Social Disadvantage Research Centre
Department of Social Policy and Social Work
University of Oxford

National Evaluation of the New Deal for Communities Programme:

Education and Skills

by

George Smith, Tom Smith, Kate Wilkinson & Maria Sigala

Social Disadvantage Research Centre,

Department of Social Policy and Social Work,

University of Oxford

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Social Disadvantage Research Centre

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For more information, contact:

Pat Buckley
SDRC Administrator
Social Disadvantage Research Centre
Department of Social Policy and Social Work
University of Oxford
Barnett House
32 Wellington Square
OX1 2ER, UK.

Email: pat.buckley@socres.ox.ac.uk
Tel: +44 1865 270325
Fax: +44 1865 270324

Alternatively, members of the group can be contacted directly, email addresses can be found at SDRC's webpage: http://www.apsoc.ox.ac.uk/sdrc

About the authors

George Smith is Co-Director of the Social Disadvantage Research Centre (SDRC), and Reader in Social Policy at the University of Oxford.

Tom Smith is Director of Oxford Consultants for Social Inclusion (OCSI), a spin-out group from SDRC set up to help public sector organisations work with administrative information sources. OCSI provides comprehensive analysis and consultancy on deprivation at small-area level. More information, including contact details, can be found at http://www.ocsi.co.uk/.

Kate Wilkinson is a Research Officer at the Department of Social Policy and Social Work at the University of Oxford.

Maria Sigala is a Research Officer at the Department of Social Policy and Social Work at the University of Oxford.

Executive Summary

'Raising educational achievement' is one of the five central themes in the national New Deal for Communities programme. This report draws on a very wide range of individual level administrative data and also the specially commissioned NDC Household Survey (MORI, 2002, 2004) to present the overall profile of NDC areas in terms of their educational performance and qualifications. This covers not just the school age population but also adults in the local area. It therefore represents probably the most extensive volume of combined data presented on local educational results so far.

The data at this stage is available for 1999-2003 (for Higher Education) and 2002-2004 (for Key Stage data). Trend data has therefore been included for these two areas. In addition, some headline figures from the two waves of the NDC Household Survey are also included.

The data allows direct comparison with other parts of the country and also analysis of particular groups within the data. However, measuring an 'NDC effect' cannot be realistically achieved until more years of data have built up. Nevertheless, the trend results show that there is indeed quite substantial, and encouraging, change going on in some NDC areas, and therefore certainly something to explain.

Section 1 covers the position of the NDC areas on the Index of Multiple Deprivation 2004 (IMD 2004). While the 39 NDC areas typically fall into the poorest 10% (first decile) of areas in terms of the overall IMD 2004, the position on the educational domain is more mixed. Some NDC areas show rather lower levels of deprivation on this domain with some of the London NDC areas in particular in the third decile or above (Table 1.2). Educational domain scores for some NDC areas are very close to the overall scores for their local authority area, scores for others are very much higher than the overall local authority score, indicating a higher level of deprivation (Figures 1.7 & 1.8).

Section 2 sets out the numbers of pupils in the analysis, makes an estimate of the proportions of pupils not in the maintained sector, and presents data on secondary school expenditure per pupil for each NDC. Actual numbers of pupils in each NDC (Table 2.1) show that in some of the NDC areas there are relatively few pupils at each Key Stage. This fact will be likely to cause fluctuations in the results from year to year at individual NDC level. As these are all the pupils there are, there is no way of increasing these numbers. Some of the London NDC areas appear to have significant numbers of pupils *not* in the maintained sector

(Table 2.2). This is an *indirect* estimate, but if correct, means that the results will be likely to *understate* the results for the area (as these are based only on pupils in the maintained sector). Estimates of per pupil expenditure (drawn from Section 52 returns) show that general expenditure at secondary level (age 11-16) in NDC areas is significantly higher than the national average (Table 2.3a). However, there are some NDC areas where the expenditure is surprisingly low (Table 2.3b). In general these are not the NDC areas with particularly strong school results.

Section 3 presents the analysis of Key Stage 2 and Key Stage 4 results for 2002. Overall, NDC areas score at about the level of the most deprived 10% of the country at Key Stage 2 (age 11) and Key Stage 4 (age 15+) (Tables 3.1a & 3.2a). However, there is considerable variation among NDC areas, with a few of the best performing NDC areas close to (or even above) the national average results at KS2, and just below at KS4 (Tables 3.1a, 3.1b. 3.2a and 3.2b). Some of the best performing NDC areas at school level are those in the London area, suggesting a possible regional effect. Conversely the same tables and figures show some NDC areas a long way below the national average.

Section 4 draws on the NDC Household Survey and 2001 Census to examine adult qualifications in NDC areas. In terms of adults without qualifications, NDC areas overall are close to the figure for the 10% most deprived decile in England (Table 4.4). However, some NDC areas (mainly in London) contain significant proportions of adults with degrees (Table 4.1 & Table 4.4). Across the NDC areas, males and younger people are significantly less likely to have no qualifications and more likely to have degree level qualifications. Some ethnic groups are doing significantly better than white groups, with Chinese and Black Africans having higher proportions of adults with degree level qualifications. Individuals of Bangladeshi origin are only half as likely as white individuals to have degrees, and more than twice as likely to have no qualifications.

Section 5 draws on data from UCAS to analyse entry to Higher Education. The rate of successful applications to Higher Education for those aged under 21 across the NDC areas overall falls between the 10th and 9th most deprived deciles (Figure 5.1), though NDC areas are marked by well above average rates of entry by mature students (aged 25+). This may in part reflect some 'catching up', but it may also be that prospective mature students move to NDC type areas to join 'access to HE' courses.

Section 6 combines information from the NDC Household Survey and from the educational results. The NDC Household Survey of NDC residents indicates some quite high levels of satisfaction with local educational provision (primary and secondary schools) (Table 6.1). However, the objective grounds for such satisfaction (in terms of results) do not always back this up (Figure 6.6). Areas containing more highly educated adults are *less* satisfied with their local schools (Figure 6.5). Thus, in some of the London areas (with above average numbers of qualified adults) satisfaction with secondary schooling is low. This and other analyses of the varying levels of satisfaction by ethnic group, age and gender suggest that satisfaction may be strongly influenced by expectations (Table 6.2).

Section 7 reports some exploratory analysis to classify NDC areas into a limited number of groups, defined by their position in terms of some of the major influences on educational results (proportion of adults with degrees, proportion of individuals of non white ethnic origin, mobility etc). Further analysis of variations in NDC area results in education suggests a number of key factors. Higher levels of adult qualification were a strong predictor of better results at school level and in entry to HE. The proportion of the NDC population from non white ethnic groups was also a good predictor. Exploratory analysis of ways of classifying NDC areas into different groups on the basis of a limited number of key variables (proportions non white, population mobility and proportions of adults with a degree) show some striking differences in average outcomes at KS4 and entry to HE (Table 7.4).

Section 8 analyses some of the trend data now available. Analysis of HE entry data over a significant time period (1999-2003) shows a *very* rapid increase in entry to HE for NDC areas overall, but this is more or less matched by other disadvantaged areas in England over the same time period (Figure 8.2). More detailed analysis, using the groups of NDC areas from Section 7, shows a *very* rapid rate of change in the progress of NDC areas containing high proportions in ethnic minority groups (Figure 8.11). This group of NDC areas has very significantly closed on the national average rate of entry to HE over this five year period. But other groups of NDC areas are more or less static over this same period (Figure 8.11) and thereby fall further behind the national average. At Key Stage 4 (GCSE/GNVQ) the NDC areas showed a larger percentage improvement in results between 2002 and 2004 than any of the 10 decile groups. At Key Stage 2 analysis of the results from 2002-2004 suggests a small decline for NDC areas in the first time period followed by an improvement in the second. Generally 2003 to 2004 saw overall improvements in NDC results; however, such data is likely to fluctuate over time and further analysis in subsequent years will indicate whether this is a trend or merely a fluctuation. Some small, but, in most cases, positive

changes are observed from the NDC Household Survey; further investigation of this data is necessary to give a fuller picture of the changes taking place.

Introduction

'Raising educational achievement' is one of the five central themes in the national New Deal for Communities programme, and a key element in the programme's aim 'to bridge the gap between some of the poorest members of our society and the rest of Britain'. The way that this educational theme is being addressed varies across the 39 NDC areas, and is the subject of separate local and national studies.

This report sets out to present a detailed and comprehensive picture of the educational outcomes and results in all 39 NDC areas using consistent data from across England. This is the first time that such comprehensive data has been put together in this format for local area analysis. This allows comparison to be made with other areas and England as a whole, showing how wide the gap may be between NDC areas and others parts of the country. While much of the data so far covers only a limited time period, some data showing trends and progress (whether the gap is closing or widening) is also presented. The information presented in this study is largely restricted to the early phases in the NDC programme (that is data up to 2003).

It should be underlined that this data is about *areas* and is based on the individual results and data for those *living* in these areas. This may not be the same as data on local schools (which may also draw pupils from other areas) or data on those who may work (but not live) in these areas. The data also importantly covers not just the school age and young people in NDC areas, but also the much larger adult population.

While the data reported here is presented in an aggregate form, it is almost wholly based on individual level information and records. This largely 'administrative data' has been supplemented by use of the NDC Household Survey across all NDC areas. As these datasets develop this will allow progress to be monitored not just in terms of area trends, but also in terms of cohort trends - for example how well the cohort who took Key Stage 2 results (end of primary stage) performed at age 13/14 - and perhaps as importantly, the geographical movements into and out of NDC areas. These longer term results will be the way that it will be possible to identify whether there is a significant "NDC effect".

There are many ways of addressing the links between education and social deprivation. First, the effects of such deprivation can be seen in the level of educational performance and results in such areas – how wide is the gap with national norms and standards? This is

directly addressed in terms of national and local targets to raise standards. This is to treat (poor levels of) education as an outcome of deprivation. However education also acts as a transmission mechanism for other outcomes. Qualifications and persistence in education lead on average to higher incomes and less unemployment. Here education is acting as a contributory determining element in continuing or reducing deprivation. The levels of qualification among the parents' generation is also a factor influencing the results for the next generation. Finally the overall educational profile of an area is clearly important in terms of its attractiveness for new employment or potential incomers, and to retain the better qualified, who may otherwise move out.

This report reviews the data on deprivation and education using data from the Index of Multiple Deprivation 2004 (Section 1). It then turns to identifying the numbers of pupils in the main analysis, and presents some information on local educational spending (section 2). Section 3 reports on performance at school level with data from 2002 and 2003. Section 4 covers qualifications among the adult population. Section 5 analyses data on entry to Higher Education (a significant marker of educational deprivation at an area level). Section 6 draws on the NDC Household Survey to assess satisfaction with local education (and local area) and looks, where possible, at the objective grounds for such satisfaction. Section 7 seeks to classify NDC areas into various groupings to look at educational results across different types of NDC area. Finally Section 8 reviews the data so far on trends; where trend data is available for a number of years some encouraging results are observed. The trend data also suggests that different types of NDC areas may be on rather different trajectories.

Section 1. Educational deprivation

Social disadvantage, that is poor social and economic circumstances judged against the overall national distribution, has long been associated with poorer educational results and outcomes. It was one of the key driving reasons behind educational policy reform in the 1960s and again since the late 1990s, to reduce the gap in educational outcomes between different social groups. While similar gaps in educational performance are found in almost all developed countries, their size varies, and there is evidence that they can be reduced by a range of educational (and other) interventions.

The exact mechanisms by which social and economic inequalities are reproduced as educational inequalities are complex. It is not simply a question of limited support in the home for educational success, or of poor educational facilities or low expectations, or limited opportunities, for example in the job market, to make achieving educational success worthwhile, but almost certainly a combination of these factors at different ages and stages. It is also critical to underline that the relationship between social background and educational results is a statistical, probabilistic one. Youngsters from disadvantaged backgrounds are not doomed to fail; but they are much less likely to do well than those from more advantaged backgrounds. Reliable measurement of social deprivation at the local level allows us to chart these social and educational inequalities in detail.

1.1 Measuring deprivation – the Index of Multiple Deprivation 2004

The Index of Multiple Deprivation 2004 (IMD 2004) offers an up-to-date and comprehensive measure of multiple deprivation at the small area level. The idea of multiple deprivation underpinning the IMD 2004 argues that different kinds of deprivation are separately measurable, with the IMD 2004 based around seven 'domains' of deprivation (the IMD 2004, the seven domains and the district level summaries are together referred to as the Indices of Deprivation 2004). Each domain contains a number of individual measures or indicators, with the entire IMD 2004 based on 37 such indicators.

One of the seven domains focuses on Education, Skills and Training deprivation. The domain is divided into two equally weighted parts, or sub-domains. The first relates to children and young people and measures the average point score of children at Key Stages 2, 3, and 4, the secondary school absence rate, the proportion of young people not staying on in school over age 16 and the proportion of young people aged under 21 who are not

entering Higher Education. The second sub-domain measures the proportion of working age adults (aged 25-54, i.e. generally post-Higher Education and below retirement) who have no or low qualifications as measured by the 2001 Census. A higher score is indicative of higher levels of deprivation on this measure.

The IMD 2004 and the individual domains are well suited to measure levels of deprivation in New Deal for Communities (NDC) areas. The IMD 2004 is drawn primarily from 2001 data and presented using a new geography: the Super Output Area (SOA). These are groups of contiguous Census Output Areas with a total population of approximately 1,500 people. The small size of the SOAs allows the identification of pockets of deprivation at sub-ward level, and also allows population-weighted IMD 2004 scores to be calculated for NDC areas with a high degree of precision. For further details of administrative and statistical geographies see Appendix A.

For the National Evaluation of the New Deal for Communities programme, the SDRC has created NDC level scores for the IMD 2004 and all seven domains.

1.2 Multiple deprivation across the NDC areas

Table 1.1 below shows the IMD 2004 for each of the NDC areas separately, and all NDC areas as a whole. The deprivation scores are given alongside the rank and decile of the score. Note that the rank and decile measures are based on the ranked scores of the Super Output Areas (SOAs), not the ranked scores of the NDC areas. For example, an IMD 2004 score of 70.1 lies between the scores of the two SOAs ranked 277 and 278 out of the 32,482 SOAs in England. Thus Liverpool NDC, with a score of 70.1, is given a “rank” of 277.5. Similarly to the “ranks”, the NDC “decile” shown is based on the distribution of all Census Super Output Area scores, not the distribution of the NDC area scores.

Table 1.1: Index of Multiple Deprivation 2004 Score: all NDC areas

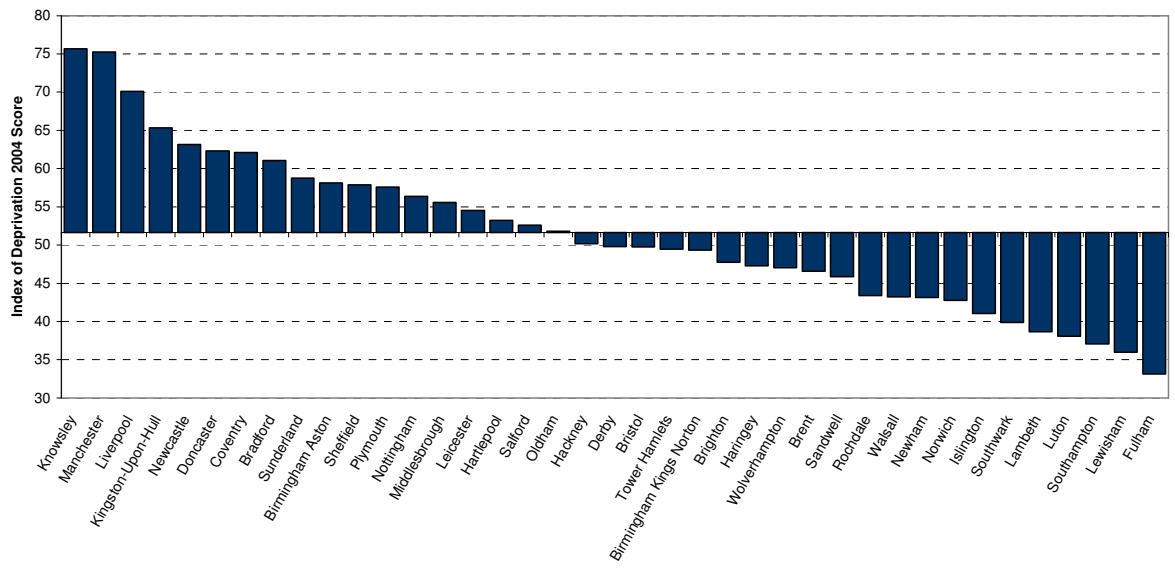
	IMD 2004 score	IMD 2004 rank	IMD 2004 decile
All NDC areas combined	51.7	1,985.5	1
Knowsley	75.7	117.5	1
Manchester	75.3	123.5	1
Liverpool	70.1	277.5	1
Hull	65.3	524.5	1
Newcastle	63.1	680.5	1
Doncaster	62.3	740.5	1
Coventry	62.1	754.5	1
Bradford	61.1	838.5	1
Sunderland	58.7	1,070.5	1
Birmingham A	58.1	1,134.5	1
Sheffield	57.9	1,163.5	1
Plymouth	57.6	1,196.5	1
Nottingham	56.4	1,334.5	1
Middlesbrough	55.6	1,426.5	1
Leicester	54.5	1,528.5	1
Hartlepool	53.2	1,736.5	1
Salford	52.6	1,836.5	1
Oldham	51.8	1,950.5	1
Hackney	50.2	2,271.5	1
Derby	49.8	2,341.5	1
Bristol	49.8	2,349.5	1
Tower Hamlets	49.5	2,402.5	1
Birmingham KN	49.4	2,420.5	1
Brighton	47.8	2,720.5	1
Haringey	47.3	2,805.5	1
Wolverhampton	47.0	2,849.5	1
Brent	46.6	2,948.5	1
Sandwell	45.9	3,080.5	1
Rochdale	43.4	3,650.5	2
Walsall	43.2	3,689.5	2
Newham	43.1	3,713.5	2
Norwich	42.8	3,819.5	2
Islington	41.1	4,289.5	2
Southwark	39.9	4,633.5	2
Lambeth	38.7	5,024.5	2
Luton	38.1	5,207.5	2
Southampton	37.1	5,524.5	2
Lewisham	36.0	5,868.5	2
H'smith & Fulham	33.2	6,913.5	3

Source: SDRC, 2004

The NDC areas show high levels of deprivation – considered together, the NDC areas have a deprivation score equivalent to the most deprived 10% of all areas across the country, with the majority of individual NDC areas also in this most deprived 10% band.

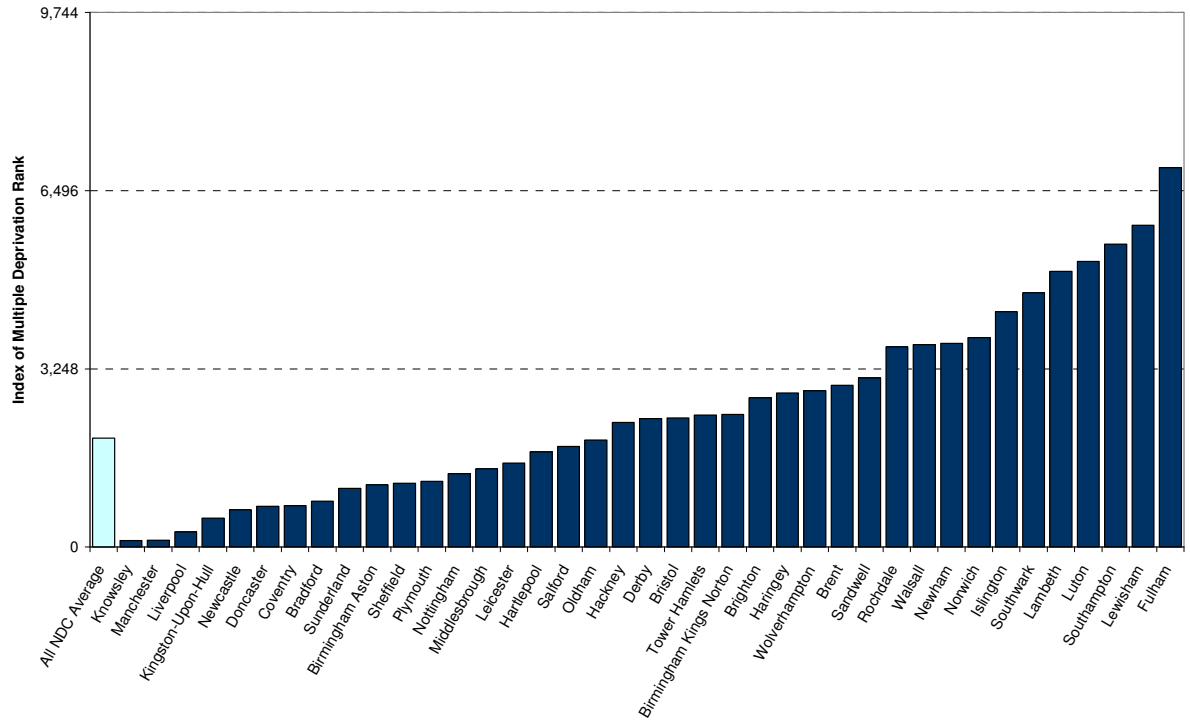
Figures 1.1 and 1.2 below show the IMD 2004 distributions across all 39 NDC areas. Figure 1.1 shows the raw scores, with the NDC columns shown with baselines set to the All NDC area score (51.65). Figure 1.2 shows the ranked scores (remember these are based on the Super Output Area ranks, not the NDC area ranks), with the All NDC area rank shown as the first column, and the y-axis showing the 10% bands of the distribution across England.

Figure 1.1: Index of Multiple Deprivation 2004 Score: all NDC areas



Source: SDRC, 2004

Figure 1.2: Index of Multiple Deprivation 2004 Rank: all NDC areas



Source: SDRC, 2004

Levels of deprivation across the NDC areas are significantly above the national average, but it is clear that there is significant variation in the IMD 2004 scores across the areas. Three areas – Knowsley, Manchester and Liverpool – have an average level of deprivation equivalent to an SOA lying in the most deprived 1% of all SOAs across England, by comparison the least deprived Fulham NDC area has an average level of deprivation equivalent to an SOA lying in the most deprived 30% of all SOAs across England. Of the 39 NDC areas, 28 have deprivation levels equivalent to the most deprived 10% of all SOAs, ten NDC areas are in 10%-20% decile, and one (Fulham) in the third 20%-30%decile.

1.3 Educational deprivation across the NDC areas

Table 1.2 below shows the Education domain for each of the NDC areas separately, and all NDC areas as a whole. The deprivation scores are given, as well as the rank and decile of the entire distribution that the score falls into. Note that as in the previous IMD 2004 section, the rank and decile measures are based on the ranked scores of the Super Output Areas (SOAs), not the ranked scores of the NDC areas. For example, an Education domain score of 51.1 lies between the scores of the two SOAs ranked 2977 and 2978 out of the 32,482 SOAs in England. Thus the Liverpool NDC, with a score of 51.1, is given a “rank” of 2977.5.

Similarly, the NDC “decile” shown is based on the distribution of all Census Super Output Area scores, not the distribution of the NDC area scores.

