience of, and found helpful, a variety of methods tended to have higher levels of attainment than otherwise similar pupils with less positive attitudes. Generally, those pupils from White UK and Black Caribbean backgrounds reported that they found relatively few methods helpful, while those from Indian and White non-UK backgrounds reported that they found a wider variety of methods helpful. Some of this variation may reflect school-level differences in teaching style, but pupils within each ethnic group came from a number of different schools (14 schools in the case of pupils from White non-UK backgrounds, and about 25 schools in the case of those from Black Caribbean and Indian backgrounds). This suggests that pupils from different ethnic backgrounds would generally have shared the same classroom experiences, but seem to have different responses to these experiences.

There were similar findings in relation to whether pupils had engaged in a variety of out-of-hours activities, such as arts activities and summer schools, with pupils from other schools. Again, greater variety of such experiences was associated with both higher levels of attainment and ethnic background: pupils from Indian and White non-UK backgrounds reported taking part in a wider range of these activities than those from White UK backgrounds.

Caution is, however, needed. The statistical models used explore relationships and cannot identify causal links. Furthermore, pupils' attitudes, as expressed in spring of Year 11, will in part reflect their own perceptions of their levels of achievement and their plans for the future.

Further details of the statistical models can be found in Kendall *et al.* (2004)

6. CONCLUSIONS

Drawing on information from the National Pupil Database and surveys carried out in EiC schools in 2002 and 2003, the results presented here demonstrate the heterogeneity of minority ethnic groups in England's secondary schools, in terms of the areas in which they live, their backgrounds and their attainment at school. Many minority ethnic groups have lower levels of attainment than those seen among pupils from White UK backgrounds, and these differences tend to increase during the years of secondary education. Over 60 per cent of pupils in England from minority backgrounds now attend schools involved in EiC, which makes EiC potentially a powerful level for raising standards among these groups.

Key Stage 4

EiC was launched in Phase 1 areas in autumn 1999 and by autumn 2000, the policy was substantially in place in secondary schools in these areas. Those pupils attending schools in EiC Phase 1 areas and completing Key Stage 4 in summer 2002 or 2003, i.e. the Year 11 cohorts of pupils considered in this report, therefore experienced the whole of Key Stage 4 in a school where EiC was being implemented. This report has shown some positive associations between attending an EiC Phase 1 school and attainment. More specifically, when a range of school and pupil factors (including attainment at the end of Key Stage 3) were taken into account, attending an EiC Phase 1 school was associated with improved attainment, relative to pupils from similar ethnic backgrounds in non-EiC schools for:

- pupils from all the minority ethnic groups considered (White non-UK, Black Caribbean, Back African, Black Other, Indian, Pakistani, Bangladeshi, Chinese and Other), but not for pupils from White UK backgrounds, using the capped ('best 8') GCSE score
- pupils from White non-UK, Black Caribbean, Back African, Black Other, Bangladeshi, Chinese and Other backgrounds, and for girls from Indian backgrounds using the uncapped GCSE score.

For these two GCSE points-based measures, pupils from Chinese backgrounds appeared to benefit most from attending an EiC Phase 1 school, where the difference between those in EiC and non-EiC areas was equivalent to one or two grades better, for example achieving seven GCSEs at grade C and one at grade A or B instead of eight at grade C. Pupils from White non-UK and Other backgrounds benefited by a slightly smaller amount, and for pupils from Black Caribbean, Black African, Black Other and Bangladeshi backgrounds the

apparent benefit was about three quarters of a grade (but over a grade for Bangladeshi pupils using the uncapped point score).

For pupils from Indian and Pakistani backgrounds the picture was slightly more complex: using the capped point score, the additional score associated with attending an EiC school was about half a grade, but using the uncapped score, there was no significant effect for pupils from Pakistani backgrounds or for boys from Indian backgrounds. However, girls from Indian backgrounds attending Phase 1 schools had scores almost three quarters of a point higher than those of similar girls attending non-EiC schools.

If we consider instead the probability of achieving at least five GCSEs at grade C or better, pupils from all ethnic groups attending Phase 1 schools generally had a slightly greater probability of achieving this threshold than similar pupils in non-EiC areas. This was particularly marked for boys from Black Other backgrounds and both boys and girls from Other backgrounds, but less evident for girls from Black Other backgrounds and for pupils from Pakistani backgrounds.

Key Stage 3

At the end of Key Stage 3, pupils from Chinese backgrounds attending schools in Phase 1 areas had higher levels of attainment in Mathematics, Science and English, and for the average Key Stage 3 level, than similar pupils (that is, taking into account school and pupil factors including attainment at the end of Key Stage 2) in non-EiC areas. This was equivalent to two or three additional months of progress. (Pupils completing Key Stage 3 in summer 2002 or 2003 entered secondary school in autumn 1998 or 1999 respectively and those attending schools in EiC areas would, therefore, have experienced EiC for only part of Key Stage 3.)

For other minority ethnic groups, the picture was more complex. (All comparisons take account of school and pupil factors including prior attainment.)

- Pupils from Black Caribbean, Black African, Bangladeshi and Other backgrounds in Phase 1 schools had similar levels of attainment to those of pupils in non-EiC areas in Mathematics and Science, but slightly higher levels for English.
- Pupils from Black Other backgrounds in Phase 1 schools had similar levels of attainment to those of pupils in non-EiC areas in Science, but slightly higher levels for English and lower levels for Mathematics.
- Pupils from Indian backgrounds in Phase 1 schools had lower levels of attainment in Mathematics and Science than similar pupils in non-EiC schools. Girls (but not boys) from Indian backgrounds had higher levels of attainment in English than similar non-EiC pupils.

- Pupils from Pakistani backgrounds in Phase 1 schools had lower levels of attainment than those of pupils in non-EiC areas in Mathematics and (for girls only) Science than similar pupils in non-EiC schools. For English, the performance of girls in non-EiC and Phase 1 areas was similar.

The Gifted and Talented and Learning Mentor Strands

Analysis of information collected specifically for the evaluation of EiC showed considerable variations between ethnic groups in the proportions identified as gifted and talented for those completing Key Stage 3 or 4 in 2002. For example, Year 11 pupils from White UK backgrounds were five times more likely than those from Black African backgrounds to be part of the gifted and talented cohort. For those competing Key Stage 3 in 2003, there was still considerable variation between ethnic groups, although it was not always the same groups which were over- or under-represented in the gifted and talented cohort. For those completing Key Stage 4 in 2003, however, there was relatively little variation between ethnic groups. These findings need to be treated with some caution, both because of relatively small numbers of pupils involved and the high proportion of pupils for whom information as to whether or not they were identified as gifted and talented was missing. Nevertheless, they do suggest that schools were increasing their repertoire of identification strategies as the Gifted and Talented Strand became more embedded.

There were also substantial differences between ethnic groups in terms of the proportions of pupils referred to a Learning Mentor among pupils completing Key Stage 3 or 4 in 2002. For those completing Year 11 in 2003, there was rather less variation, but the results for 2002 are based on small numbers of pupils and must be treated with caution. For pupils completing Year 9 in 2003, there were still marked differences between ethnic groups, with less than 10 per cent of those from Indian backgrounds, and over 20 per cent of those from Black Caribbean and Black Other backgrounds, reporting seeing a Learning Mentor.

As would be expected, pupils reporting that they had seen a Learning Mentor generally had slightly lower levels of achievement than other pupils at Key Stages 2, 3 and 4. However, a low level of attainment is only one of the reasons why a pupil might be referred to a Learning Mentor, and the analysis showed that differences in performance between those mentored and those not mentored were relatively small within ethnic groups.

Overall, the relationships between involvement in the Gifted and Talented or Learning Mentor Strand and attainment were generally similar across all the ethnic groups, although there were some exceptions with, for example, some evidence of improved attainment for mentored pupils from Black African backgrounds compared with otherwise similar pupils who had not seen a Mentor.

Pupils' attitudes

There were some indications that pupils with more positive attitudes to various aspects of school and of education had higher levels of attainment (once other school and pupil factors had been taken into account) than those with less positive attitudes. There were also differences between minority ethnic groups in terms of the extent to which pupils demonstrated more or less positive attitudes. While these associations cannot be interpreted as demonstrating causal relationships, they may merit further exploration in order to identify the ways of in which support for some groups of pupils can be provided most effectively.

Recommendations

The most positive finding of the national evaluation of EiC (Kendall *et al.*, 2005) was that the policy had an impact on attainment in Mathematics at Key Stage 3, particularly in the most disadvantaged schools in Phase 1 areas. There were complex relationships between attainment at Key Stage 3 and school factors, such as the overall level of attainment in the school, and pupil factors, such as prior attainment. This report has provided some evidence that the attainment of pupils from minority ethnic backgrounds at the end of Key Stage 4 was higher in EiC Phase 1 areas than that of comparable pupils (taking into account a wide range of school and pupil factors including prior attainment) in non-EiC areas. The picture was by no means simple, with the extent of the difference depending on the measure of attainment used as well as the ethnic group considered and (in some cases) gender. The evidence in relation to attainment at the end of Key Stage 3 was more mixed, with only those pupils from Chinese backgrounds achieving higher levels in Phase 1 schools than otherwise similar pupils in non-EiC schools.

Pupils completing Key Stage 4 in summer 2004 and 2005 in Phase 1 areas will have had the whole of their secondary education in an EiC school, and their levels of attainment are important measures of the success of EiC in raising standards in urban schools for all pupils but in particular for the many pupils in these areas from minority ethnic backgrounds. We therefore recommend that there should be further analysis of the achievements of pupils completing Key Stages 3 and 4 in these years, with an emphasis on exploring the relationship between involvement in EiC and attainment for pupils from minority ethnic groups, how this relationship is changing over time as EiC develops and becomes more embedded in schools, and the differences between the Phases of EiC. It would also be valuable to examine the extent to which the ethnic composition of the school is related to the levels of attainment of pupils from different ethnic backgrounds. For example, do pupils from a given minority ethnic background have higher levels of attainment if they are in school with substantial numbers of pupils from the same background rather than a school with relatively small numbers of pupils from similar backgrounds?

Chapter 3 demonstrated that the differentials between ethnic groups tended to widen during secondary education, but that this process occurred at different stages for different groups. For example, pupils from Black Caribbean backgrounds seemed to make relatively poor progress during both Key Stages 3 and 4, while for those from Black African backgrounds relatively good progress during Key Stage 4 to some extent compensated for poor progress at the preceding Key Stage. Case studies of how EiC as a whole has been implemented in schools could help to illuminate why there are these differences between Key Stages and to identify good practice.

A study of Learning Mentors carried out as part of the national evaluation of EiC provides some information as to how pupils are identified for Learning Mentor support, the nature of the support provided and the outcomes in terms of levels of achievement (see for example Golden *et al*., 2002, 2003; O'Donnell, 2003) but it was beyond the scope of that work to consider the Learning Mentor Strand in relation to the ethnic background of pupils. Further qualitative work in this area, and on the role of Learning Mentors in improving behaviour in school and reducing exclusions, would be of potential value both in further developing Learning Mentors in schools, but also in aiding understanding of how behaviour issues can be addressed in all schools.