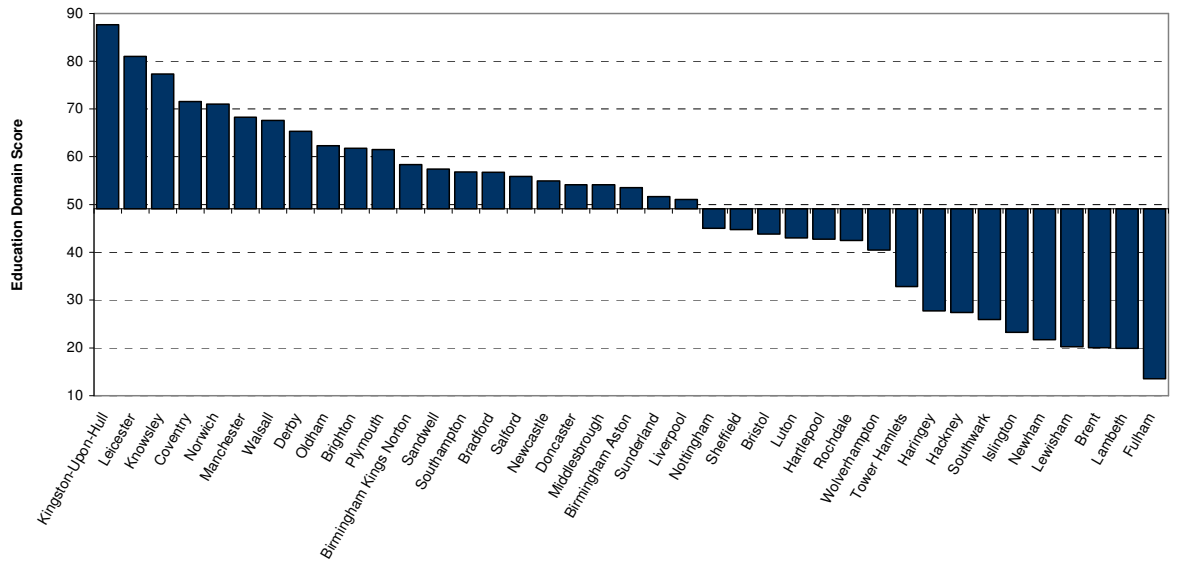
Table 1.2: Indices of Deprivation 2004, Education Domain Score: all NDC areas

	Education domain score	Education domain rank	Education domain decile
All NDC areas combined	49.1	3,311.5	2
Hull	87.6	157.5	1
Leicester	81.0	345.5	1
Knowsley	77.3	498.5	1
Coventry	71.5	799.5	1
Norwich	71.0	827.5	1
Manchester	68.3	1,036.5	1
Walsall	67.6	1,090.5	1
Derby	65.3	1,276.5	1
Oldham	62.3	1,584.5	1
Brighton	61.8	1,636.5	1
Plymouth	61.5	1,661.5	1
Birmingham KN	58.3	1,959.5	1
Sandwell	57.4	2,076.5	1
Southampton	56.8	2,162.5	1
Bradford	56.8	2,165.5	1
Salford	55.9	2,285.5	1
Newcastle	55.0	2,417.5	1
Doncaster	54.2	2,527.5	1
Middlesbrough	54.2	2,528.5	1
Birmingham A	53.5	2,621.5	1
Sunderland	51.6	2,882.5	1
Liverpool	51.1	2,977.5	1
Nottingham	45.0	4,077.5	2
Sheffield	44.8	4,118.5	2
Bristol	43.8	4,312.5	2
Luton	43.0	4,476.5	2
Hartlepool	42.7	4,536.5	2
Rochdale	42.5	4,590.5	2
Wolverhampton	40.5	5,054.5	2
Tower Hamlets	32.8	7,212.5	3
Haringey	27.7	9,227.5	3
Hackney	27.4	9,342.5	3
Southwark	25.9	10,058.5	4
Islington	23.2	11,459.5	4
Newham	21.7	12,322.5	4
Lewisham	20.2	13,242.5	5
Brent	20.0	13,358.5	5
Lambeth	19.9	13,461.5	5
H'smith & Fulham	13.6	18,348.5	6

Source: SDRC, 2004

Figures 1.3 and 1.4 below show the Education domain scores and ranks across all 39 NDC areas. Figure 1.3 shows the raw scores, with the NDC columns shown with baselines set to the All NDC area score (49.1). Figure 1.4 shows the ranked scores (remember these are based on the Super Output Area ranks, not the NDC area ranks), with the All NDC area rank shown as the first column, and the Y-scale showing the 10% bands of the distribution.

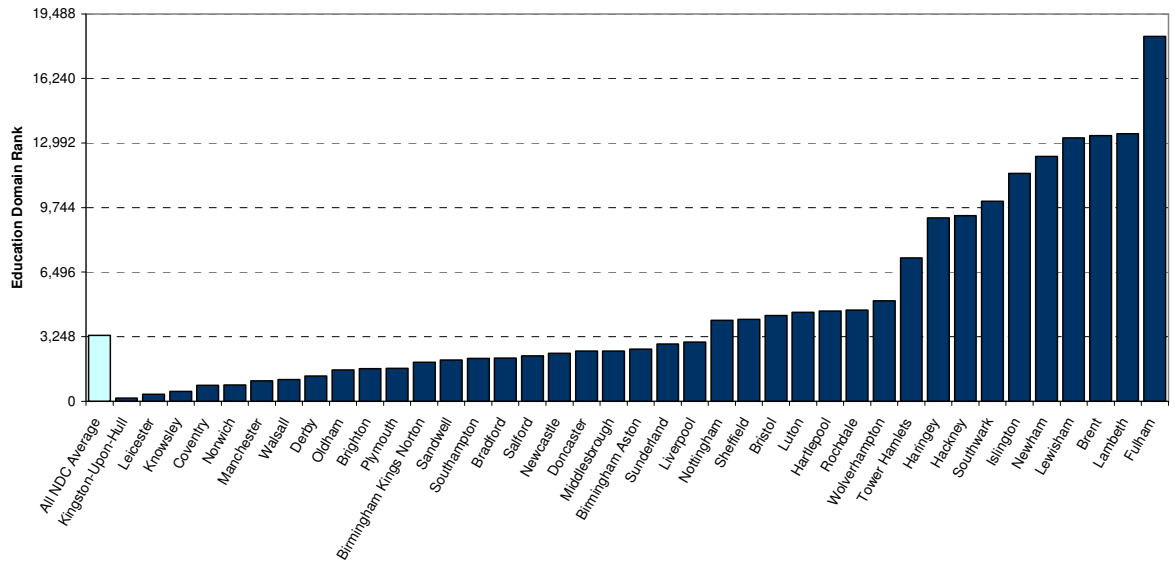
Figure 1.3: Indices of Deprivation 2004, Education Domain Score: all NDC areas



Source: SDRC, 2004

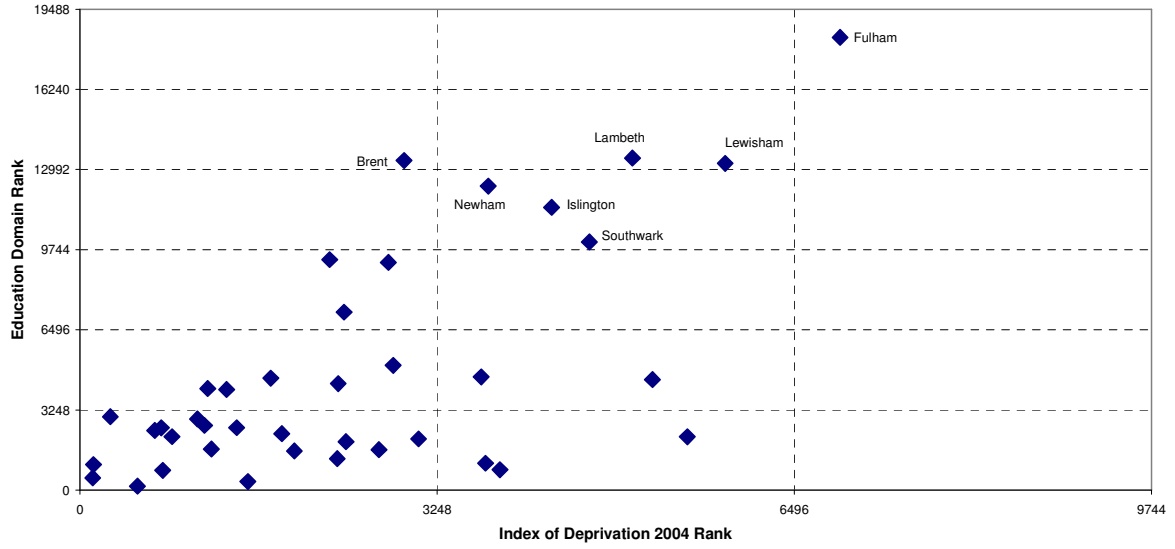
The Education domain scores and ranks show a similar picture to the Multiple Deprivation across the NDC areas – as a whole the areas are significantly more deprived than the average (the all NDC average score is only just outside the most deprived 10% of all areas on Educational achievement), and there is considerable variation between the areas. However, levels of deprivation are lower in this domain compared with the rest of the country than for the IMD 2004 as a whole – one area (Fulham) is in the 6th decile of the England distribution, so is less deprived in terms of education than an area picked at random from across England. However 22 of the 39 areas are in the most deprived 10% of the SOA distribution and a further seven in the 10%-20% decile.

Figure 1.4: Indices of Deprivation 2004, Education Domain Rank: all NDC areas.



Source: SDRC, 2004

Figure 1.5: Index of Multiple Deprivation 2004 versus Education Domain: all NDC areas.



Source: SDRC, 2004

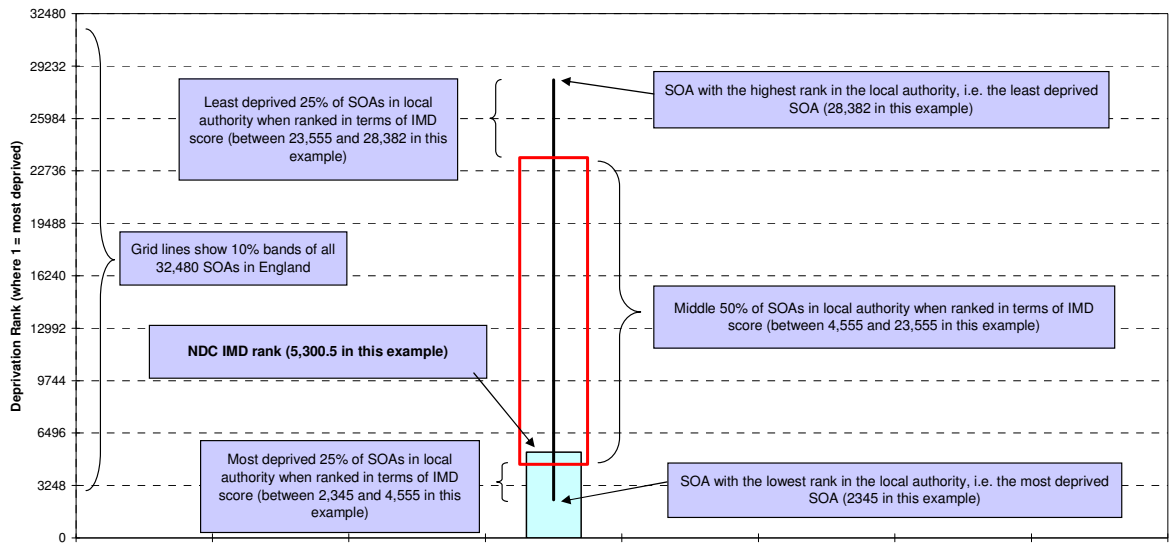
Figure 1.5 above shows a further comparison between the IMD 2004 and the Education domain for the 39 areas, with the ranking for each NDC area plotted for both measures. The grid lines show the 10% bands for the all England distribution. There is clear correlation between the two rankings (P<0.001), but the Education domain ranks (y-axis) show more variation than the IMD 2004 ranks (x-axis), spreading over six deciles of the distribution.

Overall, the NDC areas are significantly disadvantaged in terms of both Multiple Deprivation and Educational Deprivation, but there is considerable variation between the different NDC areas.

1.4 The NDC areas in their local context

Although the NDC areas are significantly more deprived than the country as a whole, it is important to place the areas in terms of their local context, in other words how does deprivation across the NDC areas compare with levels of deprivation across the Local Authority in which they are located?

Figure 1.6: Example "NDC and Local Context" chart



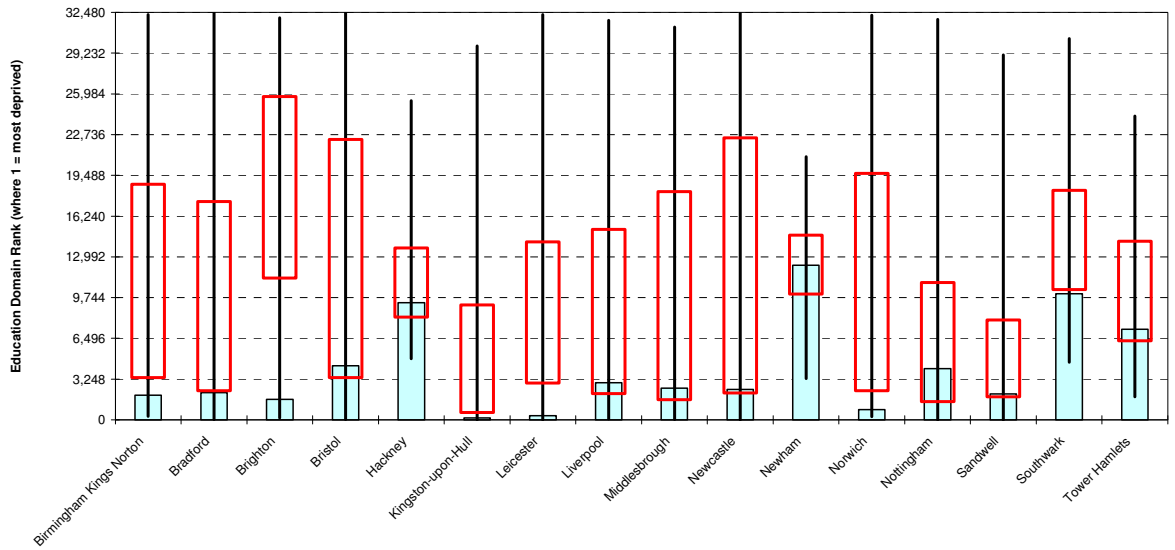
Source: SDRC, 2004

To look at this local context information, we use the scores of all Super Output Areas across the Local Authority. Figure 1.6 above shows an example "NDC and Local Context" chart, with labels highlighting the information shown. The deprivation level across the NDC area,

measured by the Education domain rank, is shown by the vertical column (5,300 in this example). The entire distribution of SOA ranks across the Local Authority is shown by the vertical line (from 2345 to 28,382 in this example), while the inter-quartile range, or middle 50%, of the Local Authority SOA ranks is shown by the box outline (from 4,555 to 23,555 in this example). Finally the y-axis grid lines show the 10% bands of the all England distribution.

From this type of chart we can focus on how the NDC area ranking compares with the distribution of ranks across the Local Authority, for example seeing whether the NDC is similarly, or significantly more, deprived then the LA as a whole. Considerable overlap between the NDC column and the LA box outline indicates that the NDC lies well within the bulk of the LA distribution, in other words it is similar to the LA as a whole. By contrast, distance between the NDC column and LA box outline indicates that the NDC area is significantly more deprived than the LA as a whole. More deprived areas have lower rankings, with the most deprived area in England ranked 1 and the least deprived ranked 32,482. Smaller values therefore show higher levels of deprivation, as seen with the NDC column typically more deprived than the bulk of SOA areas across the LA.

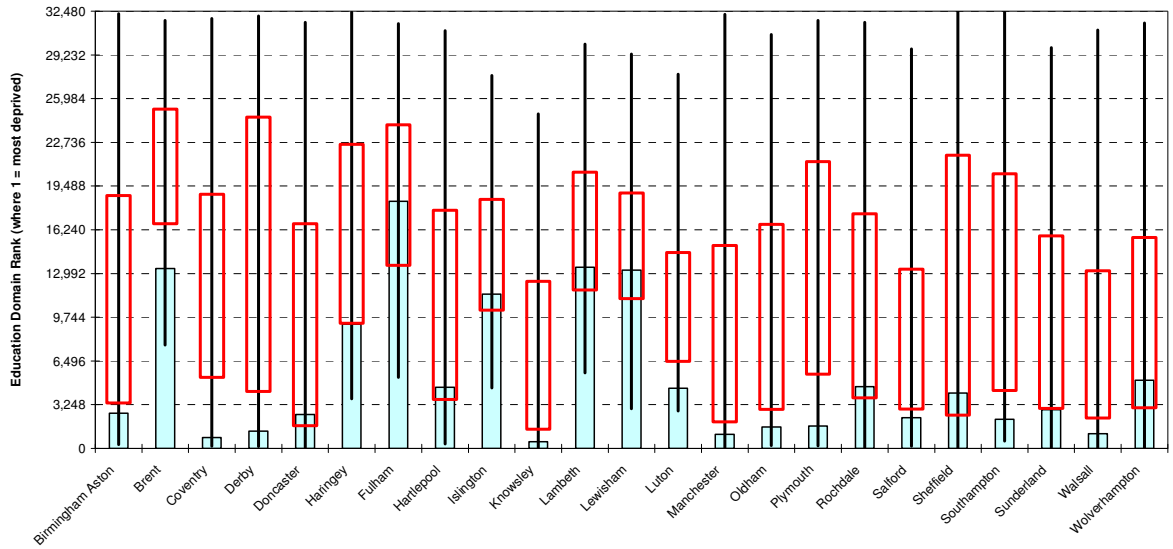
Figure 1.7: Indices of Deprivation 2004, Education Domain Rank: round 1 NDC areas



Source: SDRC, 2004

Figures 1.7 above and 1.8 below show the "NDC and Local Context" charts for all 39 NDC areas for the Education domain of the IMD 2004, organised into the two NDC rounds. It is clear that not only is there considerable variation in the NDC scores, but also considerable variation in the Local Authority distributions. Many of the NDC areas are similar to the Local Authority as a whole, with some degree of overlap between the NDC column and the LA box outline. These areas include Bristol, Hackney, Liverpool, Middlesbrough, Newham, Nottingham, Tower Hamlets, Doncaster, Fulham, Hartlepool, Islington, Lambeth, Lewisham, Rochdale, Sheffield and Wolverhampton. By contrast, there are a smaller number of areas where the NDC area shows significantly higher levels of educational deprivation than the local area. Most extreme of these cases is the Brighton NDC area, but other areas include Leicester, Brent, Coventry, Derby and Plymouth.

Figure 1.8: Indices of Deprivation 2004, Education Domain Rank: round 2 NDC areas



Source: SDRC, 2004

1.5 Educational deprivation summary

It is clear that the NDC areas, as a whole, show significant levels of multiple deprivation, with the average level of deprivation across all NDC areas equivalent to being in the most deprived 10% of all areas across England. Within the group of NDC areas there is wide variation – Knowsley, Manchester and Liverpool NDC areas have average levels of multiple deprivation equivalent to the most deprived 1% of all areas across the country, while the least deprived Fulham NDC area is outside the most deprived 20% of all areas.

The story is similar with educational deprivation. The average level of educational deprivation across all NDC areas is only just outside the most deprived 10% of all areas across England. However, levels of educational deprivation across the NDC areas are lower than the corresponding levels of multiple deprivation, with one area less deprived than the average across England. In a way this is not surprising and relates to the point made at the start of this section. Social disadvantage does not wholly determine educational results. Some young people do well despite coming from very disadvantaged circumstances. Also, in some areas there may be population change in progress, meaning that young people may reflect an incoming population, or the reverse.

Compared with the levels of deprivation across the Local Authority in which the NDC areas are based, many show similar levels of educational deprivation, while a smaller number of NDC areas are, comparatively, extremely disadvantaged. Clearly there are a number of issues here that contribute to the debate over the importance of local deprivation relative to surrounding neighbourhoods.

Section 2. Pupil numbers and school resourcing

This section acts as a necessary background to the later sections of this report, which deal with the levels of attainment in the NDC populations and the response of residents to local educational provision. As the information is based on a range of data sources: administrative data; the NDC Household Survey; and 2001 census data, it is important to be clear which groups are covered in the subsequent analysis, and their relative sizes. This places the overall information in context. In the process the data has generated additional (and new) information, which has not been further analysed at this stage, but certainly needs further study. Two examples emerge in this section: an estimate of young people aged 5-15 in the NDC areas not educated in the maintained sector: and the per pupil expenditure at secondary school level in NDC areas.

2.1 Pupil numbers in the maintained sector

The Pupil Level Annual School Census (PLASC) is currently collected by the DfES from all maintained schools. It does not cover the independent sector. PLASC includes the individual pupil postcode, and thus PLASC data can be 'unbundled' to any geographical area. PLASC data can be linked to the National Pupil Database (NPD) which contains individual data on pupil performance at the various key stages. Pupils in the independent sector who take any of the Key Stage tests or GCSE/GNVQ also appear in the NPD, but as they do not appear in PLASC, it is not possible to allocate them to any particular geography. The system records where they go to school but not where they live. Approximately 7% of pupils in England attend schools not in the maintained sector, though this varies significantly by type of area.

For this reason the data on NDC attainment at school level in subsequent chapters is restricted to pupils in the maintained sector. Data on those entering Higher Education and the adult qualification estimates cover the entire NDC resident population. Table 2.1 gives the total counts for pupils in the maintained sector and for the three key stage results in 2002. These are drawn from PLASC and NPD, 2002. The total figure for England is just over 6.5m pupils, with around 600,000 pupils at each Key Stage age group. While there are substantial numbers of pupils aged 5-15 in each NDC in the maintained sector, it can be seen that in some of the NDC areas the numbers taking Key Stage tests in any one year (in this case 2002) are much smaller. This means that results are more likely to fluctuate from year to year. There is no way we can increase these numbers as they account for *all* pupils in the area in the maintained sector, rather than only a sample.

2.2 Numbers not in the maintained sector

The next issue to address is how many additional pupils there might be if all those in the independent sector were also included. This would provide some indication of the accuracy of the results in the following sections. If very few children attend independent schools, then the results for the maintained sector are a very good proxy. As noted above about 7% of pupils nationally attend independent schools. There is no direct measure currently available of these figures at a local level. However, we can compare the numbers in the maintained sector with the estimated population at local level in the relevant age group. This is at best an *indirect* estimate, and depends on the underlying population measure used. Table 2.2 uses the data from the 2001 census, which is then attributed to NDC areas. At the overall NDC level the figures are virtually the same, suggesting that almost all pupils in NDC areas attend maintained schools; however, there is considerable variation by NDC area. While areas where more than 100% of the age group are accounted for in the state sector may be explained by variations between census and PLASC age groups (as well as the approximation of NDC areas to census areas), there are some NDC areas where there may be significant proportions of pupils aged 5 to 15 in the independent sector. Perhaps significantly, the five NDC areas with the largest proportions of pupils apparently not in the maintained sector are all in London. In these areas it may be that the pupil attainment results do not include a significant number of pupils (above 10% in the highest two NDC areas in Table 2.2).

Table 2.1: Pupils aged 5 to 15 in maintained schools

	Pupils aged 5 to 15 in maintained schools	Pupils with KS2 Results (2002)	Pupils with KS3 Results (2002)	Pupils with KS4 (GCSE/GNVQ, 2002)
All England	6,546,723	616,343	598,924	539,489
All NDC areas combined	62,016	5,718	5,528	4,591
Birmingham A	3,432	285	274	263
Brighton	3,317	289	348	235
Leicester	2,764	270	243	197
Hackney	2,754	260	228	205
Knowsley	2,061	183	171	165
Bradford	2,029	185	159	136
Sandwell	1,957	184	175	170
Walsall	1,941	168	167	168
Wolverhampton	1,787	173	140	131
Newham	1,745	163	143	94
Hartlepool	1,675	141	162	138
Birmingham KN	1,657	155	128	114
Norwich	1,629	159	168	110
Haringey	1,614	139	140	122
Manchester	1,613	155	139	94
Liverpool	1,601	147	144	122
Oldham	1,589	162	156	118
Southampton	1,563	157	150	115
Luton	1,559	131	148	116
Derby	1,540	149	145	121
Coventry	1,512	145	133	90
Sheffield	1,511	130	155	110
Newcastle	1,492	134	114	90
Middlesbrough	1,439	154	145	139
Sunderland	1,395	127	143	125
Doncaster	1,395	144	112	100
Rochdale	1,321	116	146	96
Tower Hamlets	1,271	100	107	104
Lewisham	1,197	99	101	84
Southwark	1,187	119	98	101
Hull	1,187	100	112	110
Salford	1,162	115	95	83
Islington	1,035	82	89	90
Brent	970	98	74	69
H'smith & Fulham	959	87	92	63
Lambeth	942	97	83	58
Nottingham	795	89	83	54
Plymouth	779	70	63	60
Bristol	640	57	55	31

Source: DfES, 2002

Table 2.2: Pupils aged 5 to 15, percentage in maintained schools	
	% of Pupils in maintained sector (estimated from PLASC 2002 and Census 2001)[1]
All NDC	99.6
Liverpool	>102
Manchester	>102
Wolverhampton	>102
Salford	>102
Luton	>102
Knowsley	>102
Rochdale	>102
Hartlepool	>102
Doncaster	>102
Newcastle	>102
Brighton	102
Bradford	102
Southampton	102
Middlesbrough	101
Leicester	101
Birmingham KN	101
Sheffield	101
Derby	101
Norwich	100
Nottingham	99
Sandwell	99
Bristol	99
Haringey	99
Newham	98
Walsall	98
Sunderland	98
Hackney	97
Oldham	97
Brent	97
Coventry	97
Tower Hamlets	96
Plymouth	96
Birmingham A	96
Hull	94
Lambeth	93
Lewisham	92
H'smith & Fulham	91
Islington	88
Southwark	85
Source: DfES, 2002; Census, 2001	

[1] Note: >102 = areas where the estimate was above 102%, suggesting that almost all children were in the maintained sector. Such overestimates could be explained by differences in age group between PLASC and the census, or differences in approximating NDC areas in the census

2.3 Secondary school resources: average per pupil expenditure

Section 52[2] school expenditure data is now published for (almost) all maintained secondary schools in England. It shows the budgeted and actual expenditure for each school, and the per pupil expenditure. Using this data allows an estimate to be made of per pupil expenditure at school level for any area in England. These figures include only school level expenditure and not expenditure made by the LEA. They also assume an even distribution of expenditure across the age group. That is, every pupil receives a similar level of expenditure if they attend the same school. This might well not always be the case; for example, in an 11-18 school, older pupils might be likely to receive disproportionately higher amounts. To tighten the comparisons across different areas data was restricted to 11-15 year olds in secondary schools. Primary schools were excluded at this point. The Section 52 data for secondary schools included some anomalous results which could realistically be corrected. Primary schools could be included at a later stage.

Overall per pupil expenditure at secondary level will reflect the Educational Formula Spending set up by central government for each local authority. In addition to pupil numbers, the Formula includes a weighting for 'Additional Educational Needs' (AEN - currently measured by pupils from income support/WFTC households and minority ethnic groups), an 'area costs factor' (for areas with higher salary costs), and a 'sparsity factor' (for rural areas). The allocation to schools by Local Education Authorities (LEAs) is determined by the LEA under the 'Fair Funding System' (previously LMS), which is mainly driven by pupil numbers, but may include some weighting for social needs. Individual schools may spend above or below their allocated budgets in any one year.