Similarly, work within the national evaluation exploring the Gifted and Talented Strand (Pocklington *et al.,* 2002; Pocklington and Kendall, 2002; Kendall, 2003) looked at how the Gifted and Talented Strand was being implemented in schools, and at pupils' and teachers' perceptions of the Strand. Here again, further qualitative work looking at differences between ethnic groups in relation to the Strand would be valuable, not only for EiC schools but also for all schools as they seek to provide appropriate support and challenge to their most able pupils, whatever their background.

While such qualitative studies could certainly be undertaken, more quantitative studies in relation to the Learning Mentor and Gifted and talented Strands would be more challenging to implement without imposing burdens on schools in terms of data collection. There is no nationally available data identifying which pupils have been referred to a Learning Mentor, and for an in-depth evaluation of the impact of Learning Mentors on pupils from ethnic minorities, it would be important to be able to identify both the reasons for referral and the type and extent of support available. It would be valuable to establish the extent to which such pupil-level information was available within schools and Partnerships, the degree of compatibility between information from different sources, and whether the information could be linked to pupils' attainment. It would then be possible to establish whether a dataset sufficiently large to enable robust analysis could be derived.

Information as to whether a pupil has been identified as gifted and talented has recently been introduced into the Pupil Level Annual School Census, but this

information is not available for earlier cohorts of pupils, and does not include any detail relating to why the pupil was identified as gifted or talented, or about how additional support was provided. Again, the pooling of data from a number of schools or Partnerships might enable more detailed analysis of the relationship between attainment and being identified as gifted and talented.

This report considered data relating to 2002 and 2003, and has demonstrated a positive association between attending a school in an EiC Phase 1 area and improved levels of attainment at the end of Key Stage 4 for pupils from all the main minority ethnic groups in England, although the evidence from the national evaluation of EiC has been more mixed in relation to pupils from White UK backgrounds. Further work, both to establish whether this pattern has continued since 2003 and in other Phases of EiC, and also to understand what has brought this about, are important if the lessons of EiC are to be identified and carried forward as the new relationship with schools and new forms of partnership between schools develop.

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APPENDIX 1 Ethnicity and background characteristics – 2002 and 2003

Tables A1.11 summarise the background characteristics of pupils completing Year 11 in summer 2002 or 2003, and Tables A1.12 to A1.22 provide similar information for pupils completing Key Stage 3 in 2002 or 2003.

Table A1.1 Year 11 pupils from White UK backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	50.6	49.8	49.9	49.5
	Female	49.4	50.2	50.1	50.5
English as an additional language (EAL)	Not EAL	99.5	99	99.8	98.9
	EAL	0.5	1	0.2	1.1
Special educational needs	No SEN	87.7	84.4	87	87.1
	School Action	2.3	2.9	2.5	2.3
	School Action Plus	8.0	10.6	8.5	8.4
	Statement	1.9	2.1	1.9	2.1
Free School Meals	No	92.3	80.1	82.7	86.0
	Yes	7.7	19.9	17.3	14.0
Total number of pupils		**633,231**	**78,863**	**80,133**	**35,666**

Source: NPD, 2002 and 2003

Table A1.2 Year 11 pupils from White non-UK backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	49.6	47.8	50.2	50.2
	Female	50.4	52.2	49.8	49.8
English as an additional language (EAL)	Not EAL	87.4	58.6	81.5	81.5
	EAL	12.6	41.4	18.5	18.5
Special educational needs	No SEN	87.3	81.0	83.2	83.2
	School Action	2.5	4	1.8	1.8
	School Action Plus	8.7	12.9	12.3	12.3
	Statement	1.5	2	2.8	2.8
Free School Meals	No	91.4	67.3	78.9	78.9
	Yes	8.6	32.7	21.1	21.1
Total number of pupils		**15,802**	**5,589**	**1,757**	**2,037**

Source: NPD, 2002 and 2003

Table A1.3 Year 11 pupils from Black Caribbean backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	50.8	48.2	48.7	50.0
	Female	49.2	51.8	51.3	50.0
English as an additional language (EAL)	Not EAL	96.4	92.4	97.7	92.0
	EAL	3.6	7.6	2.3	8.0
Special educational needs	No SEN	81	74.2	70.1	77.9
	School Action	2.9	4.4	4.7	4.1
	School Action Plus	14.1	18.6	22.1	16.0
	Statement	2.0	2.9	3.1	2.0
Free School Meals	No	81.1	65.8	72.2	76.2
	Yes	18.9	34.2	27.8	23.8
Total number of pupils		**4,130**	**6,724**	**1,372**	**1,423**

Source: NPD, 2002 and 2003

Table A1.4 Year 11 pupils from Black African backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	49.2	47.3	49.1	46.0
	Female	50.8	52.7	50.9	54.0
English as an additional language (EAL)	Not EAL	57.0	30.3	32.5	46.8
	EAL	43.0	69.7	67.5	53.2
Special educational needs	No SEN	83.6	77.5	73.2	77.4
	School Action	3.0	4.3	4.1	4.2
	School Action Plus	12.2	16.7	21.1	17.1
	Statement	1.2	1.6	1.7	1.4
Free School Meals	No	72.3	57.4	49.6	67.7
	Yes	27.7	42.6	50.4	32.3
Total number of pupils		**2,930**	**6,326**	**1,200**	**733**

Source: NPD, 2002 and 2003

Table A1.5 Year 11 pupils from Black Other backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	49.2	47.3	47.2	45.2
	Female	50.8	52.7	52.8	54.8
English as an additional language (EAL)	Not EAL	89.1	82.8	86.0	82.4
	EAL	10.9	17.2	14.0	17.6
Special educational needs	No SEN	83.6	77.6	76.6	80.3
	School Action	2.2	3.8	3.0	4.5
	School Action Plus	12.4	15.9	17.3	14.3
	Statement	1.7	2.6	3.0	1.0
Free School Meals	No	81.6	62.9	63.8	72.8
	Yes	18.4	37.1	36.2	27.2
Total number of pupils		**2,874**	**3,319**	**791**	**735**

Source: NPD, 2002 and 2003

Table A1.6 Year 11 pupils from Indian backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	51.7	49.9	51.4	50.7
	Female	48.3	50.1	48.6	49.3
English as an additional language (EAL)	Not EAL	22.3	12.6	9.2	13.5
	EAL	77.7	87.4	90.8	86.5
Special educational needs	No SEN	90.7	88.9	88.1	90.0
	School Action	2.0	2.4	2.6	2.1
	School Action Plus	6.2	7.3	8.0	6.6
	Statement	1.1	1.3	1.4	1.3
Free School Meals	No	91.1	78.0	88.0	86.5
	Yes	8.9	22.0	12.0	13.5
Total number of pupils		**12,936**	**4,413**	**5,361**	**3,746**

Source: NPD, 2002 and 2003

Table A1.7 Year 11 pupils from Pakistani backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	52.4	51.4	50.7	53.1
	Female	47.6	48.6	49.3	46.9
English as an additional language (EAL)	Not EAL	10.6	6.1	7.2	6.5
	EAL	89.4	93.9	92.8	93.5
Special educational needs	No SEN	83.5	79.9	85.4	79.8
	School Action	3.6	4.0	3.4	6.0
	School Action Plus	10.5	14.1	9.2	12.4
	Statement	2.4	2.0	2.0	1.8
Free School Meals	No	66.5	52.5	63.3	57.7
	Yes	33.5	47.5	36.7	42.3
Total number of pupils		**9,333**	**9,892**	**2,515**	**2,510**

Source: NPD, 2002 and 2003

Table A1.8 Year 11 pupils from Bangladeshi backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	50.7	49.6	49.4	46.1
	Female	49.3	50.4	50.6	53.9
English as an additional language (EAL)	Not EAL	8.1	1.8	4.1	2.1
	EAL	91.9	98.2	95.9	97.9
Special educational needs	No SEN	85.7	81.0	86.2	84.5
	School Action	4.4	3.7	5.1	5.1
	School Action Plus	8.9	13.2	7.7	9.3
	Statement	0.9	2.1	1.0	1.1
Free School Meals	No	57.5	29.4	53.5	32.9
	Yes	42.5	70.6	46.5	67.1
Total number of pupils		**2,054**	**5,754**	**507**	**903**

Source: NPD, 2002 and 2003

Table A1.9 Year 11 pupils from Chinese backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	52.8	50.0	56.7	49.7
	Female	47.2	50.0	43.3	50.3
English as an additional language (EAL)	Not EAL	28.9	16.2	29.4	22.0
	EAL	71.1	83.8	70.6	78.0
Special educational needs	No SEN	91.5	89.4	93.2	96.9
	School Action	1.9	2.8	2.7	0.0
	School Action Plus	5.5	6.6	3.1	3.1
	Statement	1.1	1.2	1.0	0.0
Free School Meals	No	95.3	64.0	93.9	89.9
	Yes	4.7	36.0	6.1	10.1
Total number of pupils		**2,273**	**852**	**293**	**158**

Source: NPD, 2002 and 2003

Table A1.10 Year 11 pupils from other ethnic backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	50.0	48.3	52.0	48.6
	Female	50.0	51.7	48.0	51.4
English as an additional language (EAL)	Not EAL	69.7	46.3	51.4	58.3
	EAL	30.3	53.7	48.6	41.7
Special educational needs	No SEN	87.1	81.6	83.1	86.1
	School Action	2.3	3.2	2.8	2.2
	School Action Plus	8.9	13.2	11.9	9.9
	Statement	1.6	2.0	2.2	1.9
Free School Meals	No	84.8	60.0	70.1	74.9
	Yes	15.2	40.0	29.9	25.1
Total number of pupils		**9,078**	**6,803**	**1,762**	**1,022**

Source: NPD, 2002 and 2003

Table A1.11 Year 11 pupils with ethnic background not recorded

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	50.7	48.1	48.5	50.4
	Female	49.3	51.9	51.5	49.6
English as an additional language (EAL)	Not EAL	91.5	89.0	93.0	93.5
	EAL	8.5	11.0	7.0	6.5
Special educational needs	No SEN	87.4	85.7	86.8	89.5
	School Action	1.9	1.9	2.3	3.5
	School Action Plus	8.8	11.1	9.2	5.3
	Statement	1.9	1.3	1.7	1.7
Free School Meals	No	92.5	74.0	82.5	84.3
	Yes	7.5	26.0	17.5	15.7
Total number of pupils		**24,272**	**1,798**	**1,952**	**1,689**

Source: NPD, 2002 and 2003

Table A1.12 Year 9 pupils from White UK backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	49.8	49.1	49.3	49.6
	Female	50.2	50.9	50.7	50.4
English as an additional language (EAL)	Not EAL	99.5	99.1	99.7	99.1
	EAL	0.5	0.9	0.3	0.9
Special educational needs	No SEN	89.8	87.6	89.1	89.2
	School Action	6.4	7.8	6.6	6.9
	School Action Plus	2.3	3.1	2.8	2.4
	Statement	1.4	1.6	1.4	1.5
Free School Meals	No	91.4	78.3	81.3	84.8
	Yes	8.6	21.7	18.7	15.2
Total number of pupils		**634,094**	**78,010**	**77,833**	**35,050**

Source: NPD, 2002 and 2003

Table A1.13 Year 9 pupils from White non-UK backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	50.1	47.5	47.3	54.0
	Female	49.9	52.5	52.7	46.0
English as an additional language (EAL)	Not EAL	88.1	61.9	82.0	62.5
	EAL	11.9	38.1	18.0	37.5
Special educational needs	No SEN	89.0	83.5	87.0	82.0
	School Action	6.8	11.3	8.7	13.9
	School Action Plus	2.7	3.3	2.9	3.0
	Statement	1.5	1.8	1.4	1.1
Free School Meals	No	91.0	64.6	78.8	82.3
	Yes	9.0	35.4	21.2	17.7
Total number of pupils		**16,738**	**5,139**	**1,703**	**1,670**

Source: NPD, 2002 and 2003

Table A1.14 Year 9 pupils from Black Caribbean backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	49.2	47.6	50.1	49.8
	Female	50.8	52.4	49.9	50.2
English as an additional language (EAL)	Not EAL	97.3	94.1	96.8	91.7
	EAL	2.7	5.9	3.2	8.3
Special educational needs	No SEN	83.4	79.5	75.7	81.3
	School Action	10.8	12.2	14.7	13.8
	School Action Plus	4.3	6.1	7.8	3.1
	Statement	1.5	2.2	1.8	1.8
Free School Meals	No	79.9	63.6	70.4	70.9
	Yes	20.1	36.4	29.6	29.1
Total number of pupils		**4,058**	**6,032**	**1,125**	**1,213**

Source: NPD, 2002 and 2003

Table A1.15 Year 9 pupils from Black African backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	49.7	46.4	50.3	51.3
	Female	50.3	53.6	49.7	48.7
English as an additional language (EAL)	Not EAL	717	35.8	37.7	51.6
	EAL	39.6	64.2	62.3	48.4
Special educational needs	No SEN	85.0	80.3	80.1	78.9
	School Action	10.0	13.7	13.1	16.5
	School Action Plus	3.3	4.5	4.8	3.5
	Statement	1.6	1.6	1.9	1.0
Free School Meals	No	74.2	57.9	53.2	68.5
	Yes	25.8	42.1	46.8	31.5
Total number of pupils		**2,741**	**5,376**	**1,036**	**677**

Source: NPD, 2002 and 2003

Table A1.16 Year 9 pupils from Black Other backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	48.2	49.6	48.7	46.1
	Female	51.8	50.4	51.3	53.9
English as an additional language (EAL)	Not EAL	90.1	87.7	88.7	85.4
	EAL	9.9	12.3	11.3	14.6
Special educational needs	No SEN	86.0	80.4	83.6	83.7
	School Action	9.1	12.5	10.8	12.8
	School Action Plus	3.5	4.9	4.1	2.5
	Statement	1.4	2.2	1.5	1.0
Free School Meals	No	80.5	61.4	64.8	70.3
	Yes	19.5	38.6	35.2	29.7
Total number of pupils		**2,957**	**3,485**	**758**	**717**

Source: NPD, 2002 and 2003

Table A1.17 Year 9 pupils from Indian backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	50.8	50.8	52.4	50.8
	Female	49.2	49.2	47.6	49.2
English as an additional language (EAL)	Not EAL	23.5	14.3	10.5	17.6
	EAL	76.5	85.7	89.5	82.4
Special educational needs	No SEN	92.1	90.5	90.7	91.4
	School Action	5.7	7.0	6.3	6.6
	School Action Plus	1.3	1.5	1.9	1.1
	Statement	0.9	1.0	1.1	0.9
Free School Meals	No	90.6	79.0	86.9	86.0
	Yes	9.4	21.0	13.1	14.0
Total number of pupils		**11,987**	**4,043**	**4,621**	**3,289**

Source: NPD, 2002 and 2003

Table A1.18 Year 9 pupils from Pakistani backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	52.0	49.5	51.8	53.2
	Female	48.0	50.5	48.2	46.8
English as an additional language (EAL)	Not EAL	11.7	7.7	9.6	7.9
	EAL	88.3	92.3	90.4	92.1
Special educational needs	No SEN	86.1	83.0	88.4	87.7
	School Action	10.3	12.8	8.3	9.8
	School Action Plus	1.9	2.9	2.1	1.5
	Statement	1.7	1.3	1.3	1.0
Free School Meals	No	67.7	55.5	64.8	59.0
	Yes	32.3	44.5	35.2	41.0
Total number of pupils		**8,060**	**8,596**	**2,181**	**2,307**

Source: NPD, 2002 and 2003

Table A1.19 Year 9 pupils from Bangladeshi backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	49.5	46.1	43.6	48.6
	Female	50.5	53.9	56.4	51.4
English as an additional language (EAL)	Not EAL	9.5	1.9	5.8	4.0
	EAL	90.5	98.1	94.2	96.0
Special educational needs	No SEN	87.3	84.6	90.8	89.7
	School Action	9.3	10.8	6.0	8.2
	School Action Plus	2.4	3.0	3.2	1.3
	Statement	1.0	1.6	0.0	0.8
Free School Meals	No	61.6	30.9	59.8	38.1
	Yes	38.4	69.1	40.2	61.9
Total number of pupils		**1,886**	**4,890**	**468**	**867**

Source: NPD, 2002 and 2003

Table A1.20 Year 9 pupils from Chinese backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	50.3	48.4	56.6	50.0
	Female	49.7	51.6	43.4	50.0
English as an additional language (EAL)	Not EAL	30.5	17.4	29.7	31.8
	EAL	69.5	82.6	70.3	68.2
Special educational needs	No SEN	94.3	92.4	94.4	91.7
	School Action	3.1	4.6	2.4	6.1
	School Action Plus	1.5	1.8	2.4	1.5
	Statement	1.0	1.1	0.8	0.8
Free School Meals	No	95.2	67.4	90.8	84.8
	Yes	4.8	32.6	9.2	15.2
Total number of pupils		**2,117**	**818**	**249**	**132**

Source: NPD, 2002 and 2003

Table A1.21 Year 9 pupils from other ethnic backgrounds

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	50.0	48.1	48.8	52.9
	Female	50.0	51.9	51.2	47.1
English as an additional language (EAL)	Not EAL	73.4	53.5	53.1	57.8
	EAL	26.6	46.5	46.9	42.2
Special educational needs	No SEN	89.3	84.4	85.6	84.8
	School Action	7.0	10.8	9.2	11.9
	School Action Plus	2.5	3.4	3.5	2.3
	Statement	1.2	1.4	1.7	0.9
Free School Meals	No	84.3	59.9	68.4	75.5
	Yes	15.7	40.1	31.6	24.5
Total number of pupils		**8,924**	**6,444**	**1,768**	**1,069**

Source: NPD, 2002 and 2003

Table A1.22 Year 9 pupils with ethnic background not recorded

		Not EiC %	Phase 1 %	Phase 2 %	Phase 3 %
Gender	Male	51.7	49.7	50.1	46.3
	Female	48.3	50.3	49.9	53.7
English as an additional language (EAL)	Not EAL	91.8	80.2	91.5	88.7
	EAL	8.2	19.8	8.5	11.3
Special educational needs	No SEN	88.7	88.1	86.5	90.0
	School Action	7.1	7.3	8.5	6.6
	School Action Plus	2.7	3.1	3.7	1.7
	Statement	1.5	1.5	1.2	1.6
Free School Meals	No	90.7	68.6	80.1	80.6
	Yes	9.3	31.4	19.9	19.4
Total number of pupils		**25,177**	**2,440**	**2,033**	**1,505**

Source: NPD, 2002 and 2003

APPENDIX 2 Ethnicity and achievement – 2002 and 2003

Tables A2.1 to A2.11 summarise the performance at the end of Key Stages 2, 3 and 4 of pupils completing Year 11 in summer 2002 or 2003. Tables A2.12 to A2.22 summarise the performance at the end of Key Stages 2 and 3 of pupils completing Year 11 in summer 2002 or 2003.[27]

Actual numbers of pupils may be less than those shown if information was missing for specific attainment measures.

Table A2.1 Year 11 pupils from White UK backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	26.23	25.74	25.66	25.61
KS2 level (English)	26.08	25.49	25.41	25.44
KS2 level (Maths)	25.93	25.46	25.39	25.29
KS2 level (Science)	26.68	26.26	26.19	26.11
KS3 average level	34.28	32.68	32.76	32.63
KS3 level (English)	33.47	32.30	32.37	32.08
KS3 level (Maths)	35.53	33.67	33.74	33.77
KS3 level (Science)	33.86	32.08	32.18	32.04
Total GCSE score (best 8)	37.35	33.45	33.89	33.31
Average GCSE score	4.47	4.00	4.03	3.97
5+ A* - C grades	56.9%	46.5%	48.1%	45.7%
Total number of pupils	**633,231**	**78,863**	**80,133**	**35,666**

Source; NPD, 2002 and 2003

Table A2.2 Year 11 pupils from White non-UK backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	26.59	25.11	25.75	25.45
KS2 level (English)	26.58	24.87	25.50	25.47
KS2 level (Maths)	26.29	24.98	25.53	25.20
KS2 level (Science)	26.89	25.48	26.23	25.68
KS3 average level	35.04	31.29	32.44	32.55
KS3 level (English)	34.31	31.11	32.04	32.77
KS3 level (Maths)	36.42	32.48	33.67	33.89
KS3 level (Science)	34.40	30.28	31.62	30.98
Total GCSE score (best 8)	39.49	34.33	34.65	36.14
Average GCSE score	4.73	4.07	4.15	4.28
5+ A* - C grades	62.8%	47.8%	52.1%	50.7%
Total number of pupils	**15,802**	**5,589**	**1,757**	**2,037**

Source; NPD, 2002 and 2003

[27] Key Stage 2 and 3 results are expressed in point scores, which are calculated by multiplying the level by 6 and adding 3.