[2] Under Section 52 of the Schools Standards and Framework Act the County Council must submit statements of Education spending in a prescribed format to the DfES for both budget and outturn.

Table 2.3a: Per pupil expenditure in maintained secondary schools		
	Per pupil expenditure at secondary level 2001/2 £	Number of pupils
All England	2,952	2,851,837
All NDC areas combined	3,379	25,815
IMD 2004 Decile 1 (most deprived 10%)	3,263	345,903
IMD 2004 Decile 2	3,148	313,063
IMD 2004 Decile 3	3,046	289,661
IMD 2004 Decile 4	2,959	277,185
IMD 2004 Decile 5	2,909	269,662
IMD 2004 Decile 6	2,872	262,673
IMD 2004 Decile 7	2,830	262,237
IMD 2004 Decile 8	2,801	260,519
IMD 2004 Decile 9	2,782	264,067
IMD 2004 Decile 10 (least deprived 10%)	2,762	272,120
Source: DfES, 2002		

Table 2.3b:Per pupil expenditure in maintained secondary schools

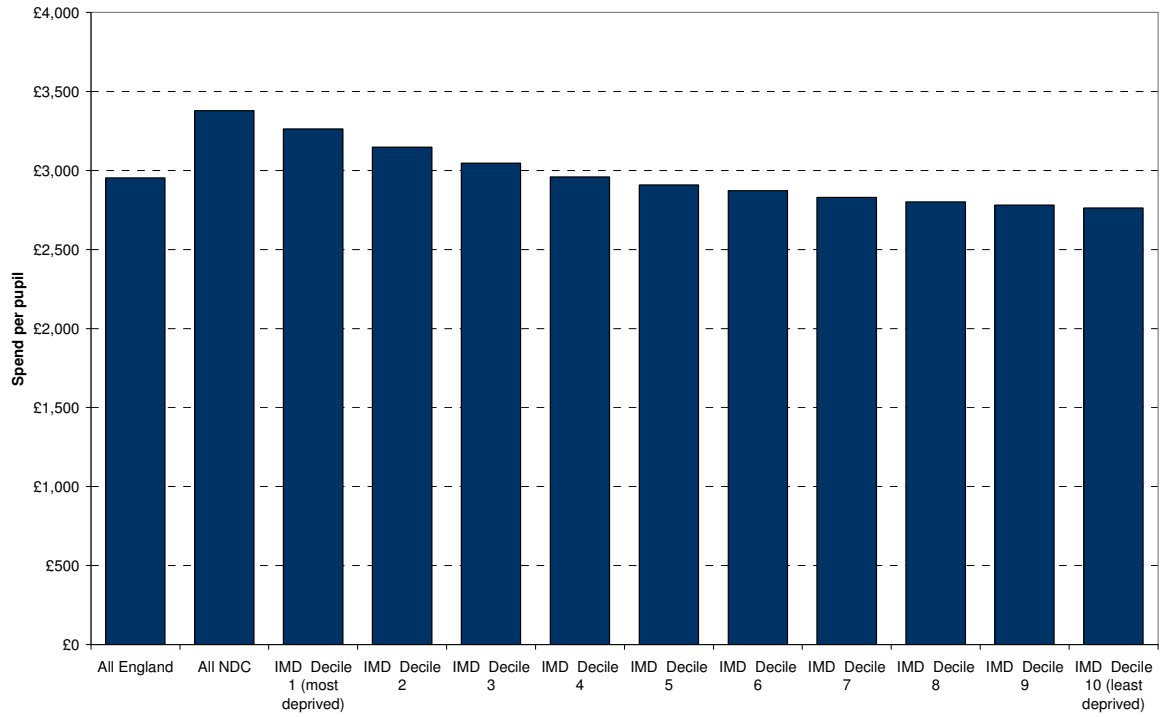
	Per pupil expenditure at secondary level 2001/2 £	Number of pupils
Islington	4,420	456
Tower Hamlets	4,419	540
Hackney	4,251	1,160
Lewisham	4,211	454
Southwark	4,186	500
Brent	3,929	358
Haringey	3,867	643
Newham	3,785	659
Birmingham KN	3,722	698
Birmingham A	3,691	1,406
Salford	3,679	470
H'smith & Fulham	3,655	376
Lambeth	3,629	355
Sheffield	3,524	657
Nottingham	3,500	291
Bristol	3,482	239
Liverpool	3,459	723
Hull	3,330	560
Bradford	3,302	748
Knowsley	3,296	879
Norwich	3,288	579
Plymouth	3,233	322
Walsall	3,226	882
Newcastle	3,222	588
Oldham	3,207	682
Brighton	3,173	1,424
Southampton	3,159	688
Derby	3,126	642
Hartlepool	3,083	697
Manchester	3,068	644
Wolverhampton	3,042	731
Doncaster	2,957	578
Sandwell	2,944	902
Coventry	2,931	600
Luton	2,888	672
Leicester	2,870	1,156
Rochdale	2,808	624
Sunderland	2,761	661
Middlesbrough	2,718	571

Source: DfES, 2002

Table 2.3 above shows expenditure by the ten IMD 2004 Decile groups (Table 2.3a) and by NDC area (Table 2.3b). In terms of IMD 2004 Deciles, results show that more disadvantaged areas typically have higher per pupil expenditures at secondary level. This may reflect both social needs elements and also the fact that some urban areas such as London have higher basic costs. The figures for the individual NDC areas bear this out. The per pupil expenditure values range from £4,400 in two London NDC areas, to below the national average spend of £2,952 in seven NDC areas (Middlesbrough, Sunderland, Rochdale, Leicester, Luton, Coventry and Sandwell).

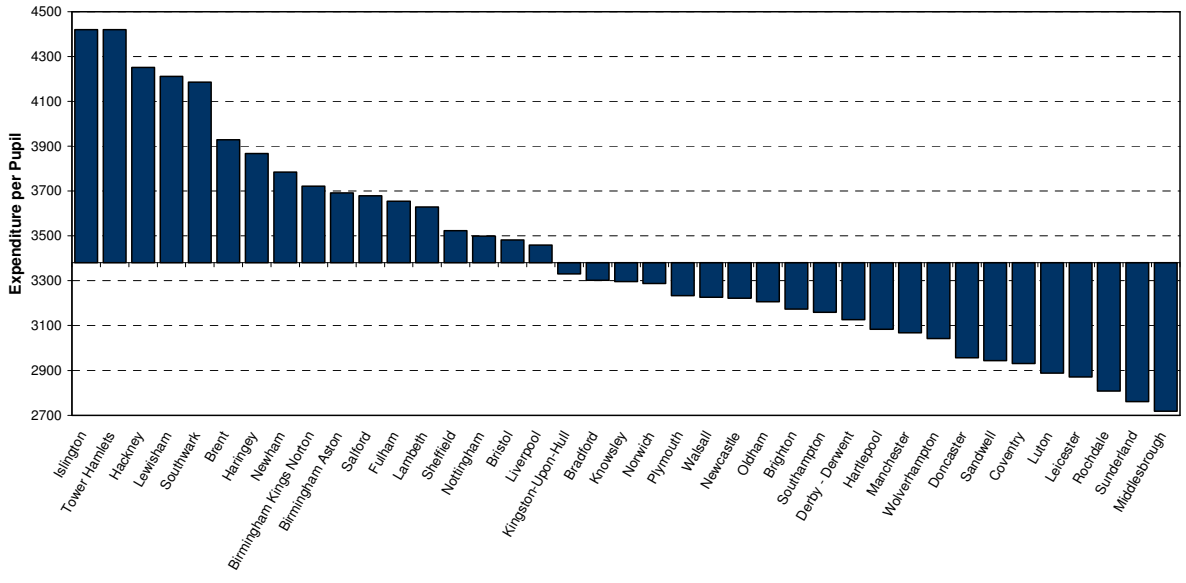
As noted above, there are many reasons why school resources should vary in this way. London areas will have much higher costs, and may also have much greater needs. It is also possible to explore how these additional resources are deployed, for example by looking at other school features by NDC area – such as pupil teacher ratios - to see how far the additional resources go to meet extra costs or are put into enhancing quality. As will be observed in the following sections, the areas with apparently low educational spend at secondary level may have lower educational costs and possibly lower social needs, and this is the main reason why they have lower per pupil expenditure. They are often areas with historically low educational expenditure. However their educational performance levels, for example at Key Stage 4, are not consistently very far up the NDC profile of results, suggesting that there may well be scope for significant improvement, which might be promoted by additional expenditure.

Figure 2.1: Per pupil expenditure at school level: maintained secondary schools



Source: SDRC, 2004

Figure 2.2: Per pupil expenditure at school level: maintained secondary schools, by NDC area



Source: SDRC, 2004

Section 3. Pupil attainment

Improving the level of pupil attainment remains a key policy objective for central government, with a number of relevant performance targets in place. Recent progress in the collection of data by LEAs and the DfES has enabled pupil attainment to be investigated at small area level alongside the traditional national, LEA and school level analysis. The Pupil Level Annual School Census (PLASC) and National Pupil Database (NPD) datasets provide individual level pupil records, linking Key Stage examination results, pupil characteristics, and residential addresses.

3.1 Measuring pupil attainment

The recently developed Pupil Level Annual School Census (or PLASC) was first collected by the DfES from schools in 2002. The PLASC datasets collect individual level information for all pupils in maintained schools on an annual census date in January. PLASC replaces the Annual Schools Census, which collected school level aggregate data, with individual level records that can be aggregated to a variety of geographical areas, such as Wards or NDC areas. It is important to emphasise that the pupil information is recorded for the pupil's home postcode, *not the school postcode*, so aggregate information can be presented on the basis of pupils' residential areas and not simply to the schools they attend. The PLASC dataset records a number of relevant pieces of information, including pupil postcode, Free School Meal status and Special Educational Needs status.

Only pupils with postcodes successfully matching to a valid Census Output Area were used in the pupil attainment analysis, and those pupils either without a postcode or with a postcode not matching to a valid Census Output Area were excluded. For this reason the data presented at 'All England' level is consistent with the data presented for the NDC areas and IMD decile data; however, the All England scores may not exactly match DfES published national performance data.[3]

The National Pupil Database (NPD) records pupil level information on all Key Stage exams, for pupils attending both maintained and independent schools. The NPD dataset can be

[3] Interestingly the scores of those pupils excluded due to having no postcode or a non-matching postcode were significantly lower than for other pupils. It is likely that these groups comprise mainly of recently moved families and children in care.

linked to the PLASC dataset using unique pupil identifiers. For further information on the methodology see *Appendix B. Pupil attainment methodology*.

3.2 Key Stage 2 across the NDC areas

At each Key Stage the NDC results are compared to results in specially selected comparator areas. These comparator areas share many similar characteristics with the NDC areas including a similar level of educational deprivation. However, the comparator areas have not been subject to any NDC initiatives. They therefore form a 'control group' against which to assess the changes occurring in the NDC areas. Further information on selecting the comparator areas is contained in *Appendix C. Selection of comparator areas*.

Table 3.1b shows the proportion of pupils reaching Key Stage 2 level 4[4] by subject, for 2002. In addition to the proportions across England, comparator areas and all NDC areas, the average proportions across all areas in each of the 10% bands of the IMD 2004 are shown. In other words the proportion of pupils reaching Key Stage 2 level 4 is calculated across all areas grouped in each of the 10% bands of the IMD 2004. The NDC areas, as a whole, show proportions of pupils well below the England rate for each of the subjects, roughly equal to the proportions of the "IMD 2004 Decile 10" group, the most deprived 10% of all areas across England.

Figure 3.1 shows the proportions of pupils reaching Key Stage 2 level 4 for English, Maths and Science for England and the NDC areas as a whole and the ten IMD 2004 decile groups. The strong relationship between deprivation and education performance shows in the decrease of pupil attainment for all three subjects with increasing level of deprivation over the ten IMD 2004 Decile groups. The England rate is closest to the middle IMD 2004 decile (groups 5 and 6) performance data while the NDC areas as a whole are closest to the most deprived group. The comparator areas perform slightly better overall than the NDC areas. This supports the analysis in the previous chapter, identifying the NDC areas as a whole in the most deprived 10% of all areas across England.

4 The proportion of pupils achieving Key Stage 2 level 4 or above is a key measure for government performance targets.

Table 3.1a: Proportion of pupils reaching Key Stage 2 level 4 by subject, 2002			
	English %	Maths %	Science %
All England	74.1	72.8	86.2
All NDC areas combined	57.3	58.9	75.5
All comparator areas combined	60.5	60.3	76.2
IMD 2004 Decile 1 (most deprived 10%)	58.5	59.5	76.3
IMD 2004 Decile 2	63.7	63.9	79.5
IMD 2004 Decile 3	67.8	67.1	82.6
IMD 2004 Decile 4	71.8	70.3	85.0
IMD 2004 Decile 5	75.0	73.4	86.9
IMD 2004 Decile 6	78.3	76.1	89.0
IMD 2004 Decile 7	80.6	78.1	90.3
IMD 2004 Decile 8	82.2	79.9	91.3
IMD 2004 Decile 9	85.2	82.3	92.8
IMD 2004 Decile 10 (least deprived 10%)	87.8	85.5	94.4
Source: DfES; SDRC, 2002			

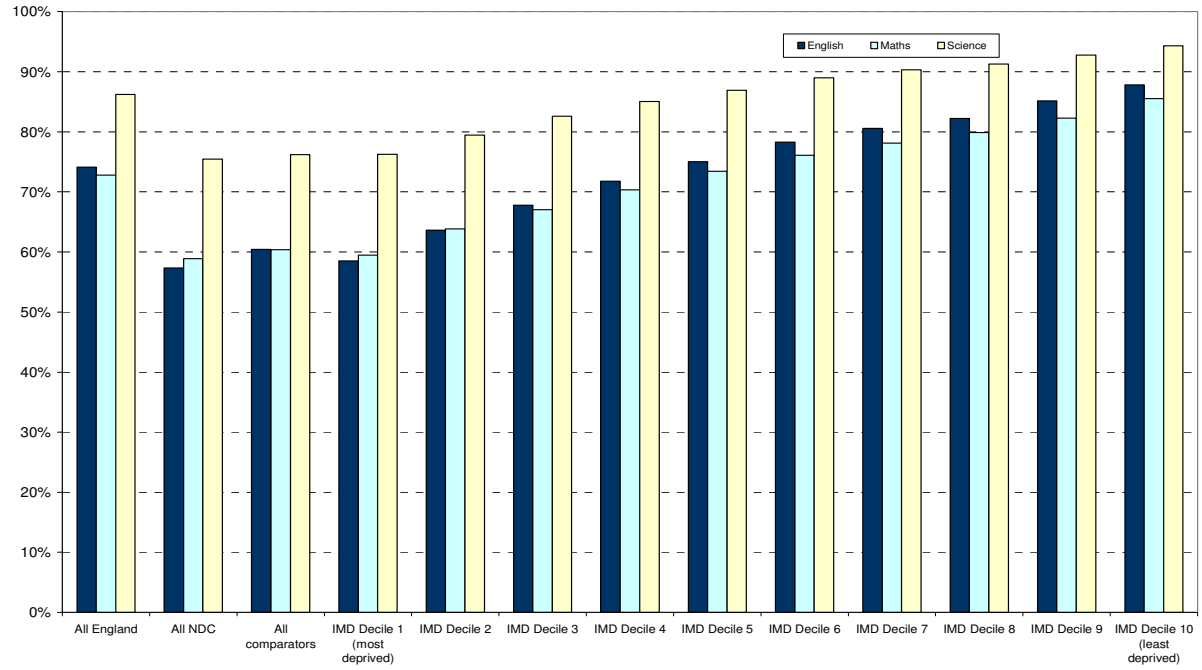
Figures 3.2 to 3.4 show the proportions of pupils reaching Key Stage 2 level 4 for the individual NDC areas, for English (figure 3.2), Maths (figure 3.3) and Science (figure 3.4). The horizontal line shows the England rate, and the NDC columns are shown with baselines set to the NDC average. In all three subjects some London NDC areas are doing better than England as a whole, with Fulham and Brent above the England rate for all three subjects, and Tower Hamlets performing better in English, and Islington in Maths. In contrast, a number of NDC areas show extremely low proportions of children reaching level 4.

Table 3.1b: Proportion of pupils reaching Key Stage 2 level 4 by subject, 2002

	English %	Maths %	Science %
H'smith & Fulham	81.6	82.8	88.5
Brent	76.3	81.6	89.8
Tower Hamlets	75.0	63.0	81.0
Islington	70.7	74.4	76.8
Rochdale	69.0	67.2	82.8
Middlesbrough	68.8	68.2	84.4
Birmingham KN	68.4	59.4	83.2
Manchester	64.3	66.9	76.6
Hartlepool	63.8	63.8	83.0
Wolverhampton	63.6	58.4	76.3
Salford	63.5	64.3	84.3
Walsall	61.9	61.9	76.2
Bradford	61.6	57.3	71.4
Lewisham	61.6	63.6	74.7
Derby	61.1	69.1	84.6
Lambeth	60.8	55.7	79.4
Southwark	60.5	65.5	84.9
Southampton	58.6	54.8	79.6
Hackney	58.5	59.2	69.6
Liverpool	57.5	61.2	78.2
Sandwell	56.8	61.2	79.8
Newham	56.4	63.8	73.6
Haringey	55.1	53.6	72.5
Bristol	54.4	59.6	78.9
Luton	54.2	58.0	72.5
Hull	54.0	69.0	84.0
Nottingham	53.9	46.1	74.2
Knowsley	53.0	57.4	76.5
Sunderland	52.8	46.5	68.5
Oldham	52.5	57.4	78.4
Doncaster	52.1	52.1	67.4
Norwich	50.9	47.8	74.8
Brighton	49.8	53.5	66.3
Birmingham A	49.1	56.0	73.6
Leicester	48.5	55.2	73.0
Newcastle	45.5	53.3	67.2
Coventry	45.5	44.1	67.6
Plymouth	41.4	51.4	52.9
Sheffield	40.8	42.3	59.2

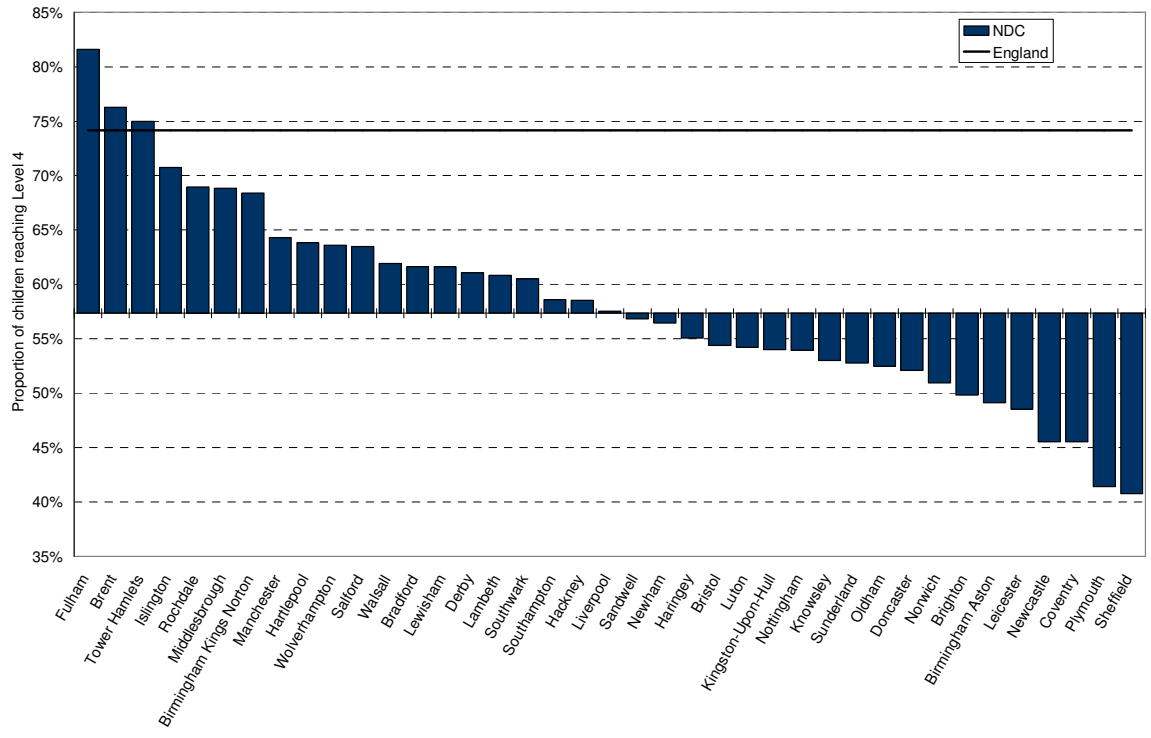
Source: DfES; SDRC, 2002

Figure 3.1: Proportion of pupils reaching Key Stage 2 level 4 by subject, 2002



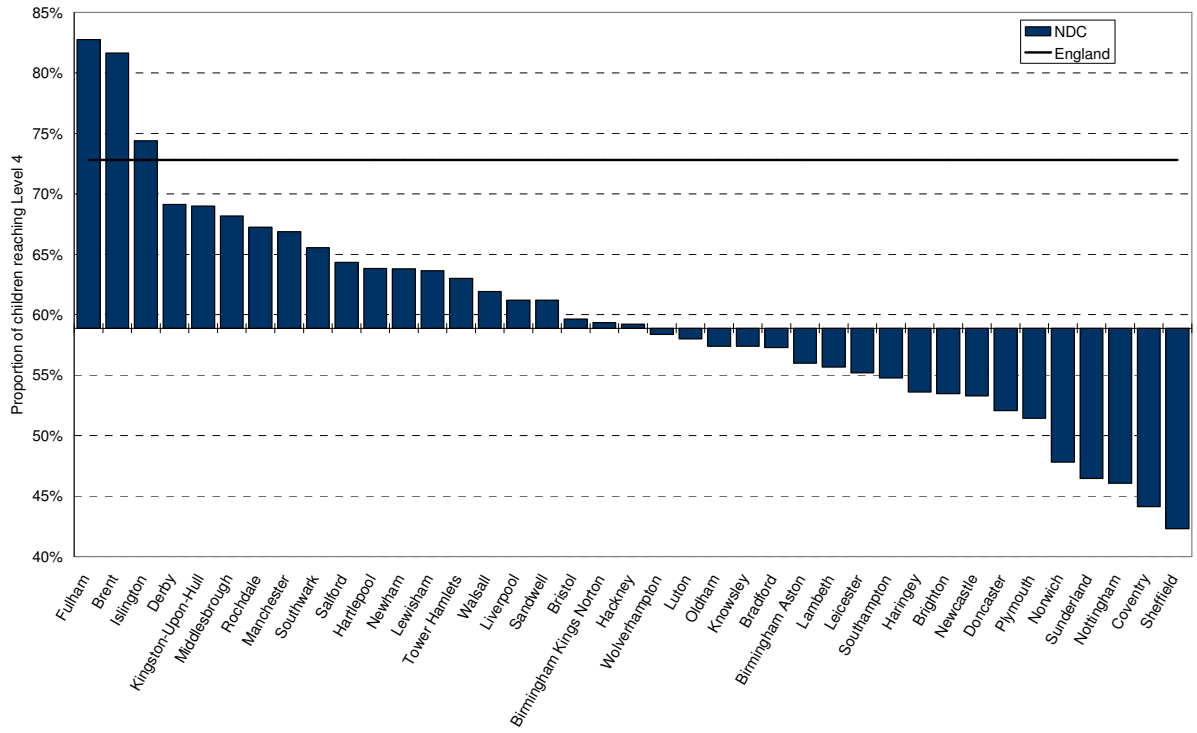
Source: DfES (PLASC and NPD datasets), 2002

Figure 3.2: Proportion of pupils in NDC areas reaching Key Stage 2 level 4 in English, 2002



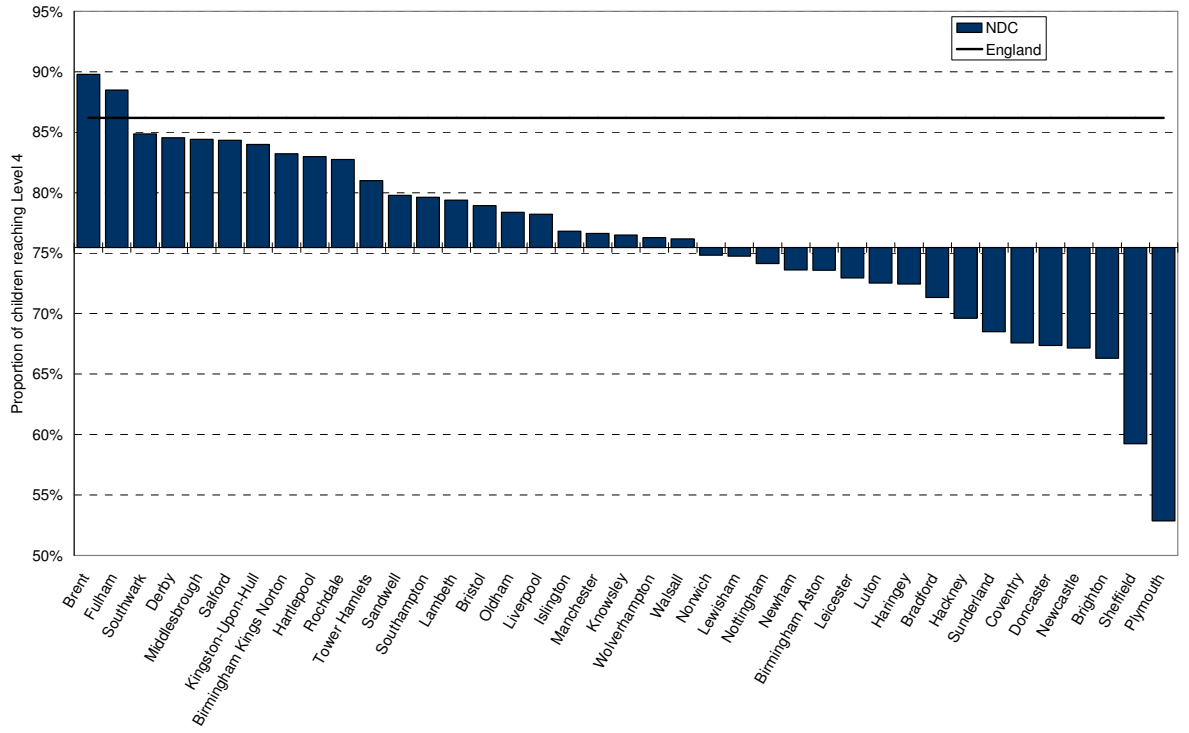
Source: DfES (PLASC and NPD datasets), 2002

Figure 3.3: Proportion of pupils in NDC areas reaching Key Stage 2 level 4 in Maths, 2002



Source: DfES (PLASC and NPD datasets), 2002

Figure 3.4: Proportion of pupils in NDC areas reaching Key Stage 2 level 4 in Science, 2002



Source: DfES (PLASC and NPD datasets), 2002

3.3 Key Stage 4 (GCSE) across the NDC areas

Table 3.2 shows the proportion of pupils achieving five or more[5] Key Stage 4 (GCSE) A*-C grade passes and those achieving five or more A*-G passes, for 2002. In addition to the proportions across England, comparator areas and all NDC areas, the average proportions across all areas in each of the 10% bands of the IMD 2004 are shown (Table 3.2a) and the individual NDC areas (Table 3.2b). As in the Key Stage 2 analysis, the NDC areas, considered together, have proportions of pupils achieving these results which are well below the England rate and roughly equal to the proportions of the comparator areas and the "IMD 2004 decile 10" group the most deprived 10% of all areas across England.