Table A2.3 Year 11 pupils from Black Caribbean backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	24.65	24.22	24.34	24.21
KS2 level (English)	24.94	24.31	24.48	24.53
KS2 level (Maths)	23.98	23.56	23.69	23.57
KS2 level (Science)	25.02	24.78	24.85	24.52
KS3 average level	31.12	29.35	29.45	30.22
KS3 level (English)	31.37	29.87	29.90	30.84
KS3 level (Maths)	31.52	29.61	29.76	30.60
KS3 level (Science)	30.47	28.57	28.69	29.21
Total GCSE score (best 8)	32.09	29.52	29.32	29.83
Average GCSE score	3.81	3.49	3.46	3.53
5+ A* - C grades	39.4%	33.0%	32.9%	33.8%
Total number of pupils	**4,130**	**6,724**	**1,372**	**1,423**

Source; NPD, 2002 and 2003

Table A2.4 Year 11 pupils from Black African backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	25.00	24.12	23.76	24.79
KS2 level (English)	25.35	24.34	23.83	25.05
KS2 level (Maths)	24.48	23.58	23.23	24.11
KS2 level (Science)	25.18	24.45	24.22	25.21
KS3 average level	31.80	29.27	28.94	30.62
KS3 level (English)	32.18	29.90	29.47	31.22
KS3 level (Maths)	32.50	29.82	29.44	31.26
KS3 level (Science)	30.72	28.10	27.90	29.37
Total GCSE score (best 8)	36.53	33.61	32.36	34.35
Average GCSE score	4.33	3.94	3.81	4.06
5+ A* - C grades	52.3%	45.1%	41.5%	49.1%
Total number of pupils	**2,930**	**6,326**	**1,200**	**733**

Source; NPD, 2002 and 2003

Table A2.5 Year 11 pupils from Black Other backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	25.17	24.52	24.07	24.67
KS2 level (English)	25.44	24.51	23.93	24.96
KS2 level (Maths)	24.53	24.00	23.61	24.02
KS2 level (Science)	25.55	25.04	24.67	25.04
KS3 average level	32.43	30.09	29.85	31.01
KS3 level (English)	32.47	30.47	30.00	31.56
KS3 level (Maths)	33.03	30.48	30.31	31.47
KS3 level (Science)	31.80	29.32	29.23	29.99
Total GCSE score (best 8)	34.41	30.37	29.76	32.04
Average GCSE score	4.11	3.59	3.54	3.76
5+ A* - C grades	47.2%	36.9%	35.9%	38.5%
Total number of pupils	**2,874**	**3,319**	**791**	**735**

Source; NPD, 2002 and 2003

Table A2.6 Year 11 pupils from Indian backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	25.79	25.30	25.39	25.20
KS2 level (English)	25.90	25.18	25.17	25.48
KS2 level (Maths)	25.80	25.34	25.40	24.93
KS2 level (Science)	25.66	25.37	25.61	25.18
KS3 average level	34.94	33.07	33.04	33.23
KS3 level (English)	34.63	33.09	32.62	33.63
KS3 level (Maths)	36.73	34.42	34.81	34.49
KS3 level (Science)	33.47	31.69	31.68	31.56
Total GCSE score (best 8)	42.31	39.30	38.91	39.18
Average GCSE score	5.03	4.64	4.60	4.62
5+ A* - C grades	70.9%	63.0%	61.8%	62.8%
Total number of pupils	**12,936**	**4,413**	**5,361**	**3,746**

Source; NPD, 2002 and 2003

Table A2.7 Year 11 pupils from Pakistani backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	23.52	23.23	23.65	23.07
KS2 level (English)	23.95	23.32	23.69	23.29
KS2 level (Maths)	23.20	22.93	23.33	22.76
KS2 level (Science)	23.40	23.45	23.91	23.15
KS3 average level	30.49	28.97	29.80	29.25
KS3 level (English)	30.97	29.51	29.88	29.60
KS3 level (Maths)	31.57	29.88	30.95	30.22
KS3 level (Science)	28.94	27.51	28.57	27.92
Total GCSE score (best 8)	34.47	32.15	33.56	32.16
Average GCSE score	4.10	3.78	3.97	3.77
5+ A* - C grades	47.7%	40.5%	43.8%	40.7%
Total number of pupils	**9,333**	**9,892**	**2,515**	**2,510**

Source; NPD, 2002 and 2003

Table A2.8 Year 11 pupils from Bangladeshi backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	23.60	23.90	23.79	23.42
KS2 level (English)	23.93	23.74	23.45	23.44
KS2 level (Maths)	23.20	23.73	23.71	23.06
KS2 level (Science)	23.67	24.23	24.21	23.77
KS3 average level	31.09	29.64	30.28	29.41
KS3 level (English)	31.48	30.35	30.68	30.25
KS3 level (Maths)	32.14	30.39	31.21	30.20
KS3 level (Science)	29.64	28.17	28.95	27.77
Total GCSE score (best 8)	35.89	34.58	33.52	33.84
Average GCSE score	4.25	4.01	3.98	3.95
5+ A* - C grades	52.0%	48.3%	41.4%	48.3%
Total number of pupils	**2,054**	**5,754**	**507**	**903**

Source; NPD, 2002 and 2003

Table A2.9 Year 11 pupils from Chinese backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	27.35	26.23	26.75	27.63
KS2 level (English)	26.81	25.75	26.15	26.96
KS2 level (Maths)	28.03	26.70	27.16	28.25
KS2 level (Science)	27.21	26.24	26.95	27.69
KS3 average level	37.75	34.57	36.30	38.01
KS3 level (English)	36.01	33.56	35.03	36.40
KS3 level (Maths)	40.74	37.03	38.84	41.15
KS3 level (Science)	36.51	33.11	35.03	36.47
Total GCSE score (best 8)	46.46	41.48	44.28	47.35
Average GCSE score	5.53	4.89	5.22	5.65
5+ A* - C grades	81.1%	69.4%	79.5%	86.8%
Total number of pupils	**2,273**	**852**	**293**	**158**

Source; NPD, 2002 and 2003

Table A2.10 Year 11 pupils from other ethnic backgrounds

	Not EiC	Phase 1	Phase 2	Phase 3
KS2 average level	26.19	25.14	25.20	25.70
KS2 level (English)	26.18	24.94	24.90	25.69
KS2 level (Maths)	26.00	24.93	25.08	25.45
KS2 level (Science)	26.40	25.56	25.62	25.96
KS3 average level	34.55	31.39	32.07	32.41
KS3 level (English)	33.98	31.24	31.64	32.21
KS3 level (Maths)	36.02	32.58	33.46	33.82
KS3 level (Science)	33.65	30.37	31.11	31.22
Total GCSE score (best 8)	39.32	34.95	35.55	35.87
Average GCSE score	4.70	4.13	4.21	4.27
5+ A* - C grades	60.9%	49.6%	51.3%	49.8%
Total number of pupils	**9,078**	**6,803**	**1,762**	**1,022**

Source; NPD, 2002 and 2003

Table A2.11 Year 11 pupils with ethnic background not recorded

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	25.88	24.46	24.94	25.28
KS2 level (English)	25.81	24.22	24.82	24.89
KS2 level (Maths)	25.57	24.29	24.59	25.20
KS2 level (Science)	26.25	24.88	25.42	25.75
KS3 average level	33.72	30.65	31.33	32.38
KS3 level (English)	32.92	30.39	31.11	31.86
KS3 level (Maths)	35.02	31.34	32.04	33.52
KS3 level (Science)	33.23	30.21	30.85	31.75
Total GCSE score (best 8)	35.44	25.95	29.71	32.66
Average GCSE score	4.32	3.31	3.64	3.95
5+ A* - C grades	51.9%	31.4%	39.1%	46.1%
Total number of pupils	**24,272**	**1,798**	**1,952**	**1,689**

Source; NPD, 2002 and 2003

Table A2.12 Year 9 pupils from White UK backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	27.64	27.24	27.34	27.16
KS2 level (English)	27.37	26.82	26.88	26.81
KS2 level (Maths)	27.13	26.77	26.86	26.65
KS2 level (Science)	28.41	28.13	28.26	28.02
KS3 average level	35.42	33.97	34.11	33.91
KS3 level (English)	34.52	33.55	33.62	33.27
KS3 level (Maths)	36.72	34.95	35.15	35.03
KS3 level (Science)	35.02	33.41	33.57	33.44
Total number of pupils	**634,094**	**78,010**	**77,833**	**35,050**

Source; NPD, 2002 and 2003

Table A2.13 Year 9 pupils from White non-UK backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	27.92	26.59	27.15	26.66
KS2 level (English)	27.68	25.96	26.56	26.18
KS2 level (Maths)	27.45	26.37	26.81	26.37
KS2 level (Science)	28.62	27.45	28.06	27.42
KS3 average level	36.00	33.35	34.33	33.70
KS3 level (English)	35.03	33.08	34.24	33.12
KS3 level (Maths)	37.45	34.40	35.36	35.14
KS3 level (Science)	35.52	32.59	33.39	32.85
Total number of pupils	**16,738**	**5,139**	**1,703**	**1,670**

Source; NPD, 2002 and 2003

Table A2.14 Year 9 pupils from Black Caribbean backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	26.14	25.82	25.87	25.79
KS2 level (English)	26.10	25.51	25.50	25.64
KS2 level (Maths)	25.30	25.09	25.15	25.02
KS2 level (Science)	27.02	26.86	26.96	26.73
KS3 average level	32.56	31.36	31.34	31.62
KS3 level (English)	32.55	31.44	31.39	31.79
KS3 level (Maths)	33.11	31.72	31.74	32.08
KS3 level (Science)	32.03	30.91	30.89	30.99
Total number of pupils	**4,058**	**6,032**	**1,125**	**1,213**

Source; NPD, 2002 and 2003

Table A2.15 Year 9 pupils from Black African backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	26.31	25.70	25.51	25.78
KS2 level (English)	26.16	25.35	24.84	25.51
KS2 level (Maths)	25.66	25.26	25.11	25.23
KS2 level (Science)	27.11	26.51	26.57	26.61
KS3 average level	33.84	32.30	32.28	32.83
KS3 level (English)	33.73	32.35	32.31	33.16
KS3 level (Maths)	34.57	32.90	32.86	33.50
KS3 level (Science)	33.22	31.65	31.68	31.85
Total number of pupils	**2,741**	**5,376**	**1,036**	**677**

Source; NPD, 2002 and 2003

Table A2.16 Year 9 pupils from Black Other backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	26.87	25.96	25.96	26.32
KS2 level (English)	26.79	25.70	25.54	26.16
KS2 level (Maths)	26.19	25.28	25.32	25.68
KS2 level (Science)	27.61	26.91	27.02	27.12
KS3 average level	34.01	31.77	31.77	32.59
KS3 level (English)	33.69	31.91	31.63	32.61
KS3 level (Maths)	34.82	32.12	32.33	33.40
KS3 level (Science)	33.51	31.27	31.35	31.75
Total number of pupils	**2,957**	**3,485**	**758**	**717**

Source; NPD, 2002 and 2003

Table A2.17 Year 9 pupils from Indian backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	27.50	26.96	26.89	26.82
KS2 level (English)	27.24	26.41	26.04	26.58
KS2 level (Maths)	27.45	26.96	26.93	26.51
KS2 level (Science)	27.82	27.52	27.71	27.36
KS3 average level	36.36	34.81	34.79	34.61
KS3 level (English)	35.60	34.27	33.99	34.51
KS3 level (Maths)	38.23	36.42	36.68	35.85
KS3 level (Science)	35.25	33.75	33.71	33.48
Total number of pupils	**11,987**	**4,043**	**4,621**	**3,289**

Source; NPD, 2002 and 2003

Table A2.18 Year 9 pupils from Pakistani backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	25.25	25.11	25.35	25.02
KS2 level (English)	25.05	24.63	24.74	24.75
KS2 level (Maths)	24.96	24.83	25.23	24.59
KS2 level (Science)	25.74	25.87	26.09	25.73
KS3 average level	32.43	31.25	32.10	31.49
KS3 level (English)	32.72	31.55	32.26	31.56
KS3 level (Maths)	33.43	32.10	32.99	32.35
KS3 level (Science)	31.13	30.09	31.05	30.56
Total number of pupils	**8,060**	**8,596**	**2,181**	**2,307**

Source; NPD, 2002 and 2003

Table A2.19 Year 9 pupils from Bangladeshi backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	25.27	25.87	25.22	25.24
KS2 level (English)	25.16	25.19	24.99	24.77
KS2 level (Maths)	24.83	25.77	24.87	24.74
KS2 level (Science)	25.82	26.64	25.81	26.21
KS3 average level	32.88	31.63	32.26	31.26
KS3 level (English)	33.06	31.77	32.47	31.55
KS3 level (Maths)	33.89	32.70	33.26	32.01
KS3 level (Science)	31.68	30.43	31.04	30.22
Total number of pupils	**1,886**	**4,890**	**468**	**867**

Source; NPD, 2002 and 2003

Table A2.20 Year 9 pupils from Chinese backgrounds

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	28.84	28.20	28.54	28.79
KS2 level (English)	28.14	27.18	27.55	28.18
KS2 level (Maths)	29.33	28.76	29.19	29.14
KS2 level (Science)	29.06	28.66	28.88	29.05
KS3 average level	39.18	37.24	38.03	38.62
KS3 level (English)	37.31	35.58	36.42	36.59
KS3 level (Maths)	42.01	39.97	40.71	41.45
KS3 level (Science)	38.21	36.18	36.95	37.82
Total number of pupils	**2,117**	**818**	**249**	**132**

Source; NPD, 2002 and 2003

Table A2.21 Year 9 pupils from other ethnic backgrounds

	Not EiC	Phase 1	Phase 2	Phase 3
KS2 average level	27.61	26.58	26.62	26.99
KS2 level (English)	27.33	26.01	25.97	26.64
KS2 level (Maths)	27.27	26.26	26.40	26.66
KS2 level (Science)	28.23	27.45	27.48	27.68
KS3 average level	35.95	33.50	34.14	34.50
KS3 level (English)	35.09	33.06	33.68	33.93
KS3 level (Maths)	37.41	34.57	35.26	35.71
KS3 level (Science)	35.36	32.86	33.47	33.86
Total number of pupils	**8,924**	**6,444**	**1,768**	**1,069**

Source; NPD, 2002 and 2003

Table A2.22 Year 9 pupils with ethnic background not recorded

	Not EIC	Phase 1	Phase 2	Phase 3
KS2 average level	27.39	26.10	26.68	26.53
KS2 level (English)	27.16	25.58	26.29	26.06
KS2 level (Maths)	26.88	25.64	26.16	26.19
KS2 level (Science)	28.12	27.08	27.58	27.33
KS3 average level	34.92	32.00	32.89	33.52
KS3 level (English)	33.91	31.52	32.17	33.58
KS3 level (Maths)	36.30	32.85	34.03	34.28
KS3 level (Science)	34.57	31.62	32.48	32.70
Total number of pupils	**25,177**	**2,440**	**2,033**	**1,505**

Source; NPD, 2002 and 2003

APPENDIX 3 OTHER TABLES

Table A3.1 The achievements of pupils seeing a Learning Mentor

		Not seeing a Mentor (mean score)	Seeing a Mentor (mean score)
White UK	KS2 Average	25.9	26.0
	KS3 Average	33.3	33.1
	Best 8 Score	36.2	35.3
White non-UK	KS2 Average	26.3	26.2
	KS3 Average	33.6	33.2
	Best 8 Score	39.3	39.6
Black Caribbean	KS2 Average	24.0	24.1
	KS3 Average	30.2	29.9
	Best 8 Score	33.9	32.1
Black African	KS2 Average	25.9	22.8
	KS3 Average	34.6	27.3
	Best 8 Score	43.3	34.6
Indian	KS2 Average	24.4	24.3
	KS3 Average	32.5	32.5
	Best 8 Score	39.5	38.7
Pakistani	KS2 Average	22.3	23.3
	KS3 Average	28.2	28.6
	Best 8 Score	30.7	32.7

Source: National evaluation surveys and NPD, 2002

APPENDIX 4 Details of multilevel models

These tables relate to the analyses described in Sections 4.1 and 4.2. All the results relate to the relevant combined 2002 and 2003 cohorts.

Table A4.1 Attainment at the end of Key Stage 4 – variables used

Variable Name	Variable Label
LEA	LEA
ESTAB	School
PUPILID	Pupil
BEST8SCO	Best 8 total score
AVSCORE	Average GCSE score
TOTSCORE	Total GCSE score
ENTRIES	No. of entries
CONS	Constant term
ATOC5P	Achieved 5 or more A*-C grades?
KS3AV	KS3 average score
KS3ENGSC	KS3 English score
KS3MASC	KS3 Mathematics score
KS3SCISC	KS3 Science score
KS3AV2	KS3 average score deviation squared
PUPSTAB	Pupil in school since Year 7
SEX	Sex (male = 0, female = 2)
AGE	Age in months
FSM	Eligible for Free School Meals?
FSMMISS	Missing FSM data
EAL	English as additional language
SEN1/2	SEN Stages 1 or 2/School Action
SEN3/4	SEN Stages 3 or 4/School Action Plus
SEN5	Statemented
WHITOTH	White non-UK
BLACKC	Black Caribbean
BLACKA	Black African
BLACKO	Black Other
INDIAN	Indian
PAKIST	Pakistani
BANGLA	Bangladeshi
CHINESE	Chinese
OTHER	Other ethnic code
ETHNOT	Ethnicity not given
PCFSM	% FSM 2002
FSMSQ	Square of % FSM (/100)
SMALL	Small school – Year 11 up to 160
LARGE	Large school – Year 11 over 240
BOYSCH	Single-sex school - boys
GIRLSCH	Single-sex school - girls
FAITH	Religious school

Variable Name	Variable Label
GOT6TH	Got 6th form?
GRAMMAR	Grammar school
GRAMINT	Grammar school by KS3 interaction
EICPH1	In EiC Phase 1
EICPH2	In EiC Phase 2
EICPH3	In EiC Phase 3
PLC	In PLC Pilot Scheme
SPEC	Specialist School
BEACON	Beacon School
INEAZ	In EAZ indicator
ARTS	Arts college
LANG	Language college
SPORTS	Sports college
SPDES98	Specialist designation September 1998 or before
PH1BEAC	EiC Phase 1 Beacon School
PH2BEAC	EiC Phase 2 Beacon School
PH3BEAC	EiC Phase 3 Beacon School
OTHBEAC	Beacon School not in EiC
PH1EAZ	EiC Phase 1 EAZ school
PH2EAZ	EiC Phase 2 EAZ school
PH3EAZ	EiC Phase 3 EAZ school
OTHEAZ	EAZ school not in EiC
PH1SPEC	EiC Phase 1 Specialist School
PH2SPEC	EiC Phase 2 Specialist School
PH3SPEC	EiC Phase 3 Specialist School
OTHSPEC	Specialist School not in EiC
PH1K3INT	Phase 1 by KS3 average
PH1FMINT	Phase 1 by FSM
PH1SXINT	Phase 1 by sex
PH2K3INT	Phase 2 by KS3 average
PH2FMINT	Phase 2 by FSM
PH2SXINT	Phase 2 by sex
PH3K3INT	Phase 3 by KS3 average
PH3FMINT	Phase 3 by FSM
PH3SXINT	Phase 3 by sex
WHOG	White non-UK (girl)
BLCG	Black Caribbean (girl)
BLAG	Black African (girl)
BLOG	Black Other (girl)
INDG	Indian (girl)
PAKG	Pakistani (girl)
BANG	Bangladeshi (girl)
CHIG	Chinese (girl)
OTHG	Other ethnic code (girl)
WHOP1	White non-UK v. EiC
BLCP1	Black Caribbean v. EiC
BLAP1	Black African v. EiC
BLOP1	Black Other v. EiC
INDP1	Indian v. EiC

Variable Name	Variable Label
PAKP1	Pakistani v. EiC
BANP1	Bangladeshi v. EiC
CHIP1	Chinese v. EiC
OTHP1	Other ethnic code v. EiC
WHOP1G	White non-UK v. EiC (girl)
BLCP1G	Black Caribbean v. EiC (girl)
BLAP1G	Black African v. EiC (girl)
BLOP1G	Black Other v. EiC (girl)
INDP1G	Indian v. EiC (girl)
PAKP1G	Pakistani v. EiC (girl)
BANP1G	Bangladeshi v. EiC (girl)
CHIP1G	Chinese v. EiC (girl)
OTHP1G	Other ethnic code v. EiC (girl)

Table A4.2 Capped point score ('best 8' score)

Parameter	Estimate	Standard error	Sig.	95% Confidence interval Min.	Max.
Base case					
LEA variance	4.834	0.957	*	2.959	6.709
School variance	41.85	1.201	*	39.496	44.204
Year variance	0.92	0.064	*	0.799	1.049
Pupil variance	162.50	0.289	*	161.934	163.066
Final model					
LEA variance	5.597	0.913	*	3.808	7.386
KS3 covariance	-0.14	0.023	*	-0.186	-0.096
KS3 slope variance	0.00	0.001	*	0.003	0.005
School variance	22.15	0.833	*	20.518	23.782
KS3 covariance	-0.52	0.021	*	-0.560	-0.478
KS3 slope variance	0.01	0.001	*	0.012	0.014
Year variance	1.74	0.061	*	1.624	1.862
Pupil variance	48.89	0.087	*	48.719	49.061
Fixed coefficients					
CONS	-8.413	6.242		-20.647	3.821
KS3ENGSC	0.586	0.003	*	0.581	0.592
KS3MASC	0.519	0.003	*	0.513	0.525
KS3SCISC	0.591	0.003	*	0.585	0.597
KS3AV2	0.636	0.018	*	0.600	0.672
SEX	1.151	0.010	*	1.131	1.171
AGE	-0.064	0.033		-0.128	0.000
FSM	-2.281	0.029	*	-2.338	-2.224
FSMMISS	-16.970	0.156	*	-17.276	-16.664
SEN1/2	-2.976	0.040	*	-3.054	-2.898
SEN3/4	-5.219	0.059	*	-5.335	-5.103
SEN5	-1.087	0.070	*	-1.223	-0.951
EAL	2.927	0.054	*	2.821	3.033
WHITOTH	0.592	0.074	*	0.448	0.736
BLACKC	0.506	0.134	*	0.244	0.768
BLACKA	2.363	0.157	*	2.055	2.671
BLACKO	0.412	0.134	*	0.149	0.675
INDIAN	1.814	0.079	*	1.659	1.969
PAKIST	1.497	0.108	*	1.285	1.709
BANGLA	1.770	0.187	*	1.404	2.136
CHINESE	1.176	0.153	*	0.876	1.476
OTHER	0.919	0.079	*	0.765	1.073
ETHNOT	-1.176	0.061	*	-1.296	-1.056
PCFSM	-0.107	0.005	*	-0.117	-0.097
FSMSQ	0.224	0.021	*	0.184	0.265
BOYSCH	0.328	0.153	*	0.029	0.627
GIRLSCH	0.252	0.140		-0.022	0.527
FAITH	0.345	0.093	*	0.163	0.528
GRAMMAR	2.052	0.227	*	1.608	2.496
GRAMINT	-0.363	0.018	*	-0.397	-0.328
PLC	0.591	0.261	*	0.079	1.102
ARTS	0.311	0.249		-0.177	0.798
SPDES98	0.783	0.113	*	0.562	1.004
EICPH1	0.203	0.227		-0.241	0.647
PLCYR	-0.352	0.131	*	-0.608	-0.095
PH1BEAC	0.403	0.263		-0.113	0.919
PH1SPEC	0.301	0.217		-0.124	0.726
PH1K3INT	-0.067	0.016	*	-0.099	-0.036
PH1FMINT	-0.017	0.011		-0.039	0.005
BLCG	0.495	0.139	*	0.222	0.768
BLAG	0.585	0.153	*	0.285	0.885
PAKG	1.038	0.108	*	0.826	1.250