5 The proportion of pupils achieving five or more Key Stage 4 A*-C grade passes is a key measure for government performance targets.

Table 3.2a: Proportion of pupils achieving 5 or more Key Stage 4 (GCSE) A*-C passes, 2002

	5 or more A*-C %	5 or more A*-G %
All England	49.4	89.1
All NDC areas combined	26.0	77.3
All comparator areas combined	28.1	78.8
IMD 2004 Decile 1 (most deprived 10%)	26.0	77.7
IMD 2004 Decile 2	32.4	83.2
IMD 2004 Decile 3	38.4	85.8
IMD 2004 Decile 4	43.9	88.4
IMD 2004 Decile 5	49.6	90.4
IMD 2004 Decile 6	54.4	92.0
IMD 2004 Decile 7	58.4	93.1
IMD 2004 Decile 8	62.3	94.4
IMD 2004 Decile 9	66.9	95.0
IMD 2004 Decile 10 (least deprived 10%)	72.4	95.9

Source: DfES; SDRC, 2002

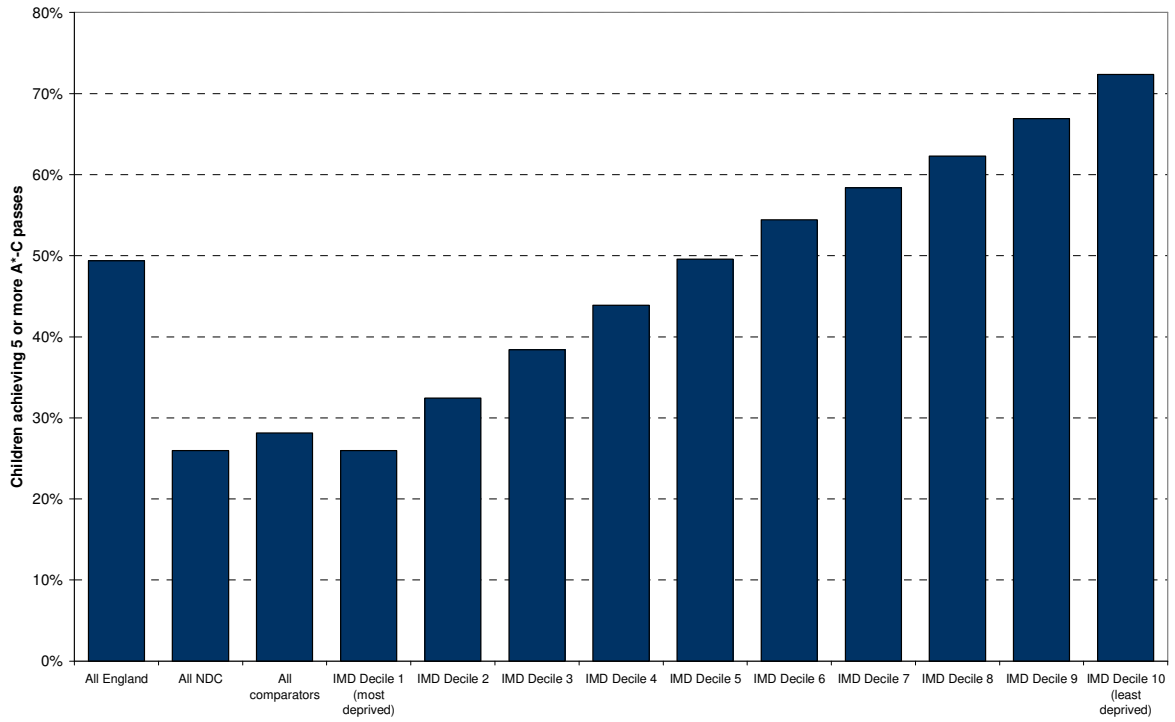
Table 3.2b: Proportion of pupils in NDC areas achieving 5 or more Key Stage 4 (GCSE) A*-C passes, 2002

	5 or more A*-C %	5 or more A*-G %
H'smith & Fulham	47.0	93.9
Newham	45.4	90.7
Tower Hamlets	41.4	82.9
Lewisham	37.6	84.7
Lambeth	36.7	76.7
Rochdale	35.6	83.2
Hackney	35.5	85.7
Birmingham A	34.2	83.1
Bradford	33.6	80.9
Hartlepool	33.1	76.4
Wolverhampton	31.9	81.2
Southwark	31.8	86.0
Southampton	30.1	77.2
Nottingham	27.9	68.9
Manchester	27.6	67.6
Oldham	27.5	80.2
Islington	27.4	84.2
Sandwell	27.2	80.4
Liverpool	26.7	77.0
Haringey	26.3	80.5
Sheffield	26.2	76.2
Salford	25.6	84.9
Brent	25.4	83.1
Birmingham KN	24.8	72.0
Walsall	24.6	75.4
Middlesbrough	23.1	78.8
Brighton	22.3	77.3
Plymouth	22.2	81.0
Sunderland	21.4	74.0
Bristol	20.6	70.6
Doncaster	20.3	67.8
Norwich	19.6	75.9
Luton	18.1	74.0
Derby	17.6	80.2
Knowsley	16.5	69.9
Hull	11.0	66.9
Leicester	9.9	68.5
Newcastle	7.7	56.7
Coventry	4.7	59.4

Source: DfES; Social Disadvantage Research Centre, University of Oxford, 2002

Figure 3.5 shows the proportions of pupils achieving five or more Key Stage 4 (GCSE) A*-C grade passes in 2002, for England as a whole, the NDC areas as a whole, and the ten IMD 2004 decile groups. As in the Key Stage 2 analysis, a strong relationship between deprivation and education performance is suggested by the decrease of Key Stage 4 attainment with increasing level of deprivation over the ten IMD 2004 decile groups. The England rate is closest to the middle IMD 2004 group 5 performance data while the NDC areas as a whole are closest to the most deprived group. This supports the analysis in the Chapter 1, identifying the NDC areas, as a whole, as having a similar level of deprivation to the most deprived 10% of all areas across England.

Figure 3.5: Proportion of pupils achieving 5 or more Key Stage 4 (GCSE) A*-C passes, 2002

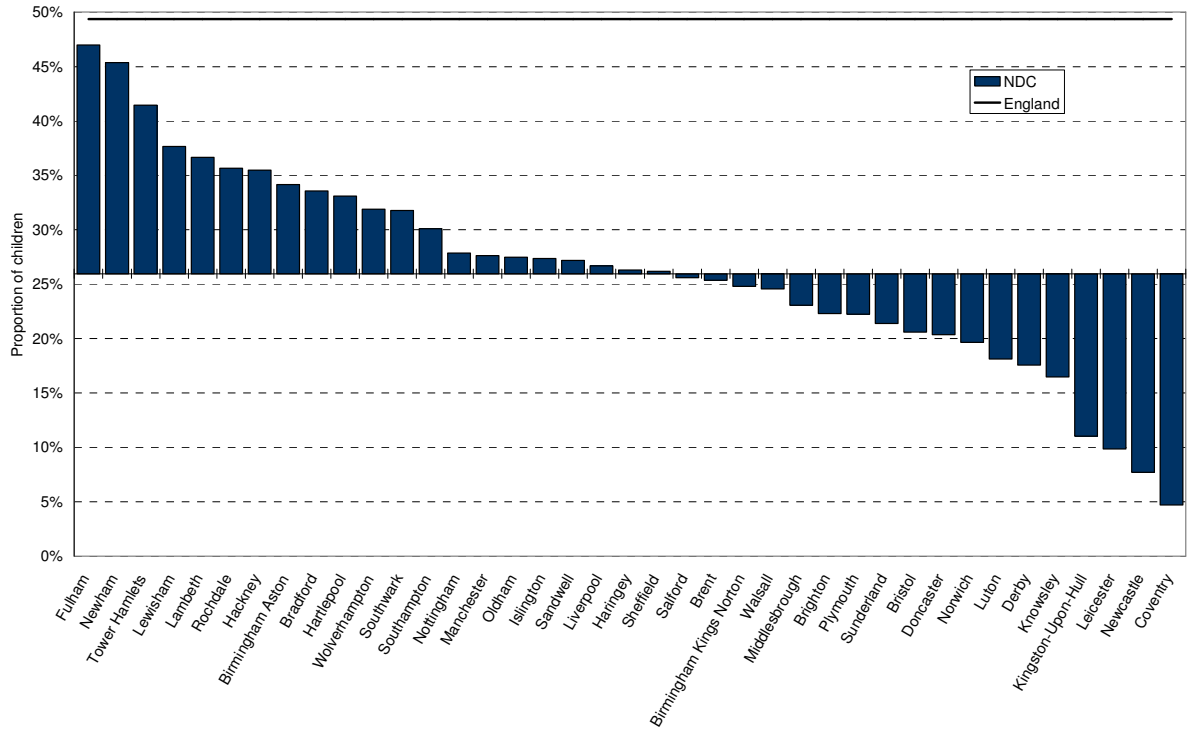


Source: DfES (PLASC and NPD datasets), 2002

Figure 3.6 below shows the proportions of pupils achieving five or more Key Stage 4 (GCSE) A*-C grade passes in 2002 for the individual NDC areas. The horizontal line shows the England rate, and the NDC area columns are shown with baselines set to the NDC average. In contrast to the Key Stage 2 analysis, no NDC areas performing better than England as a whole. The three NDC areas with more than 40% of pupils achieving 5 or more A*-C passes are all in London – Fulham, Newham, and Tower Hamlets – as are six of the seven NDC

areas with the highest proportions. Some areas are doing extremely poorly, with the three NDC areas in Coventry, Newcastle and Leicester showing proportions below 10% of pupils achieving 5 or more A*-C passes at GCSE level.

Figure 3.6: Proportion of pupils in NDC areas achieving 5 or more Key Stage 4 (GCSE) A*-C passes, 2002



Source: DfES (PLASC and NPD datasets), 2002

3.4 Pupil attainment summary

At both Key Stage 2 and Key Stage 4, NDC areas are performing well below the England average with performance comparable to the most deprived 10% of all areas across England. Within the individual NDC areas there is considerable variation, with a number of London areas doing better than the England average at Key Stage 2, although no NDC areas perform better than England, as a whole, for the important Key Stage 4 (GCSE) examinations.

From the results presented in this section there is some indication of local, or possibly regional, effects; many of the best performing NDC areas in education are concentrated in the London area. Other studies have indicated better than expected results for schools in the London area. As ever, it is likely that there is a combination of reasons for this pattern of

results. It may be that London schools are better resourced, that families and young people in disadvantaged areas in London are more highly motivated towards educational progress, or it may be that requirements of the local labour market act as a stimulus to getting qualifications. The second observation to draw out is the so-called cumulative effect of disadvantage – according to which pupils from disadvantaged areas tend to fall further behind the average as they get older - so that, in this data the performance gap between England and the NDC areas is wider at KS4 than it is at KS2. However, detailed inspection of these results at NDC area level and by type of area suggest that the actual patterns are much more varied than a simple conclusion of 'cumulative disadvantage'. Some areas appear to be doing rather better at KS4 than they were at KS2.

Section 4. Adult education, training and skills

The previous section focused on the educational performance of young people as measured through school level Key Stage exams. However, the education and skill level of the broader population within an area is also an important education indicator. In this section we look at self-reported adult qualifications, collected through the NDC Household Survey, and the Census 2001.

4.1 Measuring adult qualifications

The NDC Household Survey (MORI, 2002) gives us a detailed picture of educational qualifications in the adult population across the NDC areas, with a sample of 500 households in each NDC area. The NDC Household Survey data is available at individual level, allowing analysis of the relationship between qualifications and individual characteristics such as age and ethnic group.

Additional information is taken from the 2001 Census, the most detailed survey of the population across the country, which enables comparisons to be drawn between NDC areas and the country as a whole. The Census information is available aggregated to small area level. The SDRC has produced Census Output Area (OA) to NDC area population-weighted lookup tables, allowing information at OA level to be aggregated to NDC area. See Appendix A for further details of the administrative and statistical geographies and lookup tables.

4.2 Adult qualifications across the NDC areas

Table 4.1 below shows the proportion of adults aged 16-74 with no qualifications, and the proportion of adults aged 25-74 with degree level qualifications by NDC area, taken from the NDC Household Survey. Figures 4.1 (no qualifications) and 4.2 (degree level qualifications) below show the same information charted across the 39 NDC areas. In both figures the NDC columns are shown with baselines set to the NDC average.

The proportion of adults with no qualifications (figure 4.1) varies by NDC area from just over 18% in Lambeth, to nearly 50% in Coventry. Four other areas have rates over 40% - Knowsley, Kingston-upon-Hull, Leicester and Tower Hamlets - with the average across all NDC areas at 31.5%.

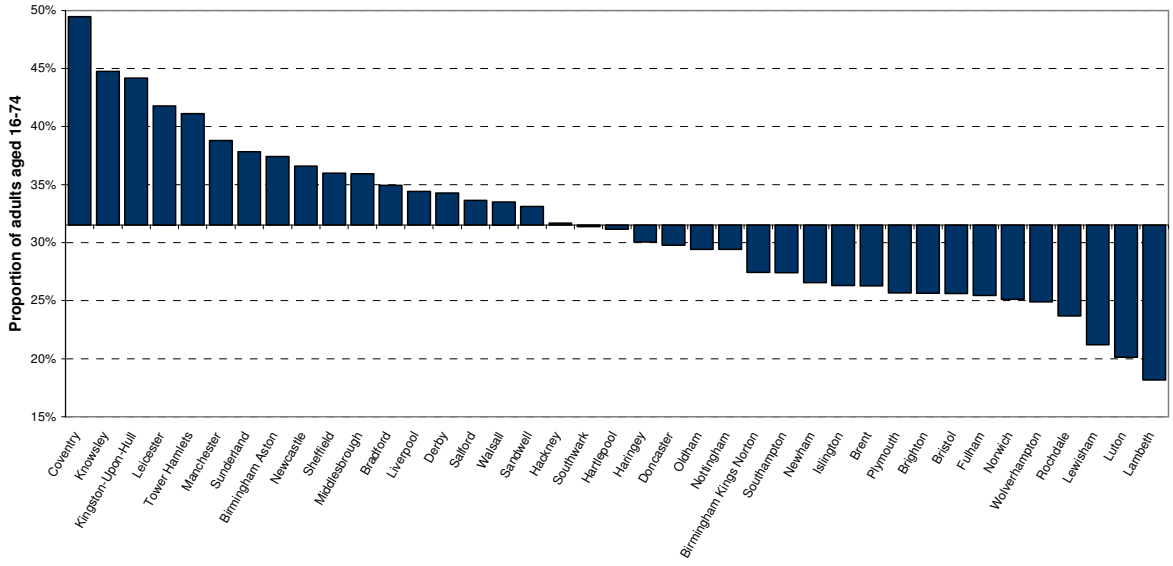
The proportion of adults with degree level qualifications varies by NDC area from over 27%, again in Lambeth, to 0.3% in Kingston-upon-Hull. Fourteen areas have proportions below 5%, with the NDC average 8.8%.

Table 4.1: Adult qualifications by NDC area

	Adults aged 16-74 with no qualifications %	Adults aged 25-74 with degree level qualifications %
All NDC areas combined	31.5	8.8
Coventry	49.5	1.6
Knowsley	44.7	0.7
Hull	44.2	0.3
Leicester	41.8	2.5
Tower Hamlets	41.1	14.5
Manchester	38.8	3.6
Sunderland	37.8	5.4
Birmingham A	37.4	6.3
Newcastle	36.6	10.4
Sheffield	36.0	12.3
Middlesbrough	35.9	2.0
Bradford	34.9	7.2
Liverpool	34.4	5.6
Derby	34.3	5.0
Salford	33.6	5.7
Walsall	33.5	2.4
Sandwell	33.1	4.8
Hackney	31.7	14.2
Southwark	31.4	9.4
Hartlepool	31.2	2.9
Haringey	30.1	19.5
Doncaster	29.8	7.1
Nottingham	29.4	13.6
Oldham	29.4	2.7
Birmingham KN	27.4	4.0
Southampton	27.4	4.4
Newham	26.6	16.4
Brent	26.3	15.1
Islington	26.3	24.3
Brighton	25.7	7.0
Plymouth	25.7	3.7
Bristol	25.6	12.5
H'smith & Fulham	25.4	23.9
Norwich	25.1	5.3
Wolverhampton	24.9	9.3
Rochdale	23.7	2.6
Lewisham	21.2	16.5
Luton	20.1	8.0
Lambeth	18.2	27.2

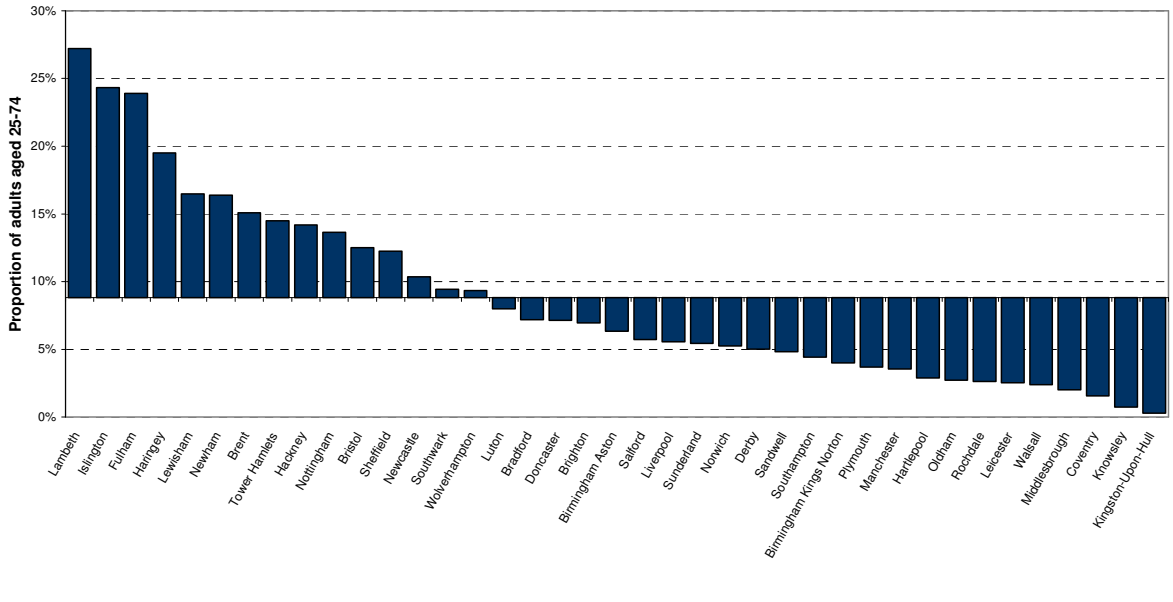
Source: MORI, 2002

Figure 4.1: Adults aged 16-74 with no qualifications: all NDC areas



Source: MORI, 2002

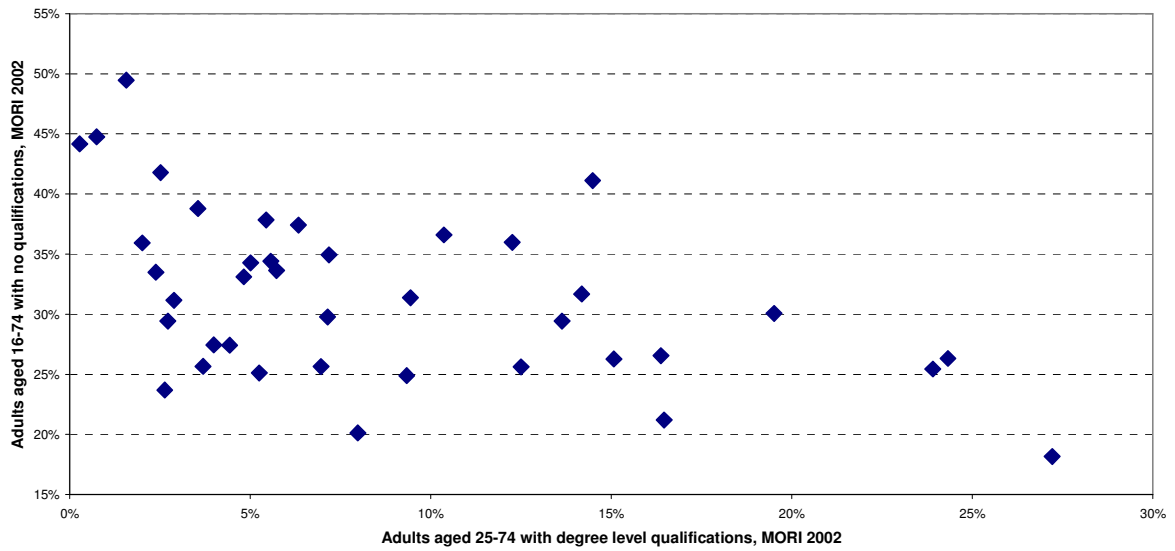
Figure 4.2: Adults aged 25-74 with degree level qualifications: all NDC areas.



Source: MORI, 2002

Figure 4.3 below shows the proportion of adults aged 16-74 with no qualifications against the proportion of adults aged 25-74 with degree level qualifications for all NDC areas. There is a weak negative correlation ($P<0.05$) between the two indicators – areas with large proportions of adults with no qualifications are also likely to have small proportions of adults with degree level qualifications.

Figure 4.3: Adult qualifications: all NDC areas



Source: MORI, 2002

4.3 Adult qualifications by individual characteristics

Table 4.2 below shows the proportions of adults surveyed with no qualifications and degree level qualifications, broken down by gender, age and ethnic group. There are clear trends in both the gender and age breakdowns – males and younger people are less likely to have no qualifications, and more likely to have degree level qualifications. There are also interesting breakdowns by ethnic group, with those of Bangladeshi origin likely to be the least well educated - most likely to have no qualifications and least likely to have degree-level qualifications – and those of Chinese origin likely to be the most highly educated - least likely to have no qualifications and most likely to have a degree.

Table 4.2: Adult qualifications by group

	Adults aged 16-74 with no qualifications %	Adults aged 25-74 with degree level qualifications %
All NDC areas combined	31.5	8.8
Male	22.0	11.1
Female	38.2	7.2
16-19	24.2	-
20-24	17.0	-
25-29	20.5	16.0
30-39	21.5	12.2
40-49	27.9	8.8
50-59	41.0	5.9
60-69	55.2	2.7
70-74	63.1	1.7
White	32.6	7.6
Black African	20.4	20.4
Black Caribbean	28.2	6.9
Indian	24.9	11.6
Pakistani	33.8	10.5
Bangladeshi	44.3	5.5
Chinese	15.2	40.4
Mixed	27.4	10.3
Other	29.7	17.2

Source: MORI, 2002

The NDC Household Survey allows us to examine the possibility that these differences are caused by overlap in the different groups; for example, the Chinese participants in the survey might be younger on average than other groups, which would account for the better adult qualification results seen. Table 4.3 below shows a logistic regression analysis of the two

qualification indicators for the population of 25-74 year olds, showing the Odds Ratios against reference groups of whites, males and those aged 25 to 29. Significant ratios (P<0.05) are shown in bold.

The logistic analysis confirms the story from Table 4.2 – males and younger people are less likely to have no qualifications, and more likely to have degree level qualifications. After allowing for age and ethnic differences, women are 2.9 times more likely to have no qualifications than men and over 40% less likely to have degree level qualifications. The older groups are also less likely to have adult qualifications, with 70 to 74 year olds nearly nine times as likely to have no qualifications, and 90% less likely to have degree level qualifications. It is interesting to note how early these differences appear, with 30 to 34 year olds nearly 30% less likely to have a degree than 25 to 29 year olds, and 40 to 49 year olds over 50% less likely to have a degree than 25 to 29 year olds.

Table 4.3: Adult qualifications by group, 25-74 year olds

	No qualifications		Degree level qualifications	
	Odds ratio	95% CI	Odds ratio	95% CI
Intercept	0.11		0.23	
Male	1.00		1.00	
Female	**2.90**	2.68 - 3.13	**0.58**	0.52 – 0.65
White	1.00		1.00	
Black African	**0.78**	0.65 – 0.94	**2.37**	1.96 – 2.86
Black Caribbean	**0.75**	0.63 – 0.88	0.93	0.71 – 1.23
Indian	1.06	0.79 – 1.42	1.32	0.89 – 1.97
Pakistani	**1.76**	1.40 – 2.20	1.10	0.78 – 1.54
Bangladeshi	**4.23**	3.32 – 5.39	**0.50**	0.30 – 0.83
Chinese	0.93	0.49 – 1.78	**5.81**	3.34 – 10.08
Mixed	1.03	0.78 – 1.34	1.09	0.75 – 1.59
Other	1.43	1.14 – 1.78	**1.84**	1.41 – 2.39
25-29	1.00		1.00	
30-39	1.14	1.00 – 1.31	**0.72**	0.62 – 0.84
40-49	**1.78**	1.54 – 2.05	**0.49**	0.41 – 0.59
50-59	**3.31**	2.87 – 3.83	**0.34**	0.27 – 0.42
60-69	**6.30**	5.44 – 7.30	**0.15**	0.11 – 0.20
70-74	**8.87**	7.41 – 10.61	**0.10**	0.06 – 0.16

Source: MORI, 2002

As in the straight percentage breakdown in Table 4.2, there is no clear trend with ethnic group; however there are several interesting points that emerge, after allowing for age and sex bias. Those of Chinese origin are nearly six times more likely to have a degree level qualification than whites; by contrast, those of Bangladeshi origin are only half as likely as whites to have degrees, and over four times as likely to have no qualifications. Other ethnic groups containing high proportions of highly educated individuals include Black Africans, who are more than 20% less likely to have no qualifications and over twice as likely to have degree level qualifications as Whites.

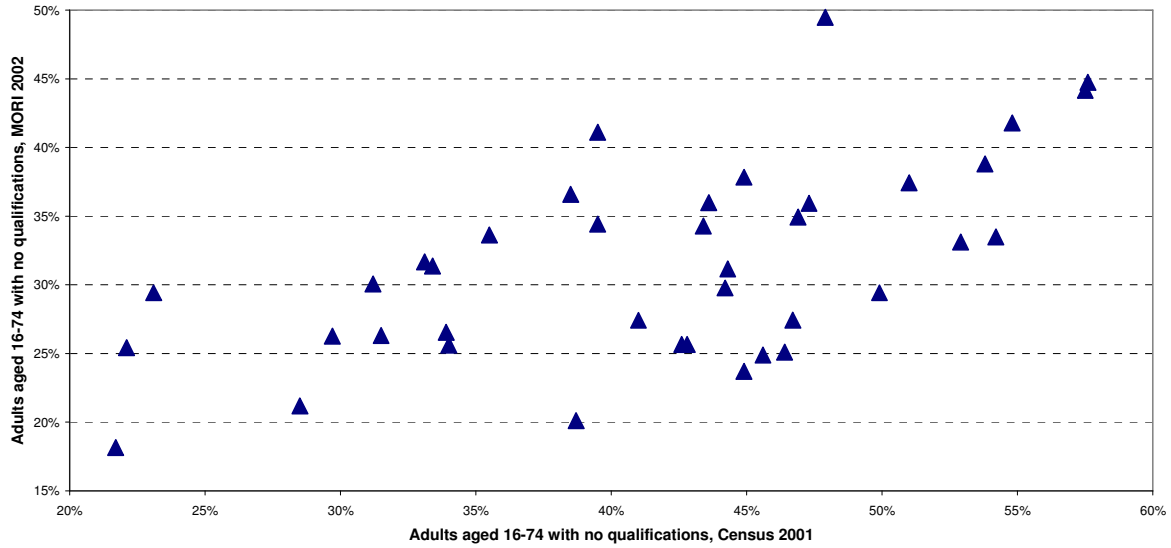
4.4 NDC areas compared with England

To compare the NDC areas with the broader picture across England we have drawn data on adult qualifications from the Census, 2001. As noted above, Census data is already aggregated to Census Output Area so we cannot carry out individual level analysis. However we can aggregate to NDC area level using population-weighted lookup tables.

Figure 4.4 shows the proportion of adults aged 16-74 plotted for all NDC areas, with the NDC Household Survey compared against Census 2001. Although there is not an exact correspondence, possibly due to differences between the Census and NDC Household Survey methodologies[6], there is an extremely strong positive correlation ($P<0.001$) between the two datasets. The Census data typically shows a slightly higher proportion of adults with no qualifications than the NDC Household Survey.

6 The main reason for differences in results between self-reported questionnaire surveys and face-to-face interview surveys may be the presence of an interviewer who probes for qualifications that might have been forgotten. This is seen particularly with low-level qualifications and "on-the-job" qualifications received as part of workplace training, which may not be remembered without the help of an interviewer. There are also differences in the NDC Household Survey and Census coding schemes. The Census may have failed to pick up some NVQ level 2 'on the job' qualifications among older people.

Figure 4.4: Adults aged 16-74 with no qualifications: Census 2001 and NDC Household Survey, all NDC areas



Source: Census 2001; MORI, 2002

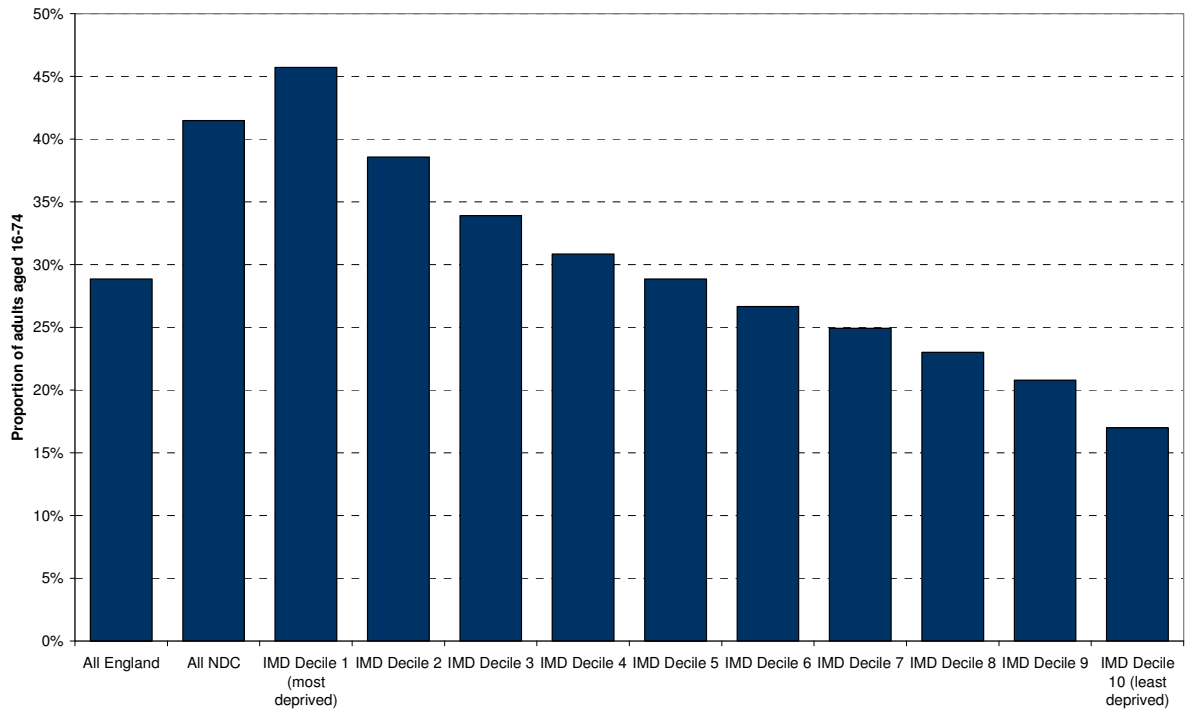
Table 4.4 below shows the proportion of adults with no qualifications in the Census 2001, for the NDC areas combined, and England as a whole. Information is also shown for the proportion across areas grouped by IMD 2004 decile. In other words, all areas in England are organised into ten equal sized groups based on the level of deprivation across each area, and the average proportion of adults with no qualifications across each of the ten groups is then calculated.

The proportion of adults across England with no qualifications is equal to the proportion of such adults in the middle IMD 2004 decile: decile 5. By comparison, the proportion across all NDC areas lies between the most deprived two deciles: deciles 1 and 2.

Table 4.4: Adult qualifications by Index of Multiple Deprivation 2004 decile	
	Adults aged 16-74 with no qualifications %
All England	28.9
All NDC areas combined	41.5
IMD 2004 Decile 1 (most deprived 10%)	45.7
IMD 2004 Decile 2	38.6
IMD 2004 Decile 3	33.9
IMD 2004 Decile 4	30.8
IMD 2004 Decile 5	28.9
IMD 2004 Decile 6	26.6
IMD 2004 Decile 7	24.9
IMD 2004 Decile 8	23.0
IMD 2004 Decile 9	20.8
IMD 2004 Decile 10 (least deprived 10%)	17.0
Source: Census, 2001; SDRC, 2004	

Figure 4.5 presents the information from Table 4.4 in chart format, comparing the England and NDC proportions of adults with no qualifications with the average proportion of adults with no qualifications in the 10 decile groups as measured by the IMD 2004. There is a clear link between deprivation and the level of adult qualifications in the population, with over 45% of all adults aged 16-74 in the most deprived 10% of all areas across England having no qualifications. By comparison, only 17% of adults aged 16-74 in the least deprived 10% of all areas have no qualifications.

Figure 4.5: Adults aged 16-74 with no qualifications.



Source: Census, 2001; SDRC, 2004.

4.5 Basic skills across the NDC areas

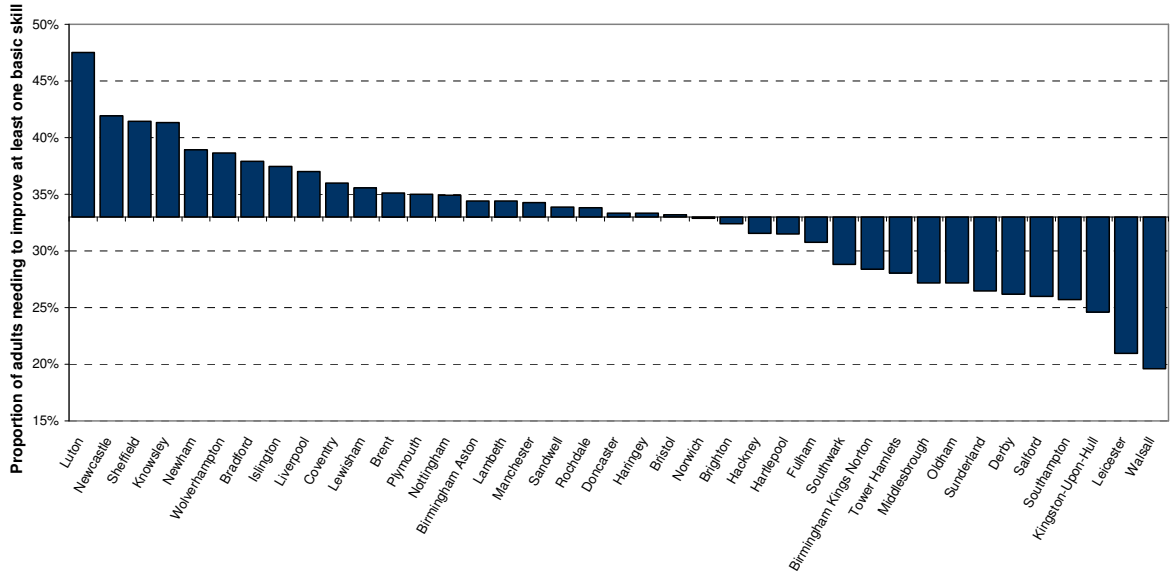
The NDC Household Survey includes data on whether an individual believes they need to improve in any one or more out of four basic skill areas: reading, writing, spelling, and maths.

Table 4.5 below shows the proportion of adults in each NDC area who believe they need to improve at least one of these basic skills. Figure 4.6 shows the same information charted across the NDC areas. The result for each NDC area is shown in comparison to the average result for all NDC areas. Across the NDC areas the proportion of survey participants who believe that they need to improve any one or more of the four basic skills in Table 4.5 ranges from 20% in Walsall and 21% in Leicester to 48% in Luton. The average for the NDC areas (33%) is slightly higher than the national average (29%[7]).

[7] Source: Basic Skills Agency

Table 4.5: Proportion of adults needing to improve at least one basic skill by NDC area	
	Adults needing to improve at least one basic skill by NDC area %
All England	29.0
All NDC average	32.8
Luton	47.5
Newcastle	41.9
Sheffield	41.4
Knowsley	41.3
Newham	38.9
Wolverhampton	38.6
Bradford	37.9
Islington	37.4
Liverpool	37.0
Coventry	36.0
Lewisham	35.6
Brent	35.1
Plymouth	35.0
Nottingham	34.9
Birmingham A	34.4
Lambeth	34.4
Manchester	34.3
Sandwell	33.9
Rochdale	33.8
Doncaster	33.3
Haringey	33.3
Bristol	33.2
Norwich	32.9
Brighton	32.4
Hackney	31.5
Hartlepool	31.5
H'smith & Fulham	30.8
Southwark	28.8
Birmingham KN	28.4
Tower Hamlets	28.1
Middlesbrough	27.2
Oldham	27.2
Sunderland	26.5
Derby	26.2
Salford	26.0
Southampton	25.7
Hull	24.6
Leicester	21.0
Walsall	19.6
Source: MORI, 2002	

Figure 4.6: Adults needing to improve at least one basic skill by NDC area.



Source: MORI, 2002

4.6 Basic skills by individual characteristics

Table 4.6: Adults needing to improve at least one basic skill by group

	Adults needing to improve at least one basic skill %
All NDC average	32.8
Male	31.9
Female	33.4
16-29	44.5
30-49	38.8
50+	19.3
No formal qualifications	31.1
Formal qualifications	33.6
First language English	30.1
First language not English	50.5

Source: MORI, 2002

Table 4.6 shows the proportions of those who believe they need to improve basic skills broken down by age group, gender, qualification level and first language. The proportion of those who believe they need to improve basic skills decreases with age. 45% of the 16-29

year olds think they need to improve basic skills. However, this drops to 19% for the 50+ age group. There is little variation between males and females in the desire to improve basic skills. 33% of females believe they need to improve basic skills compared to 32% of males. Of those with no formal qualifications, 31% believe they need to improve basic skills compared to 34% of those with formal qualifications.

For those whose first language is not English, there is an increase in the proportion who believe they need to improve basic skills. 51% of those whose first language is not English believe they need to improve basic skills in comparison with 30% of native English speakers.

Table 4.7 shows the proportion of non-native and native English speakers who believe they need to improve each basic skill. For those whose first language is not English the proportion of people wanting to improve basic skills is higher than for native English speakers for all four skills. For those whose first language is English the skill ranked highest for needing improvement is maths, followed by spelling, writing and reading. The same trend is observed nationally. However, the skill areas of most concern for non-native English speakers are writing and spelling with 36% wanting to improve these skills.

Table 4.7: Adults needing to improve at least one basic skill			
Skill	NDC First language English %	NDC First language not English %	England %
Maths	20.7	25.3	18.0
Spelling	17.7	36.0	13.0
Writing	12.8	36.3	8.0
Reading	11.1	33.0	6.0
Source: MORI, 2002, Basic Skills Agency			

Analysis using logistic regression allows further investigation of the data presented above in Table 4.6. Table 4.8 below shows a logistic regression analysis of those wanting to improve basic skills for respondents aged 16 or over. Table 4.8 shows the Odds Ratios against reference groups of males, those aged 16 to 29, those with no qualifications and those whose first language is English. Significant ratios (P<0.05) are shown in bold.

Table 4. 8: Adults needing to improve at least one basic skill by group		
	Odds ratio	95% CI
Intercept	**0.86**	
Male	1.00	
Female	1.02	0.95 - 1.08
16-29	1.00	
30-49	**0.79**	0.73 - 0.85
50+	**0.29**	0.27 - 0.32
No formal qualifications	1.00	
Formal qualifications	**0.78**	0.72 - 0.83
First language English	1.00	
First language not English	**1.98**	1.81 - 2.16
Source: MORI, 2002		

Table 4.8 confirms that the desire to improve basic skills decreases with age, controlling for the effects of gender, qualification level and first language. Those in the 30-49 age group are 20% less likely to want to improve basic skills than those aged 16 to 29, and those aged 50 or over are more than 70% less likely than the youngest age group. Those whose first language is not English are almost twice as likely to want to improve basic skills.

Interestingly, controlling for the effects of age in the above model finds that those with no qualifications are actually more than 20% more likely to want to improve basic skills than those with formal qualifications. This result can be compared to the data presented in Table 4.6, where it was seen that the proportion of people with no qualifications wanting to improve basic skills is less than the proportion of those with qualifications wanting to improve basic skills. This discrepancy can be explained by looking at the age distribution amongst those with no qualifications in Table 4.9. 56% of those with no qualifications are in the 50+ age group, which is also the age group least likely to want to improve basic skills. The proportion of those with no qualifications wanting to improve basic skills in Table 4.6 is low due to almost 60% of those with no qualifications being in the 50+ age group.

Table 4.9: Adults with no formal qualifications by age group

	No formal qualifications %	Formal qualifications %
All NDC average	64.9	35.1
16-29	19.9	80.1
30-49	24.2	75.8
50+	55.7	44.3

Source: MORI, 2002

4.7 Desire to participate in additional education or training across the NDC areas

As well as asking about the need to improve basic skills, the NDC Household Survey also asks participants if they would like to participate in any additional education or training. Full-time students have been excluded when calculating proportions of people who would like to take part in additional education or training[8].

Table 4.10 shows the proportion of respondents aged 16 or over who would like to participate in additional education or training for each NDC area. The same data is charted in Figure 4.7, where the result from each NDC is compared to the average for all NDC areas, indicated by the baseline.

8 In total, 5% of the NDC Household Survey respondents were full-time students. The Nottingham NDC area had the highest proportion of students (16%). Three other NDC areas: Newcastle, Southwark and Tower Hamlets had 10% or more students amongst survey participants.

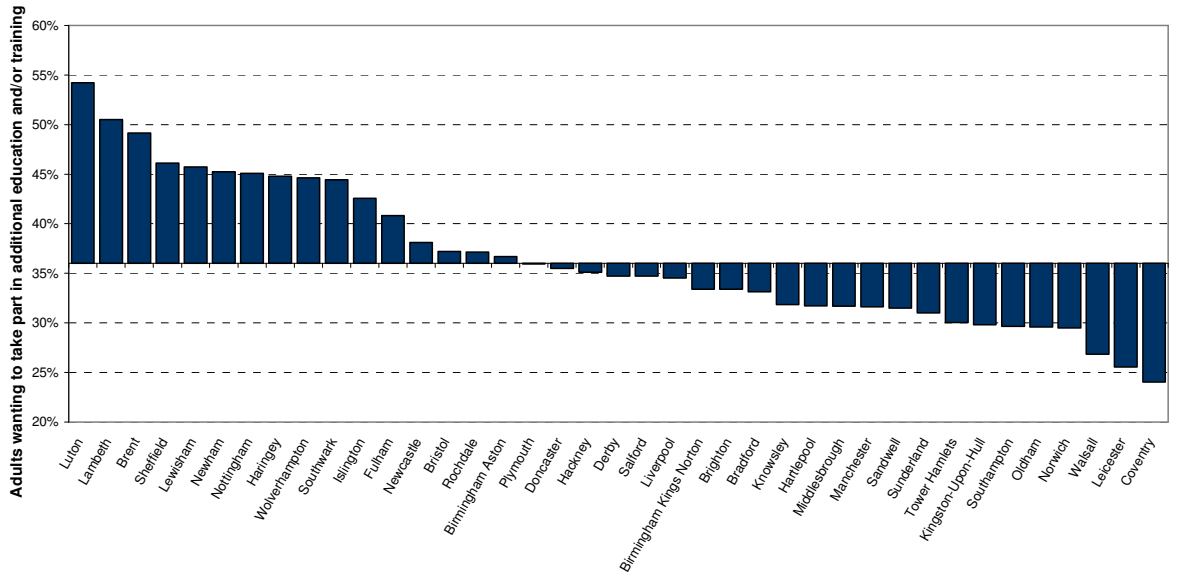
On average, 37% of survey participants would like to take part in additional education or training. Luton has the highest proportion of people wanting to participate in additional education and training at 54% followed by Lambeth (51%) and Brent (49%). Coventry and Leicester had the lowest rates: 24% and 26% respectively.

Table 4.10: Adults wanting to participate in additional education and/or training by NDC area

	Adults wanting to participate %
All NDC average	36.5
Luton	54.2
Lambeth	50.5
Brent	49.2
Sheffield	46.1
Lewisham	45.7
Newham	45.2
Nottingham	45.1
Haringey	44.8
Wolverhampton	44.6
Southwark	44.4
Islington	42.6
H'smith & Fulham	40.8
Newcastle	38.1
Bristol	37.2
Rochdale	37.1
Birmingham A	36.7
Plymouth	36.0
Doncaster	35.5
Hackney	35.1
Derby	34.7
Salford	34.7
Liverpool	34.5
Birmingham KN	33.4
Brighton	33.4
Bradford	33.1
Knowsley	31.9
Hartlepool	31.7
Middlesbrough	31.7
Manchester	31.6
Sandwell	31.5
Sunderland	31.0
Tower Hamlets	30.0
Hull	29.8
Southampton	29.7
Oldham	29.6
Norwich	29.5
Walsall	26.8
Leicester	25.6
Coventry	24.0

Source: MORI, 2002

Figure 4.7: Adults wanting to participate in additional education and/or training by NDC area



Source: MORI, 2002

4.8 Desire to participate in additional education or training by individual characteristics

Table 4.11 shows the proportions of respondents not in full-time education who would like to participate in additional education and training broken down by age group, gender, qualification level and first language. The second column shows the proportion who want to participate in order to improve job opportunities (as a percentage of those who want to participate).

Table 4.11: Adults wanting to participate in additional education and/or training by group		
	Wanting to participate %	Want to improve job opportunities (of those who want to participate) %
All NDC average	63.5	80.5
Male	34.8	79.7
Female	37.6	81.0
16-29	58.4	90.5
30-49	48.3	83.2
50+	13.2	43.6
No formal qualifications	19.3	73.2
Formal qualifications	46.2	82.2
First language English	34.7	79.9
First language not English	49.7	83.6
Source: MORI, 2002		

The proportion of adults wanting to participate in additional education and training decreases with age. Of those aged 16-29, 58% would like to participate, but this falls to 13% for those aged 50 or over. For the group with no qualifications only 19% would like to participate in additional education or training, compared to 46% of those with formal qualifications.

50% of non-native English speakers would like to attend additional education and training, compared to 35% of native English speakers. Overall, 81% of those wanting to participate in additional education or training are aiming to improve their job opportunities. This figure increases to 91% for the youngest age group, 16 to 29 year olds and drops to 44% for those aged 50 or over.

Logistic regression allows further investigation of the data presented above in Table 4.11. Table 4.12 below shows a logistic regression analysis of those wanting to attend additional education or training for respondents aged 16 or over not in full-time education. Table 4.12 shows the Odds Ratios against reference groups of males, those aged 16 to 29, those with no qualifications and those whose first language is English. Significant ratios ($P<0.05$) are shown in bold.

The results of the analysis below support the results from Table 4.11 regarding the effect of age, language and qualifications on the desire to take part in additional education or training. Compared to 16 to 29 year olds, 30 to 49 year olds are 32% less likely to want to participate in additional education and training, and those aged 50 or over are 86% less likely. Non-native English speakers are over 60% more likely to want to participate in additional education and training. Looking at the effect of qualifications on wanting to participate in additional education and training, it is interesting to compare the results in Table 4.8 with Table 4.12. Controlling for the effects of the other variables, those with no qualifications are slightly more likely than those with qualifications to want to improve basic skills. However, Table 4.12 shows that the same group is 2.6 times less likely to want to attend additional education and training.