Parameter	Estimate	Standard error	Sig.	95% Confidence interval Min.	Max.
BANG	1.021	0.171	*	0.685	1.357
WHOP1	1.115	0.134	*	0.853	1.377
BLCP1	0.673	0.152	*	0.375	0.972
BLAP1	0.845	0.171	*	0.509	1.181
BLOP1	0.730	0.230	*	0.279	1.180
INDP1	0.461	0.139	*	0.188	0.733
PAKP1	0.409	0.128	*	0.158	0.660
BANP1	0.839	0.204	*	0.440	1.239
CHIP1	1.334	0.287	*	0.772	1.896
OTHP1	1.106	0.125	*	0.862	1.350
BLOP1G	-0.508	0.250	*	-0.998	-0.017

Table A4.3 Uncapped point score

Parameter	Estimate	Standard error	Sig.	95% Confidence interval Min.	Max.
Base case					
LEA variance	7.615	1.584	*	4.510	10.720
School variance	76.47	2.229	*	72.101	80.839
Year variance	4.07	0.183	*	3.708	4.426
Pupil variance	288.60	0.513	*	287.595	289.605
Final model					
LEA variance	5.736	0.937	*	3.900	7.572
KS3 covariance	-0.15	0.026	*	-0.206	-0.102
KS3 slope variance	0.00	0.001	*	0.003	0.007
School variance	47.90	1.735	*	44.499	51.301
KS3 covariance	-1.49	0.054	*	-1.592	-1.382
KS3 slope variance	0.05	0.002	*	0.049	0.056
Year variance	4.58	0.151	*	4.281	4.871
Pupil variance	88.83	0.158	*	88.520	89.140
Fixed coefficients					
CONS	-22.800	7.582	*	-37.661	-7.939
KS3ENGSC	0.779	0.004	*	0.771	0.787
KS3MASC	0.712	0.004	*	0.704	0.719
KS3SCISC	0.780	0.004	*	0.772	0.789
KS3AV2	2.315	0.025	*	2.266	2.364
SEX	1.582	0.014	*	1.555	1.609
AGE	-0.065	0.040		-0.143	0.013
FSM	-2.959	0.040	*	-3.037	-2.881
FSMMISS	-20.160	0.211	*	-20.573	-19.747
SEN1/2	-3.969	0.054	*	-4.075	-3.863
SEN3/4	-6.499	0.080	*	-6.656	-6.342
SEN5	-1.752	0.094	*	-1.936	-1.568
EAL	4.141	0.073	*	3.998	4.284
WHITOTH	1.014	0.100	*	0.818	1.210
BLACKC	0.502	0.181	*	0.147	0.856
BLACKA	2.666	0.212	*	2.250	3.082
BLACKO	0.513	0.181	*	0.159	0.867
INDIAN	2.734	0.101	*	2.535	2.933
PAKIST	2.003	0.126	*	1.756	2.250
BANGLA	1.885	0.253	*	1.390	2.380
CHINESE	1.910	0.262	*	1.397	2.423
OTHER	1.217	0.106	*	1.009	1.425
ETHNOT	-1.614	0.083	*	-1.777	-1.451
PCFSM	-0.122	0.008	*	-0.138	-0.105
FSMSQ	0.330	0.026	*	0.278	0.381
BOYSCH	0.354	0.278		-0.190	0.899
FAITH	0.958	0.170	*	0.626	1.291
GRAMMAR	1.674	0.367	*	0.956	2.392
GRAMINT	-0.404	0.028	*	-0.459	-0.348
ARTS	0.863	0.451		-0.022	1.747
SPDES98	2.035	0.209	*	1.626	2.444
EICPH1	-0.532	0.350		-1.218	0.153
PLCYR	0.407	0.199	*	0.016	0.797
PH1BEAC	1.243	0.466	*	0.330	2.156
PH1SPEC	1.038	0.390	*	0.274	1.802
PH1K3INT	-0.061	0.022	*	-0.103	-0.018
PH1SXINT	-0.160	0.035	*	-0.228	-0.091
BLCG	0.705	0.190	*	0.334	1.077
BLAG	0.913	0.208	*	0.505	1.321
PAKG	1.342	0.147	*	1.053	1.631
BANG	1.385	0.234	*	0.927	1.843
CHIG	0.901	0.341	*	0.233	1.570

Parameter	Estimate	Standard error	Sig.	95% Confidence interval Min.	95% Confidence interval Max.
WHOP1	1.289	0.180	*	0.935	1.643
BLCP1	0.752	0.203	*	0.353	1.151
BLAP1	0.891	0.230	*	0.440	1.341
BLOP1	0.748	0.310	*	0.140	1.355
BANP1	1.277	0.273	*	0.743	1.811
CHIP1	1.792	0.387	*	1.034	2.550
OTHP1	1.356	0.166	*	1.030	1.682
BLOP1G	-0.549	0.341		-1.216	0.118
INDP1G	0.678	0.231	*	0.225	1.131

Table A4.4 Achieving at least five GCSEs at grade C or better

Parameter	Estimate	Standard error	Sig.	95% Confidence interval Min.	Max.
Base case					
LEA variance	0.055	0.011	*	0.032	0.077
School variance	0.526	0.016	*	0.495	0.556
Year variance	0.02	0.001	*	0.016	0.022
Final model					
LEA variance	0.634	0.172	*	0.297	0.971
KS3 covariance	-0.02	0.005	*	-0.026	-0.008
KS3 slope variance	0.00	0.000	*	0.000	0.001
School variance	7.68	0.337	*	7.016	8.336
KS3 covariance	-0.21	0.010	*	-0.230	-0.193
KS3 slope variance	0.01	0.000	*	0.005	0.006
Year variance	0.16	0.007	*	0.148	0.175
Fixed coefficients					
CONS	-16.120	0.115	*	-16.345	-15.895
KS3ENGSC	0.166	0.001	*	0.164	0.169
KS3MASC	0.146	0.001	*	0.143	0.149
KS3SCISC	0.171	0.001	*	0.168	0.173
KS3AV2	0.341	0.025	*	0.293	0.389
SEX	0.302	0.005	*	0.293	0.311
FSM	-0.486	0.013	*	-0.512	-0.460
FSMMISS	-2.860	0.094	*	-3.043	-2.677
SEN1/2	-0.624	0.021	*	-0.665	-0.582
SEN3/4	-0.990	0.035	*	-1.058	-0.921
EAL	0.681	0.025	*	0.632	0.730
WHITOTH	0.207	0.028	*	0.152	0.263
BLACKC	0.098	0.047	*	0.005	0.191
BLACKA	0.607	0.053	*	0.504	0.711
BLACKO	0.099	0.060		-0.017	0.216
INDIAN	0.562	0.042	*	0.480	0.644
PAKIST	0.558	0.049	*	0.462	0.654
BANGLA	0.631	0.062	*	0.510	0.752
CHINESE	0.584	0.069	*	0.450	0.719
OTHER	0.140	0.045	*	0.052	0.228
ETHNOT	-0.297	0.027	*	-0.350	-0.245
PCFSM	-0.022	0.002	*	-0.025	-0.019
FSMSQ	0.064	0.007	*	0.051	0.077
BOYSCH	0.090	0.052		-0.012	0.191
GIRLSCH	0.049	0.047		-0.043	0.141
FAITH	0.106	0.030	*	0.047	0.165
GRAMMAR	0.342	0.107	*	0.133	0.551
GRAMINT	-0.052	0.018	*	-0.086	-0.017
SPDES98	0.316	0.035	*	0.247	0.385
EICPH1	0.127	0.062	*	0.006	0.248
PH1EAZ	0.009	0.091		-0.169	0.186
PH1K3INT	-0.053	0.008	*	-0.068	-0.039
PH1FMINT	-0.005	0.003		-0.011	0.001
PH1SXINT	-0.063	0.011	*	-0.084	-0.041
BLCG	0.193	0.063	*	0.071	0.316
BLAG	0.216	0.069	*	0.081	0.352
INDG	0.216	0.052	*	0.115	0.318
PAKG	0.225	0.048	*	0.130	0.320
BANG	0.204	0.075	*	0.058	0.350
OTHG	0.149	0.053	*	0.045	0.253
BLOP1	0.241	0.102	*	0.041	0.440
PAKP1	-0.167	0.055	*	-0.275	-0.059
OTHP1	0.205	0.055	*	0.096	0.313
BLOP1G	-0.247	0.109	*	-0.460	-0.033

Table A4.5 Attainment at the end of Key Stage 3 – variables used

Variable Name	Variable Label
LEA	LEA
ESTAB	School
YEAR	Year
PUPILID	Pupil
KS3AV	KS3 average score
KS3MASC	KS3 Mathematics score
KS3ENGSC	KS3 English score
KS3SCISC	KS3 Science score
CONS	Constant term
KS2AV	KS2 average score
KS2ENGSC	KS2 English score
KS2MASC	KS2 Mathematics score
KS2SCISC	KS2 Science score
KS2AV2	KS2 average score deviation squared
SEX	Sex (male = 0, female = 2)
AGE	Age in months
FSM	Eligible for Free School Meals?
FSMMISS	Missing FSM data
SEN1/2	SEN Stage 1 or 2/School Action
SEN3/4	SEN Stage 3 or 4/School Action Plus
SEN5	Statemented
EAL	English as additional language
ETHNIC	Ethnic code
PCFSM	% FSM 2002
FSMSQ	Square of % FSM (/100)
SMALL	Small school – Year 11 up to 160
LARGE	Large school – Year 11 over 240
BOYSCH	Single-sex school - boys
GIRLSCH	Single-sex school - girls
FAITH	Religious school
GOT6TH	Got 6th form?
GRAMMAR	Grammar school
GRAMINT	Grammar school by KS2 interaction
PHASE	EiC phase
PLC	PLC y/n
SPEC	Specialist School
BEACON	Beacon School
INEAZ	In EAZ indicator
ARTS	Arts college
LANG	Language college
SPORTS	Sports college
SPDES98	Specialist designation September 1998 or before
EICPH1	In EiC Phase 1
EICPH2	In EiC Phase 2
EICPH3	In EiC Phase 3
PH1Y2	Phase 1 in 2002
PH2Y2	Phase 2 in 2002