Table 4.12: Adults wanting to participate in additional education and/or training by group

	Odds ratio	95% CI
Intercept	**0.54**	
Male	1.00	
Female	**1.26**	1.18 - 1.35
16-29	1.00	
30-49	**0.68**	0.63 - 0.74
50+	**0.14**	0.13 - 0.16
No formal qualifications	1.00	
Formal qualifications	**2.55**	2.36 - 2.76
First language English	1.00	
First language not English	**1.61**	1.46 - 1.77

Source: MORI, 2002

4.9 Participation in additional education or training across the NDC areas

This section looks at actual participation rates in additional education and training for adults over the age of 16 in the previous year[9], excluding those who are full-time students. Comparison is also made between the actual rates of participation and the rates of those expressing a desire to participate (see section 4.7).

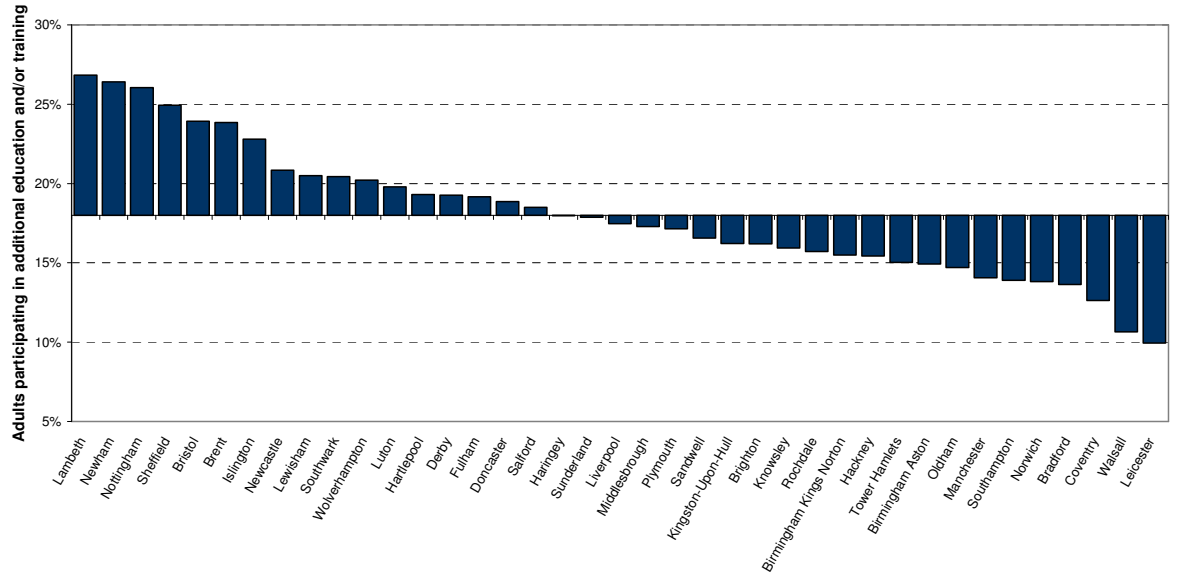
Table 4.13 shows the participation rates in additional education and training across the NDC areas, and the participation rates for those who expressed a desire to participate in additional education and training. The same data is charted in Figures 4.8 and 4.9, where the result from each NDC is compared to the average for all NDC areas, indicated by the baseline. On average, 18% of participants have taken part in additional education or training in the last year. This figure is lower than the national average: 29% participation. However, there is considerable variation across the NDC areas with only 10% participation in Leicester and 27% participation in Lambeth and 26% participation in Newham NDC areas.

The second column in Table 4.13 shows the proportion of those who expressed a desire to participate in additional education and training who have already undertaken such training. On average, 35% of those who said they would like to participate in additional education and training have already taken part, or are currently doing so.

9 Participation in additional education or training includes those who have completed additional education or training in the past year or are currently completing additional education or training. Those who undertook additional education or training more than a year ago are classified in the NDC Household Survey as not having participated.

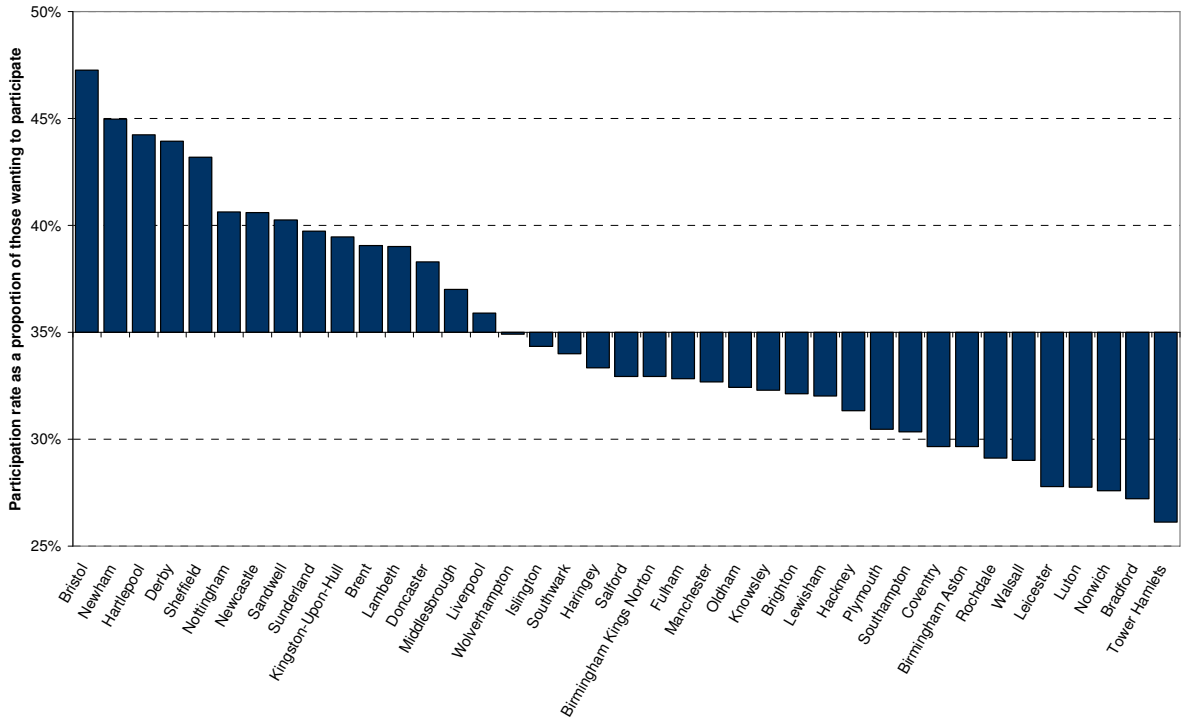
Table 4.13: Participation in additional education / training		
	Taken part in additional education / training %	Actual participation as a proportion of those who would like to participate %
England	29.0	-
All NDC average	18.0	35.1
Lambeth	26.8	39.0
Newham	26.4	45.0
Nottingham	26.1	40.6
Sheffield	24.9	43.2
Bristol	23.9	47.3
Brent	23.8	39.1
Islington	22.8	34.3
Newcastle	20.9	40.6
Lewisham	20.5	32.0
Southwark	20.4	34.0
Wolverhampton	20.2	34.9
Luton	19.8	27.8
Hartlepool	19.3	44.2
Derby	19.3	43.9
H'smith & Fulham	19.2	32.8
Doncaster	18.9	38.3
Salford	18.5	32.9
Haringey	18.0	33.3
Sunderland	17.9	39.7
Liverpool	17.5	35.9
Middlesbrough	17.3	37.0
Plymouth	17.1	30.5
Sandwell	16.6	40.3
Hull	16.2	39.5
Brighton	16.2	32.1
Knowsley	15.9	32.3
Rochdale	15.7	29.1
Birmingham KN	15.5	32.9
Hackney	15.4	31.3
Tower Hamlets	15.0	26.1
Birmingham A	14.9	29.7
Oldham	14.7	32.4
Manchester	14.0	32.7
Southampton	13.9	30.3
Norwich	13.8	27.6
Bradford	13.6	27.2
Coventry	12.6	29.7
Walsall	10.7	29.0
Leicester	9.9	27.8
Source: MORI, 2002		

Figure 4.8: Participation in additional education / training



Source: MORI, 2002

Figure 4.9: Actual participation as a proportion of desired participation



Source: MORI, 2002

4.10 Participation in additional education or training by individual characteristics

Table 4.14 shows the proportions of adults not in full-time education who have participated in additional education and training broken down by age group, gender, qualification level and first language.

Table 4.14: Participation in additional education / training by group

	Taken part in additional education / training %
All NDC average	18.0
Male	17.4
Female	18.4
16-29	27.9
30-49	24.3
50+	6.5
No formal qualifications	5.4
Formal qualifications	25.2
First language English	17.3
First language not English	23.2

Source: MORI, 2002

Participation rates are highest in the 16 to 29 (28%) and 30 to 49 (24%) year old age groups. Only 7% of the over 50s have participated in additional education and training. Males and females show approximately equal rates of participation (17% and 18%). Of those with no qualifications only 5% have taken part in additional education and training. Actual participation rates amongst those whose first language is not English are higher than for native English speakers: 23% compared to 17%.

As before, logistic regression is used to analyse the results in more detail. Table 4.15 shows the logistic regression analysis for actual rates of participation in additional education or training for all respondents aged 16 or over not in full-time education. Table 4.15 shows the Odds Ratios against reference groups of males, those aged 16 to 29, those with no qualification and those who are native English speakers. Significant ratios ($P<0.05$) are shown in bold. Table 4.15 shows that older people are less likely to have participated in

additional education or training. The 50+ age group is more than 70% less likely to have participated than the 16-29 age group.

Table 4.15: Adults having participated in additional education and/or training by group

	Odds ratio	95% CI
Intercept	**0.09**	
Male	1.00	
Female	**1.24**	1.15 - 1.35
16-29	1.00	
30-49	**0.86**	0.79 - 0.94
50+	**0.27**	0.24 - 0.31
No formal qualifications	1.00	
Formal qualifications	**4.56**	4.05 - 5.14
First language English	1.00	
First language not English	**1.33**	1.19 - 1.49

Source: MORI, 2002

This is consistent with the result that older age groups are less likely to consider that they need to improve basic skills or attend additional education or training. Women are 24% more likely to have participated than men. Non-native English speakers are over 30% more likely to have participated in additional education or training than those whose first language is English. The effect of having no qualifications shows up most strongly in the analysis. Controlling for the effects of the other variables, those with formal qualifications are 4.6 times more likely to have participated in additional education or training than those with no qualifications.

4.11 Use of computing facilities across the NDC areas

Computing facilities, internet and email may be an important means of providing access to educational resources and improving skills. The NDC Household Survey provides data about access to computing facilities at home and at work or a place of study.

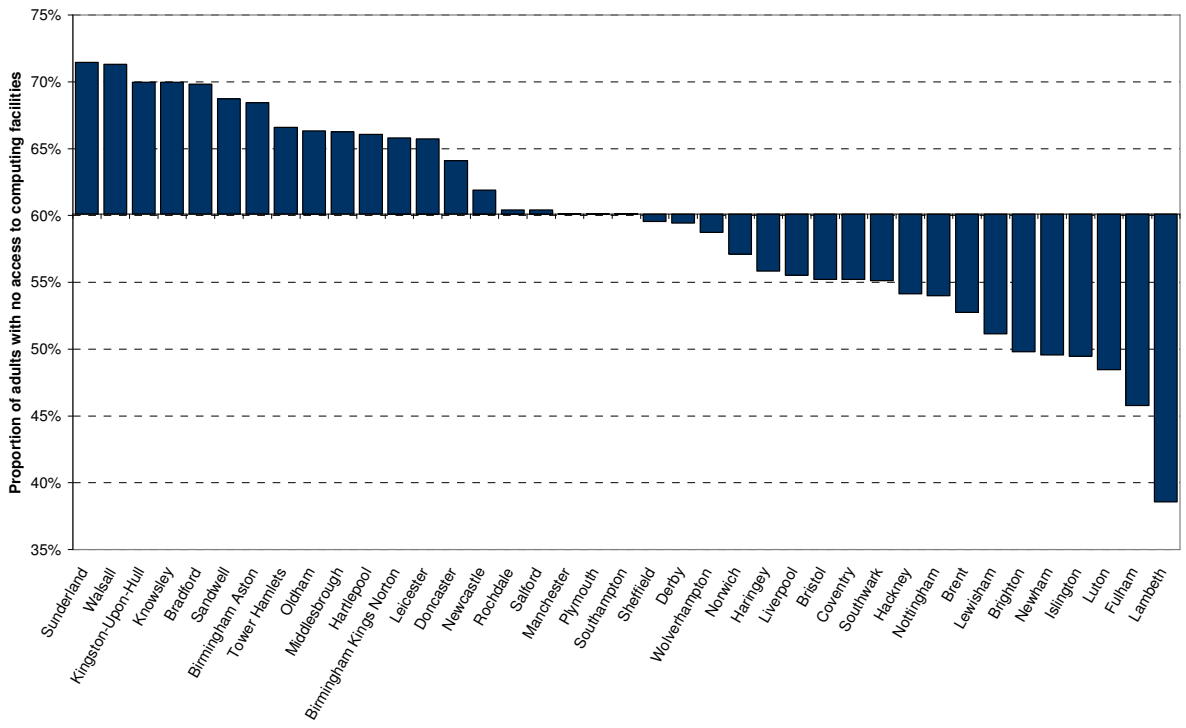
The proportion of respondents who do not use any computing facilities (excluding full-time students) is 60%. Table 4.16 shows the proportion of adults who do not use any computing facilities across the NDC areas. The same data is charted in Figure 4.10, where the result from each NDC is compared to the average for all NDC areas.

Table 4.16: No use of any computing facilities by NDC area

	No use of computing facilities %
All NDC average	60.1
Sunderland	71.5
Walsall	71.3
Hull	70.0
Knowsley	70.0
Bradford	69.8
Sandwell	68.7
Birmingham A	68.4
Tower Hamlets	66.6
Oldham	66.3
Middlesbrough	66.3
Hartlepool	66.1
Birmingham KN	65.8
Leicester	65.7
Doncaster	64.1
Newcastle	61.9
Rochdale	60.4
Salford	60.4
Manchester	60.1
Plymouth	60.1
Southampton	60.1
Sheffield	59.5
Derby	59.4
Wolverhampton	58.7
Norwich	57.1
Haringey	55.8
Liverpool	55.5
Bristol	55.2
Coventry	55.2
Southwark	55.1
Hackney	54.1
Nottingham	54.0
Brent	52.7
Lewisham	51.1
Brighton	49.8
Newham	49.6
Islington	49.5
Luton	48.5
H'smoth & Fulham	45.8
Lambeth	38.6

Source: MORI, 2002

Figure 4.10: No use of computing facilities by NDC area



Source: MORI, 2002

In five NDC areas; Sunderland, Walsall, Kingston-upon-Hull, Knowsley and Bradford 70% or more adults do not use any computing facilities. Rates of computer usage are highest in the London NDC areas. In Lambeth, Fulham, Luton and Islington more than 50% of adults have access to computing facilities.

4.12 Use of computing facilities at home by individual characteristics

Table 4.17 shows the proportions of those who use computing facilities at home and at work. 33% of adults have access to computing facilities at home and 20% have access to computing facilities at work.

Table 4.17: Use of computing facilities at work and at home.

		Use of computer at home?		
		No	Yes	Total
Use of computer at place of work / study?	No	76%	24%	80%
	Yes	33%	67%	20%

Source: MORI, 2002.

Of those who use computing facilities at work, 67% also have access to these facilities at home. On the other hand, of those who do not have computer access at work (80%), 76% have no access to computing facilities at home either. Table 4.18 below shows a breakdown of the proportion who have use of a computer at home by age group, qualification level, participation in training, and ethnic group[10].

10 The analysis does not include those who use computers at work or a place of study as this may include people who have access through an educational establishment.

Table 4.18: Use of computing facilities at home by group	
	Use a computer at home %
England	56.0
All NDC Average	33.1
16-29	43.8
30-49	47.1
50+	13.6
Formal Qualifications	45.6
No formal qualifications	11.3
Do not need to improve basic skills	34.4
Need to improve basic skills	32.5
Would not like to participate in additional education / training	23.6
Would like to participate in additional education / training	49.7
Have not participated in additional education / training	27.1
Have participated in additional education / training	60.5
White	32.0
Black African	46.3
Black Caribbean	34.8
Indian	41.3
Pakistani	31.1
Bangladeshi	27.4
Chinese	50.0
Mixed	37.6
Other	33.0
Source: MORI, 2002, MORI Tech Tracker	

The proportion of respondents who use a computer at home in the NDC areas is lower than the national average: 33% compared to 56%.

Only 14% of those aged 50 or over use a computer at home, compared to 44% of 16 to 29 year olds. For the group with no formal qualifications, only 11% use a computer at home. 50% of those who would like to participate in additional education and training use computing facilities at home, and 61% of those who have participated in additional education and training have a computer at home.

Table 4.19: Use of computing facilities at home by group		
	Odds ratio	95%CI
Intercept	**0.74**	
16-29	1.00	
30-49	**1.27**	1.16 - 1.38
50+	**0.35**	0.31 - 0.39
Formal qualifications	1.00	
No formal qualifications	**0.26**	0.23 - 0.28
Do not need to improve basic skills	1.00	
Need to improve basic skills	**0.69**	0.64 - 0.74
Would not like to participate in additional education / training	1.00	
Would like to participate in additional education / training	**1.66**	1.53 - 1.79
Have not participated in additional education / training	1.00	
Have participated in additional education / training	**2.12**	1.95 - 2.32
White	1.00	
Black African	0.94	0.80 - 1.10
Black Caribbean	0.88	0.75 - 1.02
Indian	1.23	0.95 - 1.60
Pakistani	**0.76**	0.61 - 0.95
Bangladeshi	**0.68**	0.53 - 0.88
Chinese	1.58	0.84 - 2.99
Mixed	0.83	0.66 - 1.04
Other	**0.69**	0.55 - 0.86
Source: MORI, 2002		

The proportion having a computer at home also varies by ethnic group. Individuals of Chinese and Black African origin have the highest rates of usage at 50% and 46% respectively. Individuals of Bangladeshi origin have the lowest proportion of respondents who use a computer at home: 27%.

Logistic regression is used to further investigate the data. Table 4.19 above shows the results of this analysis for all respondents over the age of 16 who use computing facilities at home (excluding full-time students).

Table 4.19 shows the Odds Ratios against reference groups of Whites, those aged 16 to 29, those who have formal qualifications, those who do not need to improve basic skills, those who have not participated in additional education or training and those who do not want to participate in additional education or training. Significant ratios ($P<0.05$) are shown in bold.

The results in Table 4.19 show that those who either have or would like to participate in additional education and training are approximately twice as likely to have access to a computer at home. However, those who want to improve their basic skills (reading, writing, spelling and maths) are 30% less likely to have access to a computer at home. Those with no formal qualifications are also significantly less likely (by almost 75%) to have access to a computer at home than those with any formal qualifications. Pakistanis and Bangladeshis are also less likely to have a computer at home compared to Whites.

The results suggest that access to computing facilities is an important factor in adult education and training outcomes. However, further analysis is needed as access to a computer at home may be masking the effect of another variable such as household income level.

4.13 Adult education, training and skills summary

This chapter has looked at adult qualification levels, basic skills, participation in additional education and training and access to computing facilities in the NDC areas.
We have drawn on the NDC Household Survey and Census 2001 to compare levels of adult qualifications within the NDC areas, and with the picture across England as a whole. As in the section on pupil attainment, the levels of adult qualification across the NDC areas are well below the national averages, and comparable to the most deprived 10% of all areas in England. There is also considerable variation across the NDC areas – in two areas (Kingston-upon-Hull and Knowsley) there are less than 1% of all adults aged 25-74 with degree level qualifications, compared to over 27% of such adults in Lambeth.

Analysis of the breakdown of qualifications at individual level showed that across the NDC areas, males and younger people are significantly less likely to have no qualifications and more likely to have degree level qualifications. Similarly, individuals in some ethnic groups are doing significantly better than white individuals, with those of Chinese and Black African origin more likely to have degree level qualifications. By contrast those of Bangladeshi origin

are only half as likely as white groups to have degrees, and more than four times as likely to have no qualifications.

There is considerable variation across NDC areas in terms of the proportion of adults wanting to improve skills or attend training. In general the London NDC areas tend to have higher rates of participation in additional education and training.
As age increases individuals are less likely to want to improve basic skills or participate in training. Those with no qualifications are more likely to want to improve basic skills but less likely to participate, or want to participate, in any additional education or training. An individual with any formal qualification is nearly 5 times more likely to have participated in additional education and training than an individual with no formal qualifications.

Participation in additional education and training is significantly increased when an individual has access to a computer at home. Only 11% of individuals with no qualifications have access to a computer at home.

Section 5. Applications to Higher Education

The proportion of people going on to Higher Education across an area is a strong indicator of educational strength, showing enormous range across England from under 5% in the most disadvantaged areas, to near 100% in the most advantaged areas (*The English Indices of Deprivation 2004*, p28). The government's regeneration policies emphasise the importance of increasing the proportion of people going on to further/higher education from disadvantaged backgrounds and areas. This section focuses on the proportions of successful applicants to Higher Education across the NDC areas, also compared with the broader picture across the country.

5.1 Measuring applications to Higher Education

The University Central Admissions Service (UCAS) collects data on all full time applicants to first degrees in Higher Education, including age, sex, ethnic group, application outcome and residential postcode at the time of admission. UCAS data is apparently back-coded with data from universities, to include direct entrants who may not have originally applied through the UCAS system. For the NDC National Evaluation, UCAS has made available individual level record datasets for successful applications to Higher Education for the years 1999 to 2003, linked to the residential postcode for each record. The SDRC team has produced population-weighted lookup tables linking these postcodes to standard geographies including Census Output Areas and Census Wards, and also to NDC areas (see Appendix A for further details of the lookup tables).

This provides a count of successful applicants by age for any given geographical area; however there are two issues that need to be addressed when measuring the proportion of successful applicants to Higher Education across an area – mature applicants and population denominators.

5.1.1 Mature Applicants

Mature applicants are more likely to have moved area by the time they apply for Higher Education, with a significant number likely to move for economic reasons. In other words, the geographical distribution of mature student applications to Higher Education may well be subject to systematic bias[11]. Without more detailed information, for example survey data, it is

11 Indeed the proportions of mature applicants, those aged 21 and over, is far higher in more deprived areas than in less deprived areas, see section 5.3 for further details.

extremely difficult to separate out this group from applicants in such areas who are simply applying later for university. For these reasons we use only application data for people aged under 21 – these are more likely to be undergraduate applicants applying from their "home" area.

5.1.2 Population denominators

To turn the raw counts of successful applicants into a population rate, we need the relevant population denominator. Unfortunately this is not straightforward. The first approximation is to use the area populations, either through Census or Mid Year Estimate counts. However this will include all people who have moved into the area. For example, in areas with significant numbers of students such as the Nottingham NDC programme area, this will lead to an inflated population for age groups over 17. A second option is to use the Pupil Level Annual School Census (described further in Section 3). However, this excludes all pupils from independent schools so again may lead to systematic area bias. A third option is to use information on Child Benefit, which is known to have extremely high take-up rates. However, for children over 16 Child Benefit is provided only for those in non-advanced further education, so may significantly undercount the population in some areas.