Variable Name	Variable Label
PH3Y2	Phase 3 in 2002
PLCY2	PLC in 2002
PH1Y3	Phase 1 in 2003
PH2Y3	Phase 2 in 2003
PH3Y3	Phase 3 in 2003
PLCY3	In PLC Pilot Scheme
WHITOTH	White non-UK
BLACKC	Black Caribbean
BLACKA	Black African
BLACKO	Black Other
INDIAN	Indian
PAKIST	Pakistani
BANGLA	Bangladeshi
CHINESE	Chinese
OTHER	Other ethnic code
ETHNOT	Ethnicity not given
PH1BEAC	EiC Phase 1 Beacon School
PH2BEAC	EiC Phase 2 Beacon School
PH3BEAC	EiC Phase 3 Beacon School
OTHBEAC	Beacon school not in EiC
PH1EAZ	EiC Phase 1 EAZ school
PH2EAZ	EiC Phase 2 EAZ school
PH3EAZ	EiC Phase 3 EAZ school
OTHEAZ	EAZ school not in EiC
PH1SPEC	EiC Phase 1 Specialist School
PH2SPEC	EiC Phase 2 Specialist School
PH3SPEC	EiC Phase 3 Specialist School
OTHSPEC	Specialist school not in EiC
PH1K2INT	Phase 1 by KS2 average
PH1FMINT	Phase 1 by FSM
PH1SXINT	Phase 1 by sex
PH2K2INT	Phase 2 by KS2 average
PH2FMINT	Phase 2 by FSM
PH2SXINT	Phase 2 by sex
PH3K2INT	Phase 3 by KS2 average
PH3FMINT	Phase 3 by FSM
PH3SXINT	Phase 3 by sex
YEAR02	Year 2002
YEAR03	Year 2003
WHOG	White non-UK (girl)
BLCG	Black Caribbean (girl)
BLAG	Black African (girl)
BLOG	Black Other (girl)
INDG	Indian (girl)
PAKG	Pakistani (girl)
BANG	Bangladeshi (girl)
CHIG	Chinese (girl)
OTHG	Other ethnic code (girl)
WHOP1	White non-UK v. EiC

Variable Name	Variable Label
BLCP1	Black Caribbean v. EiC
BLAP1	Black African v. EiC
BLOP1	Black Other v. EiC
INDP1	Indian v. EiC
PAKP1	Pakistani v. EiC
BANP1	Bangladeshi v. EiC
CHIP1	Chinese v. EiC
OTHP1	Other ethnic code v. EiC
WHOP1G	White non-UK v. EiC (girl)
BLCP1G	Black Caribbean v. EiC (girl)
BLAP1G	Black African v. EiC (girl)
BLOP1G	Black Other v. EiC (girl)
INDP1G	Indian v. EiC (girl)
PAKP1G	Pakistani v. EiC (girl)
BANP1G	Bangladeshi v. EiC (girl)
CHIP1G	Chinese v. EiC (girl)
OTHP1G	Other ethnic code v. EiC (girl)

Table A4.6 Overall Key Stage 3 level

Parameter	Estimate	Standard error	Sig.	95% Confidence interval Min.	95% Confidence interval Max.	Adjusted coefficients (months)
Base case						
LEA variance	1.114	0.210	*	0.702	1.526	
School variance	8.314	0.239	*	7.845	8.783	
Year variance	0.396	0.018	*	0.360	0.432	
Pupil variance	30.370	0.064	*	30.245	30.495	
Fixed model						
LEA variance	0.089	0.077		-0.062	0.240	
School variance	0.425	0.017	*	0.391	0.458	
Year variance	0.320	0.010	*	0.301	0.340	
Pupil variance	10.010	0.021	*	9.969	10.051	
Fixed coefficients						
CONS	97.560	15.330	*	67.513	127.607	
YEAR02	-1.002	0.020	*	-1.041	-0.963	-4.008
YEAR03	-1.309	0.020	*	-1.348	-1.270	-5.236
KS2ENGSC	0.403	0.001	*	0.401	0.406	10.862
KS2MASC	0.486	0.001	*	0.484	0.489	12.960
KS2SCISC	0.346	0.002	*	0.342	0.349	8.091
KS2AV2	2.203	0.020	*	2.164	2.242	3.365
SEX	0.077	0.005	*	0.067	0.088	0.619
AGE	-0.557	0.092	*	-0.737	-0.377	-0.031
FSM	-0.820	0.015	*	-0.850	-0.790	-3.279
FSMMISS	-0.843	0.071	*	-0.982	-0.704	-3.373
SEN1/2	-1.671	0.021	*	-1.713	-1.629	-6.684
SEN3/4	-2.029	0.033	*	-2.093	-1.965	-8.116
SEN5	-1.539	0.045	*	-1.628	-1.450	-6.156
EAL	0.469	0.029	*	0.412	0.526	1.876
WHITOTH	0.124	0.033	*	0.060	0.188	0.497
BLACKC	-0.509	0.087	*	-0.679	-0.339	-2.036
BLACKA	-0.113	0.067		-0.244	0.018	
BLACKO	-0.376	0.070	*	-0.514	-0.238	-1.505
INDIAN	0.430	0.052	*	0.327	0.533	1.720
PAKIST	-0.099	0.053		-0.203	0.004	
BANGLA	0.248	0.061	*	0.129	0.366	0.990
CHINESE	1.204	0.084	*	1.039	1.369	4.816
OTHER	0.313	0.037	*	0.240	0.386	1.252
ETHNOT	-0.324	0.030	*	-0.384	-0.264	-1.296
PCFSM	-0.076	0.002	*	-0.080	-0.072	-5.369
FSMSQ	0.120	0.009	*	0.101	0.138	2.321
BOYSCH	0.389	0.071	*	0.251	0.528	1.558
GIRLSCH	0.602	0.066	*	0.473	0.731	2.408
FAITH	0.130	0.043	*	0.045	0.215	0.518
GRAMMAR	3.924	0.097	*	3.735	4.113	6.998
GRAMINT	-0.529	0.011	*	-0.552	-0.507	
SPDES98	0.096	0.053		-0.008	0.200	
EICPH1	0.190	0.104		-0.014	0.395	
PH1BEAC	0.265	0.123	*	0.023	0.506	1.058
PH1SPEC	0.177	0.099		-0.017	0.371	
PH1K2INT	-0.048	0.003	*	-0.054	-0.042	
PH1FMINT	-0.018	0.004	*	-0.027	-0.009	
BLCG	0.195	0.120		-0.040	0.429	
BLAG	0.306	0.123	*	0.066	0.547	1.225
BLOG	0.532	0.121	*	0.296	0.769	2.130
INDG	0.161	0.060	*	0.043	0.279	0.644
BLCP1	-0.192	0.114		-0.416	0.032	
INDP1	-0.178	0.075	*	-0.324	-0.031	-0.710
PAKP1	-0.203	0.071	*	-0.341	-0.064	-0.810
CHIP1	0.611	0.204	*	0.212	1.010	2.445
BLCP1G	0.269	0.155		-0.035	0.573	
BLAP1G	0.183	0.131		-0.074	0.440	
BLOP1G	-0.472	0.136	*	-0.738	-0.206	-1.888
CHIP1G	-0.367	0.260		-0.875	0.142	
OTHP1G	0.119	0.077		-0.032	0.270	

Table A4.7 Key Stage 3 Mathematics level

Parameter	Estimate	Standard error	Sig.	95% Confidence interval Min.	Max.	Adjusted coefficients (months)
Base case						
LEA variance	1.447	0.273	*	0.911	1.983	
School variance	10.780	0.310	*	10.172	11.388	
Year variance	0.324	0.023	*	0.279	0.368	
Pupil variance	49.100	0.103	*	48.898	49.302	
Fixed model						
LEA variance	0.087	0.017	*	0.052	0.121	
School variance	0.623	0.023	*	0.578	0.669	
Year variance	0.254	0.011	*	0.232	0.276	
Pupil variance	18.180	0.038	*	18.105	18.255	
Fixed coefficients						
CONS	-2.501	0.083	*	-2.664	-2.338	
YEAR02	-1.259	0.022	*	-1.303	-1.215	-5.036
YEAR03	-1.094	0.022	*	-1.136	-1.052	-4.376
KS2ENGSC	0.299	0.002	*	0.295	0.303	8.048
KS2MASC	0.867	0.002	*	0.863	0.870	23.090
KS2SCISC	0.326	0.002	*	0.322	0.330	7.632
KS2AV2	2.700	0.027	*	2.647	2.753	4.124
SEX	-0.200	0.007	*	-0.214	-0.186	-1.598
FSM	-0.747	0.021	*	-0.788	-0.707	-2.990
FSMMISS	-0.743	0.095	*	-0.930	-0.556	-2.972
SEN1/2	-1.556	0.029	*	-1.612	-1.500	-6.224
SEN3/4	-1.794	0.044	*	-1.880	-1.708	-7.176
SEN5	-1.461	0.061	*	-1.581	-1.341	-5.844
EAL	0.674	0.039	*	0.597	0.750	2.695
WHITOTH	0.086	0.046		-0.005	0.177	
BLACKC	-0.944	0.077	*	-1.094	-0.794	-3.775
BLACKA	-0.565	0.090	*	-0.742	-0.389	-2.262
BLACKO	-0.699	0.095	*	-0.884	-0.513	-2.796
INDIAN	0.775	0.058	*	0.662	0.888	3.100
PAKIST	0.220	0.081	*	0.060	0.379	0.878
BANGLA	0.411	0.106	*	0.203	0.618	1.642
CHINESE	2.087	0.146	*	1.801	2.373	8.348
OTHER	0.354	0.045	*	0.265	0.443	1.416
ETHNOT	-0.326	0.040	*	-0.405	-0.247	-1.306
PCFSM	-0.075	0.003	*	-0.081	-0.070	-5.327
FSMSQ	0.125	0.011	*	0.103	0.146	2.416
SMALL	0.047	0.036		-0.024	0.119	
BOYSCH	0.338	0.084	*	0.175	0.502	1.354
GIRLSCH	0.589	0.075	*	0.441	0.736	2.354
GOT6TH	0.075	0.044		-0.010	0.161	
GRAMMAR	4.428	0.119	*	4.195	4.661	6.344
GRAMINT	-0.692	0.015	*	-0.721	-0.662	
ARTS	-0.316	0.137	*	-0.585	-0.048	-1.265
SPDES98	0.169	0.060	*	0.051	0.288	0.678
EICPH1	0.183	0.105		-0.022	0.388	
PLCY2	-0.208	0.061	*	-0.328	-0.088	-0.832
PH1K2INT	-0.075	0.004	*	-0.083	-0.067	
PH1FMINT	-0.023	0.005	*	-0.033	-0.013	
BLCG	0.428	0.103	*	0.226	0.631	1.714
BLAG	0.301	0.165		-0.022	0.624	
BLOG	0.334	0.130	*	0.079	0.588	1.334
PAKG	-0.347	0.083	*	-0.510	-0.185	-1.390
BANG	0.113	0.199		-0.277	0.503	
CHIG	-0.420	0.186	*	-0.785	-0.055	-1.680
INDP1	-0.194	0.100		-0.390	0.002	
PAKP1	-0.367	0.094	*	-0.551	-0.182	-1.467
CHIP1	0.502	0.208	*	0.095	0.909	2.007
WHOP1G	-0.135	0.112		-0.355	0.084	
BLAP1G	0.463	0.176	*	0.119	0.807	1.852
BANP1G	-0.714	0.209	*	-1.123	-0.304	-2.855