Table 5.1a: Successful applicants under 21 to Higher Education by NDC area and year

	1999 %	2000 %	2001 %	2002 %	2003 %
All England	32.1	32.8	34.5	34.9	35.1
All NDC	15.3	17.3	18.5	18.5	19.5
IMD 2004 Decile 1 (most deprived 10%)	13.4	14.7	16.0	16.1	17.2
IMD 2004 Decile 2	18.0	18.7	20.2	20.7	21.6
IMD 2004 Decile 3	21.9	22.4	24.4	24.8	25.6
IMD 2004 Decile 4	26.0	27.0	28.6	28.8	29.3
IMD 2004 Decile 5	30.5	31.5	33.0	33.5	33.6
IMD 2004 Decile 6	35.0	35.9	37.5	38.1	37.6
IMD 2004 Decile 7	38.7	39.4	41.4	42.0	41.7
IMD 2004 Decile 8	41.6	42.2	43.7	44.1	43.8
IMD 2004 Decile 9	46.3	46.4	48.1	48.8	48.5
IMD 2004 Decile 10 (least deprived 10%)	52.8	53.3	55.1	55.5	54.9

Source: UCAS, 1999 – 2003

The best methodology is to use a younger age cohort. In this analysis we use the Census 2001 population aged 15 to 17, although a younger Child Benefit group could equally well be used. Thus for any given area we define the population rate for successful applicants as:

- Numerator: Total number of successful applicants aged under 21 living in the area
- Denominator: Census population aged 15 to 17 living in the area, divided by three

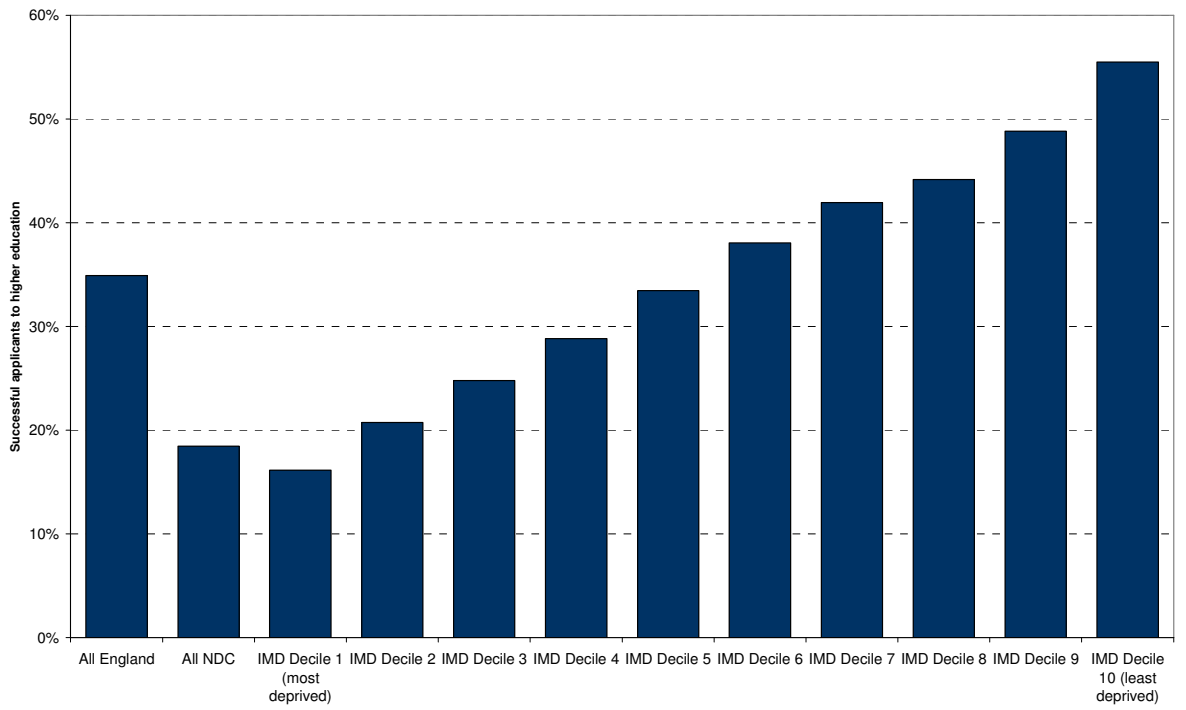
5.2 Admissions to Higher Education across the NDC areas

Table 5.1 below shows the successful applicants to Higher Education as a proportion of the relevant population (see above for discussion of the population denominator used), for England and the NDC areas (Table 5.1b); it also shows the average proportion across all areas across England grouped into the IMD 2004 10% bands (Table 5.1a). The information is shown for the five years 1999 to 2003 – this section focuses on a snapshot picture of the 2002 data, while Section 8 details analysis of the changing picture over the five years.

Figure 5.1 shows the proportion of successful applicants across the NDC in the context of the proportion across England, and the proportion across the areas grouped by IMD 2004 decile. The NDC proportion of 18.5% is significantly below the average across England (34.9%), and lies between the proportions in the most deprived two decile groups across the country. As in previous analysis, the educational indicator shows a strong correlation with deprivation, as the proportion of successful applicants declines from over 50% in the least disadvantaged 10% of all areas across the country, to 16% in the most disadvantaged group.

Table 5.1b: Successful applicants under 21 to Higher Education by NDC area and year					
	1999 %	2000 %	2001 %	2002 %	2003 %
H'smith & Fulham	33.5	40.8	39.8	31.4	32.4
Newcastle	31.2	22.0	17.7	25.3	22.0
Lambeth	29.6	32.2	30.9	34.8	39.9
Bradford	29.0	23.0	25.8	30.1	27.9
Wolverhampton	28.9	45.2	40.4	32.6	28.9
Hackney	25.1	26.3	27.6	29.2	38.7
Brent	24.7	22.2	25.9	29.6	25.9
Tower Hamlets	24.0	32.6	42.0	35.2	37.7
Lewisham	23.1	25.0	29.9	37.6	36.6
Newham	22.9	21.4	23.6	31.0	31.7
Southwark	21.4	29.7	32.2	33.8	43.7
Rochdale	21.1	18.3	10.1	11.9	8.3
Sandwell	20.4	28.3	26.1	29.5	28.3
Haringey	19.6	23.6	33.8	26.3	31.8
Islington	18.1	20.2	30.8	27.6	26.6
Middlesbrough	16.3	11.8	14.8	10.3	9.6
Luton	15.9	18.1	14.4	14.4	16.6
Birmingham A	15.5	20.3	23.4	23.7	25.6
Doncaster	15.4	16.3	11.8	15.4	16.3
Oldham	14.2	8.9	11.2	8.9	11.2
Nottingham	13.4	22.3	16.4	23.8	28.2
Liverpool	12.0	14.4	15.6	12.0	13.2
Hartlepool	11.9	15.6	8.9	11.1	14.8
Sheffield	11.7	14.4	15.8	19.9	14.4
Derby	10.4	11.2	8.8	6.4	11.2
Birmingham KN	10.2	10.2	5.5	11.8	9.5
Salford	10.2	8.1	11.2	12.2	14.3
Sunderland	9.8	10.6	12.3	8.2	13.1
Walsall	8.8	8.2	14.7	12.3	19.4
Manchester	8.7	7.9	12.2	14.0	18.3
Southampton	7.3	8.0	10.9	13.8	16.7
Norwich	6.6	11.5	13.1	7.4	4.1
Brighton	6.4	8.3	5.6	7.1	4.5
Plymouth	4.9	1.6	4.9	8.2	11.4
Bristol	4.4	8.7	19.7	19.7	13.1
Leicester	4.3	5.3	8.2	7.2	5.3
Hull	3.8	5.8	4.8	1.0	4.8
Knowsley	3.5	10.5	11.7	9.9	7.6
Coventry	3.4	1.7	11.0	1.7	1.7
Source: UCAS, 1999 – 2003					

Figure 5.1: Successful applicants under 21 to Higher Education

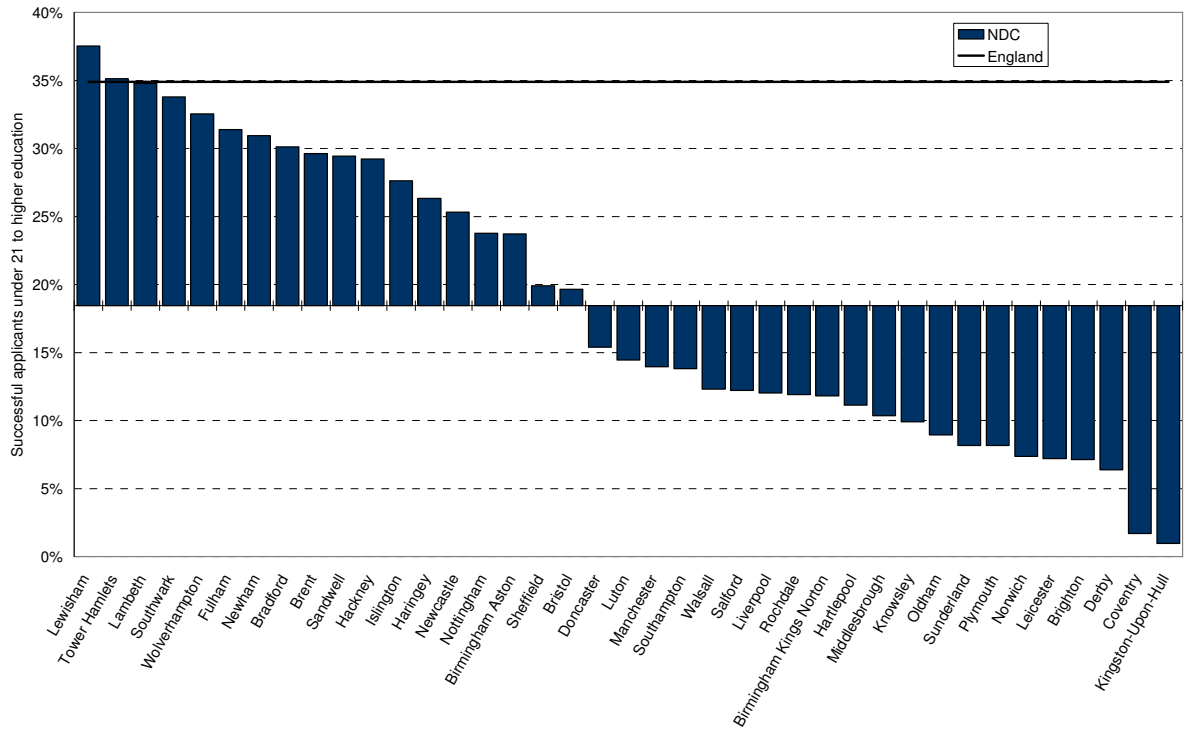


Source: UCAS, 2002

Figure 5.2 below shows the successful proportion of Higher Education applicants for all 39 NDC areas, with the England average (34.9%) shown by the horizontal line, and the NDC columns shown with baselines set to the NDC average (18.5%). There is enormous variation across the areas – in two of the NDC areas (Lewisham and Tower Hamlets) the proportion of successful applicants to Higher Education is above the national average, with a further six areas having proportions above 30%. At the other end of the range, the Kingston-upon-Hull and Coventry NDC areas have less than 2% of the population successfully applying to Higher Education, and a further eight areas where the proportion is below 10%.

What is not known is whether significant groups of the population move in or out of areas before applying to Higher Education - it may well be the case that there is a systematic area bias across the 39 NDC areas, for example people from Kingston-upon-Hull may be more likely to migrate to other areas before applying. It is a tantalising possibility that this effect may be identifiable through further analysis of the UCAS and NDC Household Survey datasets once the second wave of the NDC Household Survey is available.

Figure 5.2: Successful applicants under 21 to Higher Education, by NDC area

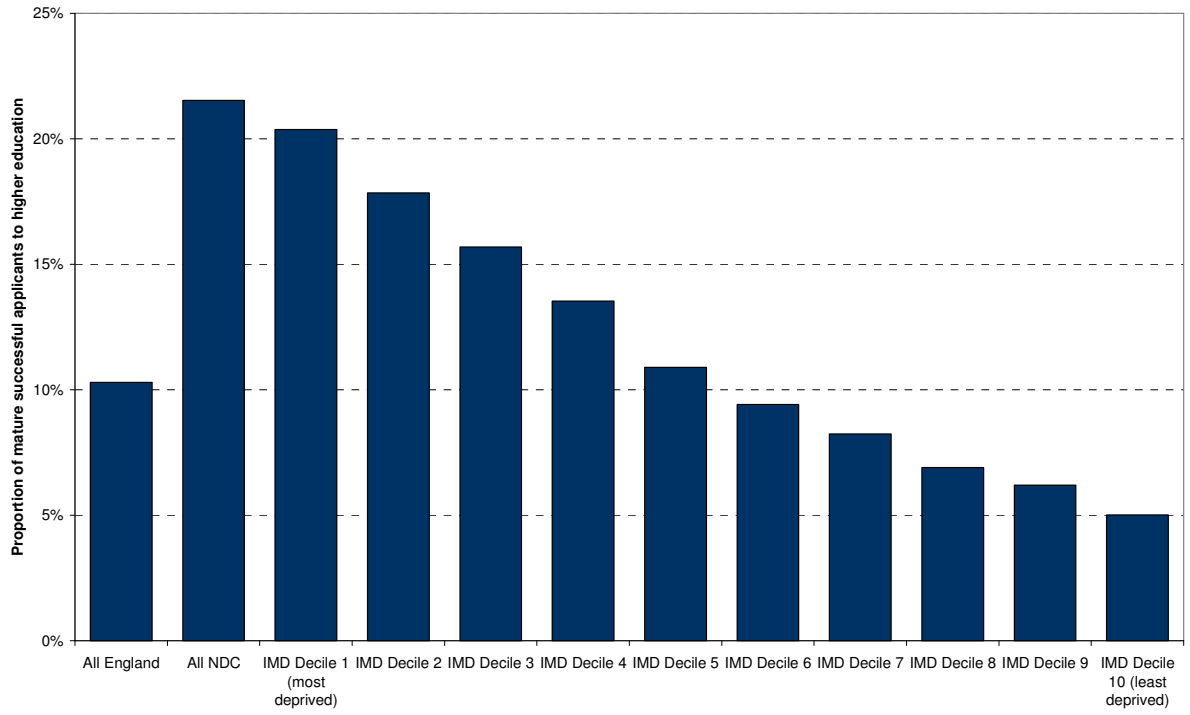


Source: UCAS, 2002

5.3 Mature student admissions to Higher Education

To support the earlier argument that mature students are disproportionately weighted towards more deprived areas, figure 5.3 shows the proportion of successful applicants to Higher Education who are “mature” students (those aged 21 and over when applying) for the England and NDC areas, and the average across all areas in England grouped by IMD 2004 decile.

Figure 5.3: Proportion of successful mature applicants to Higher Education



Source: UCAS, 2002

The proportion of mature students increases markedly with increasing levels of deprivation, from one in twenty in the least deprived 10% of all areas, to more than one in five in the most deprived 10% of areas. The proportion of mature students across the NDC areas is higher than even the most disadvantaged 10% of areas, and higher than would be expected given the levels of deprivation across the NDC areas. This suggests either that groups across the NDC areas are applying disproportionately late for Higher Education, or that the NDC areas experience inward migration from groups likely to apply late for Higher Education. Disentangling these two groups requires more detailed information, for example from further survey data. However, linking this with further analysis of the effects of possible migration by younger groups as suggested earlier in this section is an exciting possibility.

5.4 Application to Higher Education summary

The proportion of people successfully applying to Higher Education across the NDC areas is significantly below the national average, and comparable to the proportions across the most deprived 20% of all groups across the country. Across the 39 NDC areas there is considerable variation in these proportions, ranging from under 1% in Kingston-upon-Hull to over 37% in Lewisham.

The level of mature student applications across the country also shows a strong relationship with increasing levels of deprivation. However the level of mature applications from the NDC areas is well above the expected proportion, based simply on deprivation levels across the NDC areas. This may be because a significant number of NDC areas are actually located close to HE institutions, and may attract inward mobility by prospective students or those taking 'access to HE' courses.

Section 6. Satisfaction with local services and area

Satisfaction with one's local area and local services is widely regarded as an important factor in assessing the quality of life. In addition to simply measuring people's own satisfaction, there is often an implicit argument that satisfaction with services is likely to be a strong indicator of the quality of those services. However there is a wide ranging debate on whether this link is a valid one. In this section we focus on the reported satisfaction across the NDC areas, and the relationship with educational indicators.

6.1 Measuring satisfaction with local services and area as a place to live

The NDC Household Survey (MORI, 2002) of the adult population across the NDC areas asked a number of questions on satisfaction with the local area and services, with answers coded on a scale from "very satisfied" to "very dissatisfied". The NDC Household Survey is available at individual level, allowing analysis of the relationship between satisfaction and individual characteristics such as age and ethnic group.

Answers to seven questions were coded into a binary "satisfied" or "not expressing satisfaction":

1. How satisfied or dissatisfied are you with the quality of local secondary schools?
2. How satisfied or dissatisfied are you with the quality of local primary schools?
3. How satisfied are you with this area as a place to live?
4. How satisfied or dissatisfied are you with the quality of local childminders and childcare clubs?
5. How satisfied or dissatisfied are you with the quality of local pre-school nursery provision?
6. How satisfied or dissatisfied are you with the quality of local sixth form / FE colleges?
7. How satisfied or dissatisfied are you with the quality of local adult education centres?

Those answering "neither satisfied nor dissatisfied" were coded as "not expressing satisfaction", those answering "don't know" were excluded from the analysis. In the analysis reported here we use all respondents in the survey answering these questions. Using only those parents or guardians with children under 16 did not qualitatively affect the results.

6.2 Satisfaction with schools and area across the NDC areas

Table 6.1 below shows the proportion of residents satisfied with local secondary schools, primary schools, and the area as a place to live. Overall satisfaction with primary schools (75%) is higher than with secondary schools (59%) and the area as a place to live (61%)

Figures 6.1 to 6.3 below show the proportion of residents satisfied with local secondary schools (figure 6.1), local primary schools (figure 6.2) and the area as a place to live (figure 6.3). As in previous charts, the NDC columns are shown with baselines set to the NDC average. In all three measures there is considerable variation across the individual NDC areas.

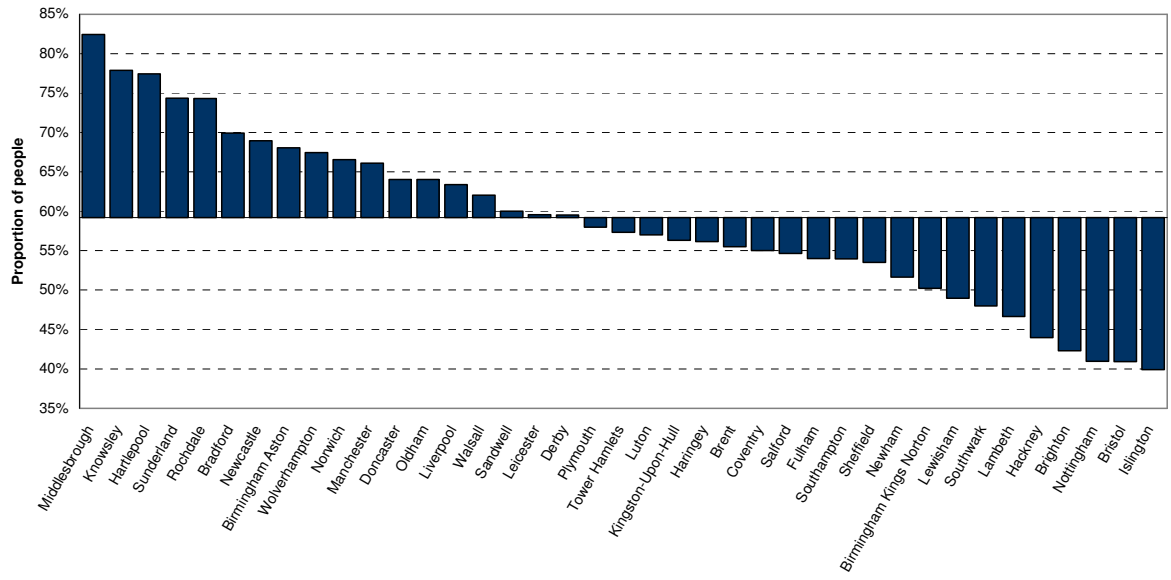
Figure 6.1 shows that in three areas – Middlesbrough, Knowsley and Hartlepool – satisfaction with local secondary schools is above 75%. These three (and the Manchester NDC) also show the greatest satisfaction with local primary schools (figure 6.2), nearly 90% in Knowsley. At the other end of the range, areas with satisfaction of local secondary schools below 50% include Islington, Bristol, Nottingham, Brighton, Hackney, Lambeth, Southwark and Lewisham. Bristol, Hackney and Brighton also show low satisfaction with local primary schools. It is interesting to note the number of London NDC areas that show low resident satisfaction with local schooling – Tower Hamlets shows the greatest satisfaction with secondary schools of the London NDC areas, ranked 19 out of all the NDC areas, while Lambeth at rank 24 is the most satisfied London NDC area for primary schools. In previous sections London areas were seen to be doing well on pupil and adult attainment compared to other NDC areas. However residents are less likely to express satisfaction with the quality of local schools.

Table 6.1: Satisfaction by NDC area

	Secondary schools %	Primary schools %	Area as place to live %
All NDC average	59.2	75.0	61.0
Middlesbrough	82.4	83.7	58.1
Knowsley	77.9	89.6	54.9
Hartlepool	77.4	82.3	52.5
Sunderland	74.4	79.8	67.3
Rochdale	74.3	82.2	67.6
Bradford	69.9	78.2	54.7
Newcastle	68.9	78.0	63.7
Birmingham A	68.0	79.9	59.0
Wolverhampton	67.4	80.7	53.7
Norwich	66.5	75.1	64.6
Manchester	66.1	86.4	63.5
Oldham	64.0	80.5	57.1
Doncaster	64.0	75.0	48.5
Liverpool	63.4	80.1	43.9
Walsall	62.1	81.2	64.8
Sandwell	60.0	75.5	69.3
Leicester	59.5	78.1	66.7
Derby	59.5	81.5	63.4
Plymouth	58.0	72.1	67.9
Tower Hamlets	57.3	71.5	67.5
Luton	57.0	76.5	58.0
Hull	56.3	77.3	78.4
Haringey	56.1	69.6	53.8
Brent	55.5	71.4	66.0
Coventry	55.0	73.9	59.2
Salford	54.6	80.7	51.6
H'smith & Fulham	54.0	72.0	75.7
Southampton	53.9	67.1	65.3
Sheffield	53.5	65.6	65.7
Newham	51.6	68.1	53.1
Birmingham KN	50.2	73.7	62.2
Lewisham	48.9	70.4	58.1
Southwark	48.0	68.4	52.1
Lambeth	46.6	73.1	63.1
Hackney	44.0	59.0	57.2
Brighton	42.3	60.2	69.8
Nottingham	41.0	63.6	49.7
Bristol	40.9	58.5	54.3
Islington	39.9	67.3	76.6

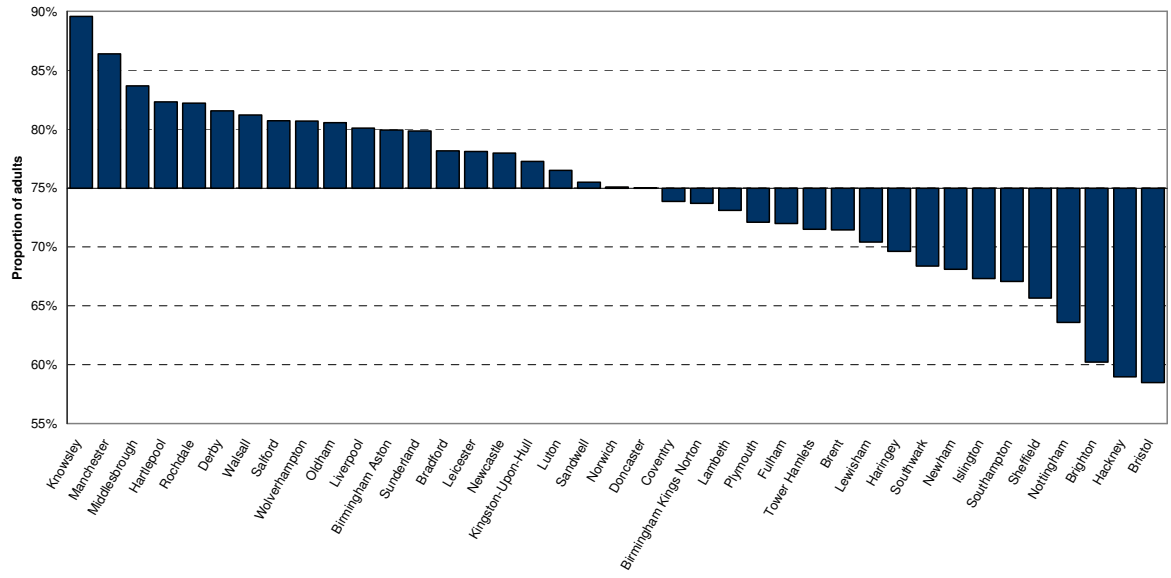
Source: MORI, 2002

Figure 6.1: Secondary school satisfaction by NDC



Source: MORI, 2002

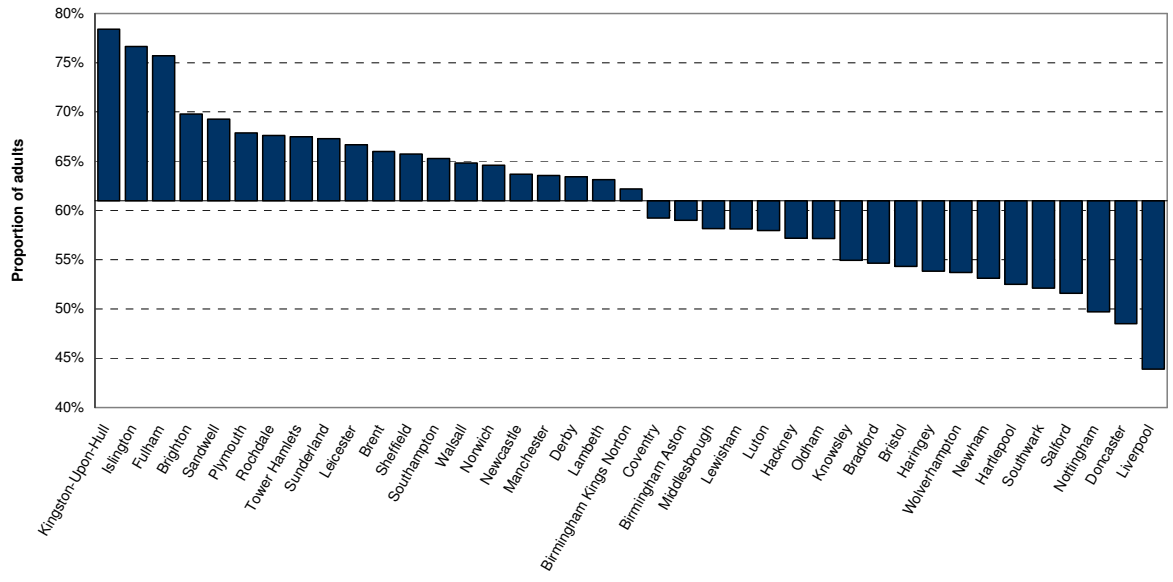
Figure 6.2: Primary school satisfaction by NDC



Source: MORI, 2002

Figure 6.3 shows the proportion of residents satisfied with the area as a place to live, for all NDC areas. The NDC columns are shown with baselines set to the NDC average. In three areas – Kingston-upon-Hull, Islington and Fulham – over 75% of residents are satisfied with the area; by contrast less than half of residents in Liverpool, Doncaster and Nottingham are similarly satisfied.