Table A4.8 Key Stage 3 Results English level

Parameter	Estimate	Standard error	Sig.	95% Confidence interval Min.	95% Confidence interval Max.	Adjusted coefficients (months)
Base case						
LEA variance	0.700	0.150	*	0.407	0.993	
School variance	7.281	0.227	*	6.837	7.725	
Year variance	1.954	0.051	*	1.854	2.054	
Pupil variance	34.740	0.073	*	34.597	34.883	
Fixed model						
LEA variance	0.094	0.072		-0.047	0.234	
School variance	0.457	0.036	*	0.387	0.527	
Year variance	1.780	0.041	*	1.699	1.861	
Pupil variance	17.550	0.037	*	17.478	17.622	
Fixed coefficients						
CONS	6.952	0.085	*	6.785	7.119	
YEAR02	-0.657	0.040	*	-0.736	-0.579	-2.630
YEAR03	-1.413	0.040	*	-1.492	-1.334	-5.652
KS2ENGSC	0.583	0.002	*	0.579	0.587	15.704
KS2MASC	0.236	0.002	*	0.232	0.239	6.275
KS2SCISC	0.208	0.002	*	0.204	0.212	4.876
KS2AV2	1.860	0.026	*	1.808	1.912	2.841
SEX	0.843	0.007	*	0.829	0.857	6.744
FSM	-0.893	0.020	*	-0.933	-0.853	-3.571
FSMMISS	-0.995	0.095	*	-1.181	-0.810	-3.981
SEN1/22	-2.097	0.028	*	-2.152	-2.042	-8.388
SEN3/4	-2.696	0.044	*	-2.781	-2.611	-10.784
SEN5	-2.338	0.060	*	-2.456	-2.220	-9.352
EAL	0.479	0.039	*	0.403	0.556	1.917
WHITOTH	0.226	0.046	*	0.135	0.316	0.902
BLACKA	0.673	0.101	*	0.475	0.870	2.690
BLACKO	0.312	0.094	*	0.128	0.496	1.246
INDIAN	0.689	0.057	*	0.577	0.801	2.756
PAKIST	0.380	0.070	*	0.242	0.518	1.520
BANGLA	0.631	0.105	*	0.425	0.837	2.524
CHINESE	0.779	0.096	*	0.591	0.967	3.117
OTHER	0.437	0.056	*	0.326	0.547	1.746
ETHNOT	-0.275	0.041	*	-0.355	-0.196	-1.102
PCFSM	-0.071	0.003	*	-0.077	-0.065	-4.995
FSMSQ	0.103	0.013	*	0.077	0.129	1.997
BOYSCH	0.702	0.098	*	0.510	0.894	2.808
GIRLSCH	0.500	0.091	*	0.321	0.678	1.998
FAITH	0.340	0.060	*	0.222	0.458	1.360
GRAMMAR	4.002	0.132	*	3.743	4.261	8.031
GRAMINT	-0.485	0.015	*	-0.515	-0.455	
LANG	0.256	0.124	*	0.012	0.499	1.023
SPDES98	-0.031	0.076		-0.180	0.119	
EICPH1	0.457	0.130	*	0.202	0.712	1.828
PH1BEAC	0.419	0.172	*	0.082	0.755	1.675
PH1SPEC	0.216	0.138		-0.055	0.487	
PH1K2INT	-0.045	0.004	*	-0.053	-0.036	
PH1FMINT	-0.015	0.006	*	-0.027	-0.003	
PH1SXINT	-0.084	0.019	*	-0.121	-0.047	
BANG	0.270	0.131	*	0.012	0.528	1.080
BLCP1	-0.311	0.101	*	-0.510	-0.113	-1.245
BLAP1	-0.225	0.150		-0.518	0.068	
BLOP1	-0.317	0.132	*	-0.575	-0.059	-1.268
INDP1	-0.331	0.127	*	-0.579	-0.083	-1.324
PAKP1	-0.182	0.094		-0.367	0.002	
OTHP1	-0.217	0.111		-0.435	0.001	
WHOP1G	0.232	0.113	*	0.011	0.452	0.926
BLCP1G	0.351	0.135	*	0.087	0.615	1.404
BLAP1G	0.210	0.149		-0.083	0.502	
INDP1G	0.227	0.160		-0.088	0.541	
OTHP1G	0.259	0.131	*	0.003	0.514	1.035

Table A4.9 Key Stage 3 Science level

Parameter	Estimate	Standard error	Sig.	95% Confidence interval Min.	95% Confidence interval Max.	Adjusted coefficients (months)
Base case						
LEA variance	1.366	0.239	*	0.897	1.835	
School variance	7.597	0.221	*	7.164	8.030	
Year variance	0.440	0.020	*	0.400	0.480	
Pupil variance	33.620	0.071	*	33.481	33.759	
Fixed model						
LEA variance	0.096	0.019	*	0.059	0.133	
School variance	0.599	0.023	*	0.553	0.645	
Year variance	0.349	0.012	*	0.325	0.373	
Pupil variance	15.690	0.033	*	15.625	15.755	
Fixed coefficients						
CONS	4.225	0.076	*	4.077	4.373	
YEAR02	-1.074	0.022	*	-1.118	-1.030	-4.296
YEAR03	-1.398	0.023	*	-1.444	-1.352	-5.592
KS2ENGSC	0.329	0.002	*	0.325	0.332	8.848
KS2MASC	0.357	0.002	*	0.353	0.360	9.509
KS2SCISC	0.502	0.002	*	0.498	0.506	11.764
KS2AV2	2.051	0.025	*	2.002	2.100	3.133
SEX	-0.410	0.007	*	-0.423	-0.396	-3.277
FSM	-0.818	0.019	*	-0.856	-0.781	-3.273
FSMMISS	-0.800	0.089	*	-0.974	-0.626	-3.200
SEN1/2	-1.361	0.027	*	-1.413	-1.309	-5.444
SEN3/4	-1.600	0.041	*	-1.680	-1.520	-6.400
SEN5	-0.815	0.057	*	-0.926	-0.703	-3.259
EAL	0.245	0.033	*	0.179	0.310	0.979
BLACKC	-0.665	0.108	*	-0.877	-0.452	-2.659
BLACKO	-0.558	0.088	*	-0.731	-0.386	-2.234
PAKIST	-0.902	0.063	*	-1.025	-0.778	-3.606
BANGLA	-0.464	0.098	*	-0.655	-0.273	-1.856
CHINESE	1.039	0.105	*	0.834	1.244	4.156
OTHER	0.208	0.046	*	0.118	0.298	0.833
ETHNOT	-0.355	0.038	*	-0.428	-0.281	-1.418
PCFSM	-0.081	0.003	*	-0.086	-0.076	-5.705
FSMSQ	0.123	0.011	*	0.101	0.144	2.379
SMALL	0.071	0.036	*	0.001	0.142	0.286
GIRLSCH	0.699	0.074	*	0.553	0.845	2.795
GRAMMAR	3.206	0.111	*	2.988	3.424	6.358
GRAMINT	-0.393	0.014	*	-0.421	-0.365	
SPDES98	0.165	0.062	*	0.043	0.287	0.660
EICPH1	0.056	0.115		-0.169	0.281	
PLCY3	-0.263	0.063	*	-0.387	-0.139	-1.051
PH1BEAC	0.276	0.143		-0.005	0.557	
PH1SPEC	0.226	0.116		-0.001	0.452	
PH1K2INT	-0.023	0.004	*	-0.031	-0.015	
PH1FMINT	-0.009	0.005		-0.019	0.001	
WHOG	0.128	0.054	*	0.021	0.234	0.511
BLCG	0.404	0.150	*	0.111	0.698	1.617
BLOG	0.474	0.121	*	0.237	0.710	1.895
INDG	0.324	0.062	*	0.202	0.445	1.294
PAKG	0.514	0.096	*	0.325	0.703	2.055
BANG	0.381	0.123	*	0.140	0.622	1.524
WHOP1	-0.173	0.082	*	-0.333	-0.012	-0.690
BLCP1	-0.266	0.143		-0.547	0.014	
BLAP1	-0.336	0.106	*	-0.543	-0.129	-1.344
INDP1	-0.225	0.087	*	-0.396	-0.053	-0.899
CHIP1	0.518	0.193	*	0.139	0.897	2.072
BLCP1G	0.279	0.194		-0.101	0.659	
BLAP1G	0.650	0.139	*	0.378	0.922	2.600
PAKP1G	-0.387	0.118	*	-0.618	-0.157	-1.550
OTHP1G	0.265	0.097	*	0.075	0.454	1.058

APPENDIX 5 Derivation of attitude scales

Year 11 pupil questionnaire

A total of 27 first-order factors were extracted. These factors, with brief statements relating to the items included in each factor, are summarised in Table A5.1 below. In order to reduce the number of factors, second-order factor analysis was carried out. As a result, the final multilevel modelling was carried out using five second-order factors or scales (derived from 23 first-order factors) and four first-order factors – see Table A5.2. The labels assigned to each factor should be regarded as indicative of the general range of areas covered, rather than as definitions of the content.

Table A5.1 Year 11 first-order factors

	First-order factors	Items included
1	Variety of teaching methods experienced	Working in small groups, using ICT, using drama, acting or role play, visitors from industry or business
2	Helpfulness of teaching methods	Number of teaching methods reported as helpful
3	Feedback on progress	Opportunities to discuss progress with a teacher and to set targets Teacher asks questions in lessons
4	Perceptions of teachers	Teachers have clear expectations about behaviour in school and deal with those who break school rules Teachers give praise for good work and encourage pupils to work hard
5	Teachers and homework	Teachers set homework and make sure it is done Teachers mark work
6	Non-curricular involvement	Number of types of activities undertaken
7	Non-curricular involvement with pupils from other schools	Number of types of activities undertaken with pupils from other schools
8	Enjoyment of non-curricular involvement	Number of types of activity enjoyed
9	Facilities for academic subjects	Facilities for ICT, Science, library, MFL, homework/study Opportunities to use ICT in school
10	Facilities for practical subjects, creativity and sports	Facilities for sports/PE, performing arts, art, technology
11	Behaviour	Well-behaved at school Completes homework
12	Attendance	Pupils' and friends' level of truancy Punctuality for lessons
13	Help with homework from people outside of school	Help from parents/family Place to do homework

	First-order factors	Items included
14	Organisation	Confident about the future, able to set targets, good at organising own work
15	Using information and resources	Independent working, using books and computers for information, good at solving problems
16	Team or independent working	Enjoy working in a team, liking for practical work, wanting help with homework
17	Self-confidence	Expressing opinions, popular with peers, not feeling lonely, confidence in talking to the class
18	Self-esteem	Wanting to change, feeling 'mixed up', happy at home
19	Parental interest in child's schooling	Parental encouragement to learn and to behave well
20	Perceptions of the school	Adults', parents' and pupils' views as to whether the school is good
21	Attitude to f school	Liking being at school, seeing school work as worth doing, finding lessons interesting and useful
22	Mutual respect between teachers and pupils	School has sensible rules, teachers and students treat each other with respect
23	Support from teachers	Teachers encourage students Pupils are encouraged to consider HE
24	Education post-16	Parental support to stay in education Wanting to stay at school and go to university
25	Concerns for the future	Local employment opportunities Getting qualifications Being able to afford to go to HE Attitude of friends to HE Academic challenge of HE
26	Thinking practically about future	Being treated as an adult No point in studying except for qualifications Need ICT skills
27	School prepares you for the future	Extent to which school prepares young people for the future

Table A5.2 Year 11 second-order factors

	Second order factors	First-order factors
1	School and teacher attributes	3, 4, 5, 9, 10, 20, 22, 23
2	Pupil Attributes	11, 12, 21, 24
3	Organised/resourceful	14, 15, 17, 18, 25
4	Engaging teaching and learning opportunities	1, 6, 8
5	Help and support from others	13, 16, 19

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