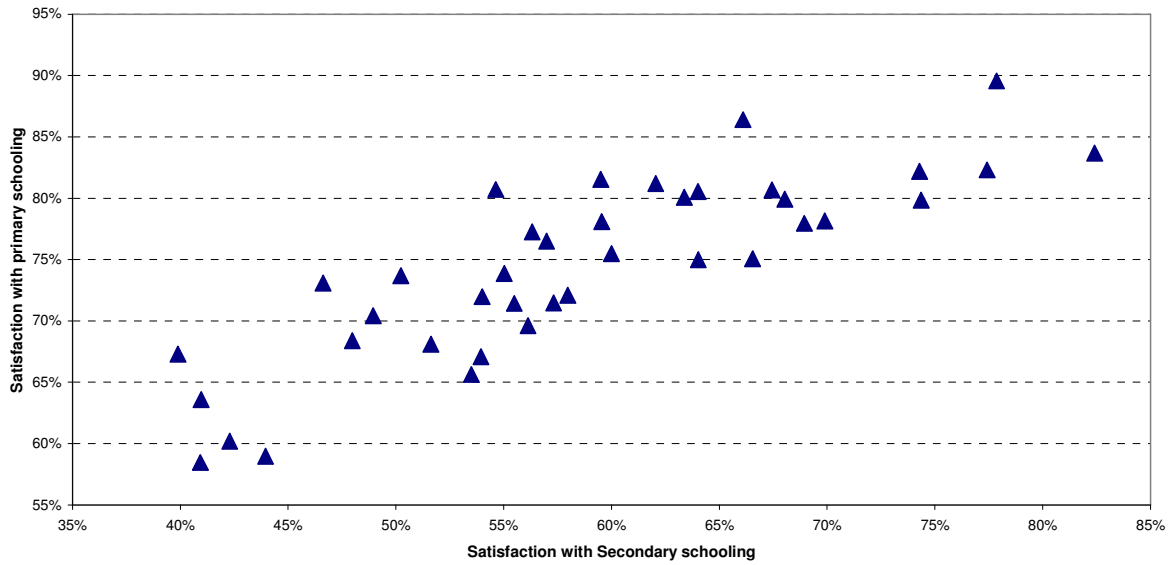
Figure 6.3: Satisfaction with area as place to live by NDC



Source: MORI, 2002

Figure 6.4 shows the strong relationship between satisfaction with local primary and secondary schools for each NDC area ($P<0.001$). Areas with high proportions of residents satisfied with local primary schools are also likely to have high proportions of residents satisfied with local secondary schools. There was no significant relationship seen between satisfaction with schools and satisfaction with the area as a place to live at NDC area level.

Figure 6.4: Satisfaction with local schools



Source: MORI, 2002

6.3 Satisfaction by individual characteristics

Table 6.2 below shows resident satisfaction with local schools and the area as a place to live, broken down by gender, ethnic and age groups. Satisfaction is also shown for residents with no qualifications, and residents with degree level qualifications.

There is little difference between reported satisfaction between the male and female groups, although there is some indication that females may be more satisfied with local primary schools. Mixed and Black Caribbean groups show the least satisfaction with secondary and primary schools, with Pakistani and Bangladeshi groups showing the most satisfaction. There is a clear relationship between satisfaction with the area as a place to live and age, with satisfaction increasing with age, but no correspondingly clear pattern for school satisfaction with age. By contrast, adult qualifications are strongly linked to satisfaction with local schools, with those with no qualifications significantly more likely to be satisfied with local primary and secondary schools compared to those with degree level qualifications.

Table 6.2: Satisfaction by group

	Secondary schools %	Primary schools %	Area as place to live %
All NDC average	59.2	75.0	61.0
Male	59.2	71.9	62.1
Female	59.2	76.5	60.2
White	58.3	74.6	59.9
Black African	63.3	77.6	67.1
Black Caribbean	53.7	69.9	67.4
Indian	65.5	77.2	64.0
Pakistani	74.6	81.9	61.8
Bangladeshi	68.9	82.4	70.8
Chinese	57.7	69.0	57.0
Mixed	50.9	72.9	58.8
Other	58.2	72.1	60.3
16-19	66.6	79.0	55.8
19-24	54.1	70.2	53.8
25-29	53.6	76.2	57.5
30-39	58.9	77.3	59.6
40-49	60.5	75.6	59.5
50-59	59.1	74.0	61.9
60-69	63.4	74.1	65.8
70+	57.2	64.1	69.1
No qualifications	65.0	78.6	66.7
Degree level qualification	36.8	55.1	57.4

Source: MORI, 2002

The NDC Household Survey allows us to examine the possibility that these differences are caused by overlap in the different groups. Table 6.3 below shows a logistic regression analysis of the three satisfaction indicators, showing the Odds Ratios against reference groups of whites, males, those aged 16 to 19, those with some formal qualifications and those without degree level qualifications. Significant ratios ($P<0.05$) are shown in bold.

Females are nearly 20% more likely to be satisfied with the local primary schools than males, but no more likely to be satisfied with secondary schools. However, females are just over 10% less likely to be satisfied with the area as a place to live.

Black Africans are more likely to be satisfied with the local schools and area than Whites, as are those of Bangladeshi, Pakistani and Indian origin. Individuals of Black Caribbean origin are significantly less likely to be satisfied with the local primary schools but more satisfied with the local area than Whites.

Table 6.3: Satisfaction by group

	Secondary schools		Primary schools		Area as place to live	
	Odds Ratios	95% CI	Odds Ratios	95% CI	Odds Ratios	95% CI
Intercept	**1.80**		**3.10**		**1.16**	
Male	1.00		1.00		1.00	
Female	0.95	0.86 – 1.05	**1.18**	1.06 – 1.31	**0.88**	0.83 – 0.93
White	1.00		1.00		1.00	
Black African	**1.44**	1.15 – 1.81	**1.28**	1.01 – 1.62	**1.56**	1.35 – 1.80
Black Caribbean	0.84	0.69 – 1.03	**0.77**	0.62 – 0.95	**1.43**	1.25 – 1.63
Indian	**1.49**	1.08 – 2.06	1.25	0.87 – 1.79	**1.28**	1.02 – 1.61
Pakistani	**2.22**	1.67 – 2.93	**1.55**	1.15 – 2.08	1.18	0.98 – 1.42
Bangladeshi	**1.55**	1.20 – 2.02	**1.51**	1.13 – 2.02	**1.75**	1.41 – 2.17
Chinese	1.03	0.46 – 2.28	0.80	0.36 – 1.78	1.07	0.72 – 1.60
Mixed	0.77	0.57 – 1.05	0.90	0.64 – 1.27	1.04	0.86 – 1.27
Other	1.06	0.79 – 1.42	0.91	0.67 – 1.22	1.10	0.92 – 1.31
16-19	1.00		1.00		1.00	
20-24	**0.63**	0.51 – 0.79	**0.65**	0.50 – 0.85	0.96	0.82 – 1.13
25-29	**0.63**	0.51 – 0.79	0.89	0.69 – 1.16	1.10	0.94 – 1.29
30-39	**0.79**	0.66 – 0.95	0.99	0.78 – 1.24	**1.19**	1.03 – 1.37
40-49	0.83	0.68 – 1.01	0.91	0.71 – 1.16	**1.17**	1.01 – 1.36
50-59	**0.76**	0.61 – 0.94	0.80	0.62 – 1.04	**1.28**	1.10 – 1.49
60-69	0.86	0.68 – 1.09	**0.75**	0.57 – 0.99	**1.44**	1.23 – 1.69
70+	**0.64**	0.50 – 0.83	**0.45**	0.34 – 0.60	**1.65**	1.41 – 1.93
Any formal qualifications	1.00		1.00		1.00	
No formal qualifications	**1.32**	1.19 – 1.47	**1.28**	1.14 – 1.44	**1.35**	1.26 – 1.45
NO degree level qualification	1.00		1.00		1.00	
Degree level qualification	**0.39**	0.32 – 0.47	**0.39**	0.32 – 0.47	0.97	0.86 – 1.08

Source: MORI, 2002

Supporting the breakdown shown in Table 6.2, there is an increasing level of satisfaction with the area as a place to live for older age groups, even after gender and ethnic factors have been taken into consideration. Several of the age groups also have significantly lower satisfaction with local schools than the 16 to 19 year old group. However there is no clear trend.

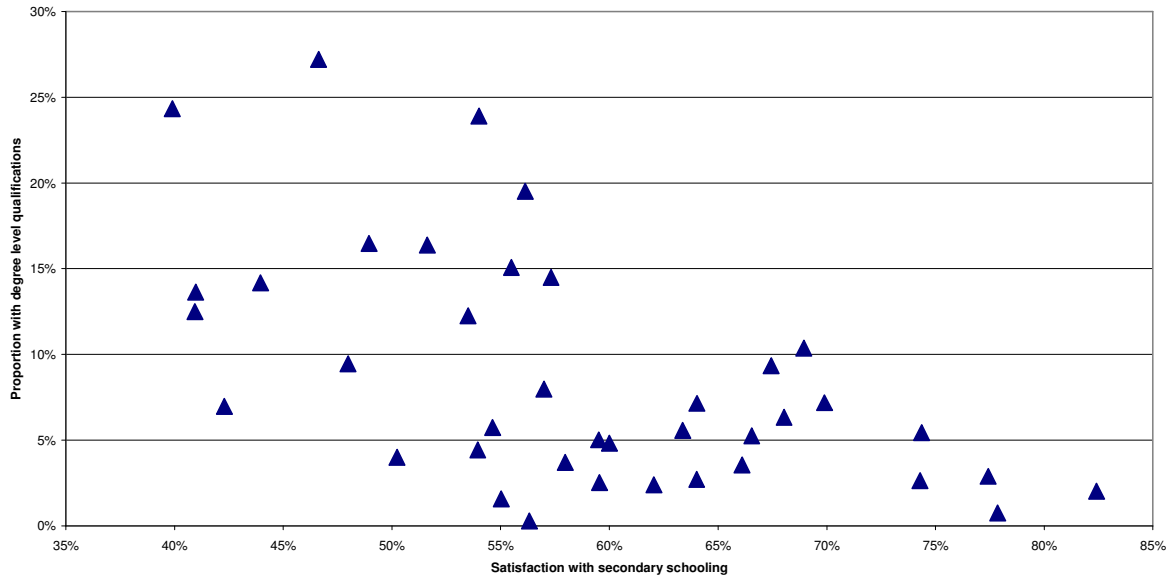
The adult qualification indicators were significant factors in school satisfaction - adults with no qualifications were 30% *more likely* to be satisfied with local secondary and primary schools than the reference group (those with some qualifications but not degree level qualifications), and 36% more likely to be satisfied with the area as a place to live. By contrast, those with degree level qualifications were over 60% *less likely* to be satisfied with the local schools than the reference group.

In other words, even after allowing for gender, age and ethnic group effects, there is an extremely significant negative correlation between levels of educational qualification and satisfaction with local schools, strongly suggesting that more highly educated individuals are more demanding of the level of service provided. Although this is not a direct link between school outcomes and school satisfaction (the NDC Household Survey did not collect information on pupil attainment), it is strongly indicative that satisfaction with services should not necessarily be taken as a straightforward measure of service quality - satisfaction with services is extremely dependent on individual characteristics.

6.4 NDC area level analysis of school satisfaction by adult qualifications and pupil attainment

The previous section on satisfaction with school found a strong *individual level* effect between adult qualifications and school satisfaction – figure 6.5 below shows the proportion of adults satisfied with local secondary schools against the proportion of adults with degree level qualifications at NDC *area level*. There is a strong negative correlation between the indicators ($P<0.001$), in other words NDC areas with higher levels of adults with degree level qualifications show less satisfaction with local secondary schools, as in the individual level analysis.

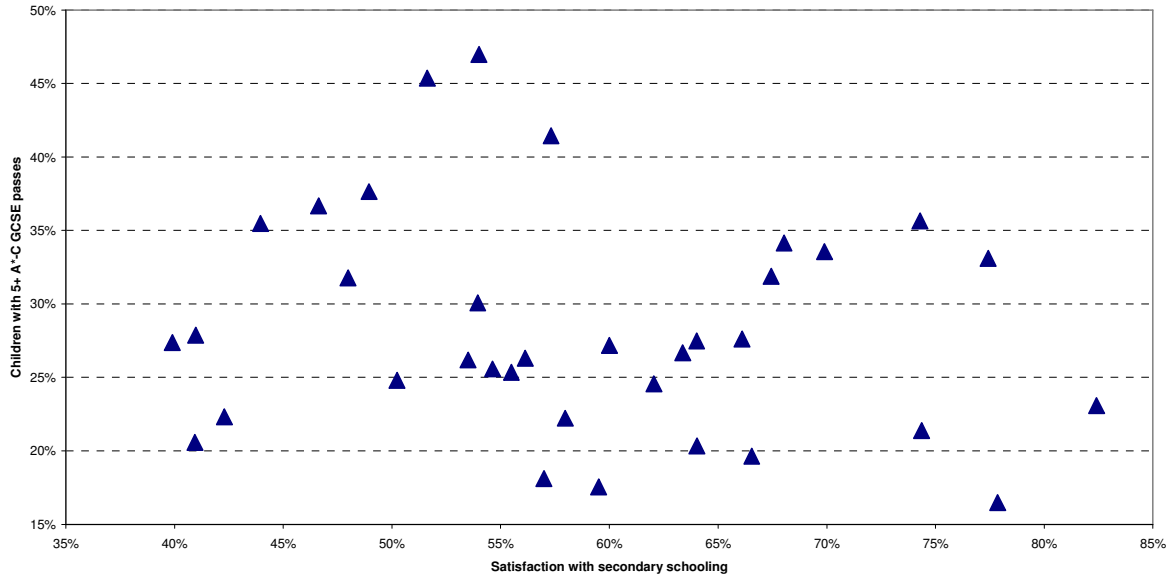
Figure 6.5: Satisfaction with secondary schools against degree level qualifications



Source: MORI, 2002

The same relationship is seen between adults with degree level qualifications and primary school satisfaction ($P<0.001$), with the inverse relationship found between the proportion of adults with no qualifications and satisfaction with secondary ($P<0.001$) and primary schools ($P<0.001$). No significant relationships at NDC level were found between adult qualifications and satisfaction with the area as a place to live.

Figure 6.6: Satisfaction with secondary schools against Key Stage 4 (GCSE) performance



Source: MORI, 2002

In terms of satisfaction with local schools and pupil attainment school outcomes, no significant relationships were observed. Figure 6.6 above shows the satisfaction with secondary schools against the proportion of pupils achieving five or more A*-C grades at Key Stage 4 (GCSE) – the link is not significant - also the case with other Key Stage results against primary and secondary school satisfaction (analysis not shown).

In other words there is no observed link between resident satisfaction over the quality of local schools and the objective performance of local children on Key Stage exams. Although this contrasts with the strong link between adult qualifications and school satisfaction, it is possible that further analysis at the individual level might show a more explicit link between school satisfaction and pupil outcome, for example if the NDC Household Survey were collected on pupil attainment.

Further multivariate analysis also supports the hypothesis that adult qualifications, specifically the proportion of adults with degree level qualifications, are a strong driver of both primary and secondary school dissatisfaction.

6.5 Satisfaction with outside school childcare provision across the NDC areas

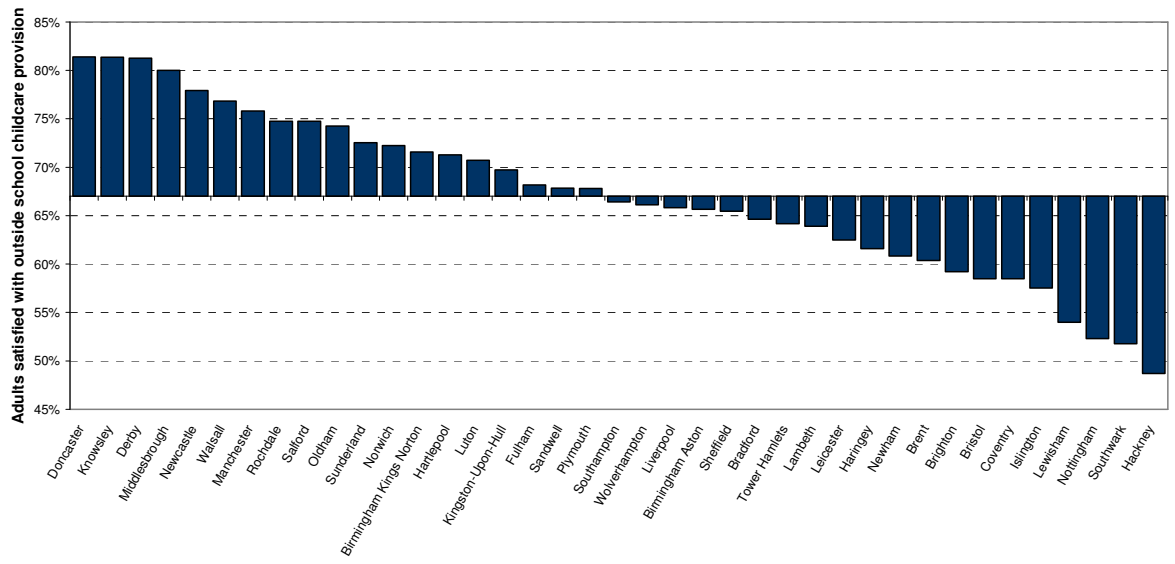
Table 6.4: Satisfaction with outside school childcare provision by NDC area

	Satisfaction with outside school childcare provision %
All NDC Average	67.2
Doncaster	81.4
Knowsley	81.4
Derby	81.3
Middlesbrough	80.0
Newcastle	77.9
Walsall	76.8
Manchester	75.8
Rochdale	74.7
Salford	74.7
Oldham	74.3
Sunderland	72.5
Norwich	72.2
Birmingham KN	71.6
Hartlepool	71.3
Luton	70.7
Hull	69.7
H'smith & Fulham	68.2
Sandwell	67.8
Plymouth	67.8
Southampton	66.4
Wolverhampton	66.1
Liverpool	65.8
Birmingham A	65.7
Sheffield	65.4
Bradford	64.6
Tower Hamlets	64.2
Lambeth	63.9
Leicester	62.5
Haringey	61.6
Newham	60.8
Brent	60.4
Brighton	59.2
Bristol	58.5
Coventry	58.5
Islington	57.5
Lewisham	54.0
Nottingham	52.3
Southwark	51.8
Hackney	48.7

Source: MORI, 2002

Table 6.4 above shows the proportion of adults expressing satisfaction with any form of childcare provision outside school (childminders, children's clubs, and pre-school nurseries)[12]. Figure 6.7 shows in graphical format the proportion of residents satisfied with outside school childcare provision. As in previous charts, the NDC columns are shown with baselines set to the NDC average. The average rate of satisfaction across the NDC areas is 67%. Rates of satisfaction are 80% or higher in four NDC areas: Doncaster, Knowsley, Derby, and Middlesbrough. The lowest rates of satisfaction are in Lewisham, Nottingham, Southwark, and Hackney where less than 55% of adults are satisfied with outside school childcare provision.

Figure 6.7: Satisfaction with outside school childcare provision across NDC areas

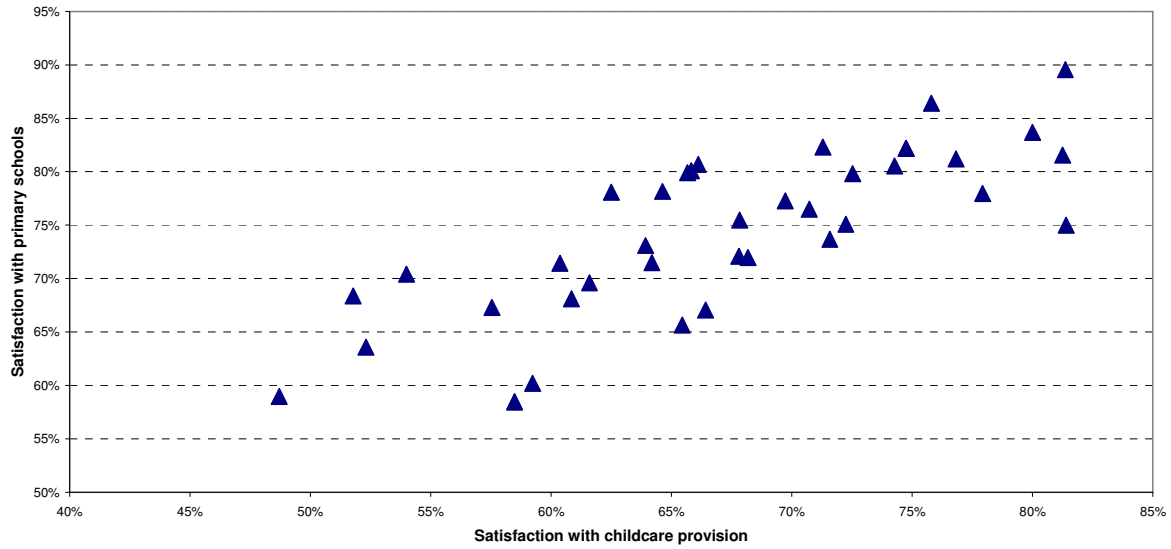


Source: MORI, 2002

Figure 6.8 shows the proportion of residents satisfied with outside school childcare against the proportion of residents satisfied with primary schools for each NDC area. There is a strong positive correlation ($p<0.001$) between satisfaction with childcare provision and satisfaction with local primary schools.

12 The data relates only to those who expressed an opinion on childcare provision, approximately 35% of all respondents.

Figure 6.8: Satisfaction with primary schools and satisfaction with childcare



Source: MORI, 2002

6.6 Satisfaction with adult education provision across the NDC areas

Table 6.5 below shows the proportion of adults satisfied with adult education centres and local FE / Sixth form colleges by NDC area[13]. The same information is charted in figures 6.8 and 6.9, with baselines set to the NDC averages.

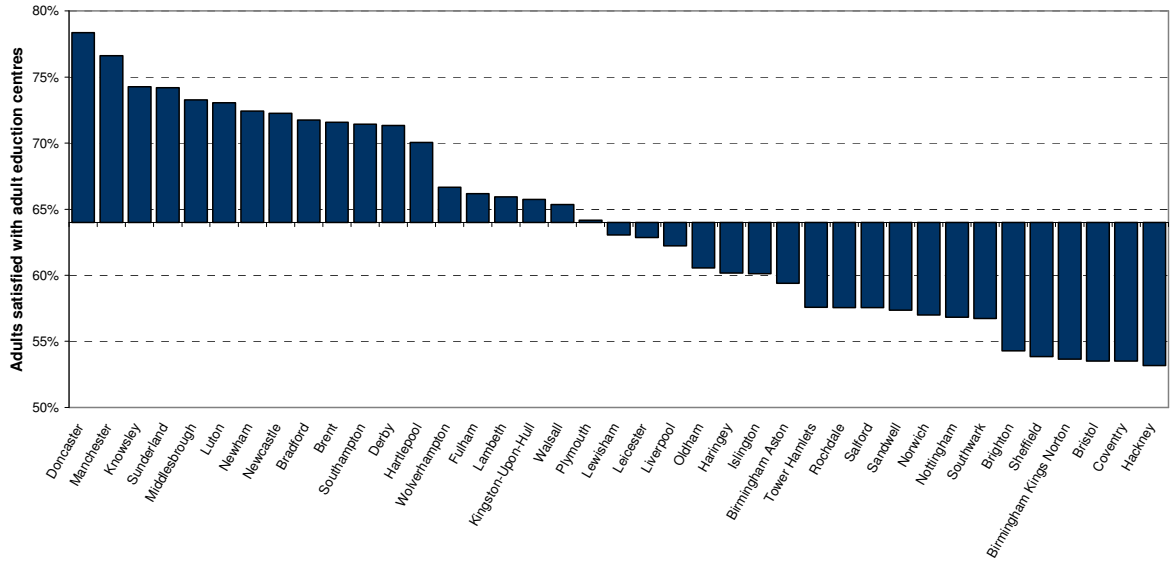
13 The data relates only to those who expressed an opinion on adult education provision, approximately 30% of respondents.

Table 6.5: Satisfaction with adult education facilities and FE/6th form colleges

	Satisfaction with local adult education centres %	Satisfaction with local FE / 6th form colleges %
All NDC average	64.4	61.9
	0.0	0.0
Doncaster	78.4	78.5
Manchester	76.6	69.8
Knowsley	74.3	73.8
Sunderland	74.2	74.3
Middlesbrough	73.3	82.1
Luton	73.1	65.1
Newham	72.4	56.0
Newcastle	72.3	76.7
Bradford	71.8	69.5
Brent	71.6	55.0
Southampton	71.4	59.8
Derby	71.3	64.5
Hartlepool	70.1	77.9
Wolverhampton	66.7	71.3
Fulham	66.2	58.0
Lambeth	65.9	54.2
Hull	65.7	59.0
Walsall	65.3	71.2
Plymouth	64.2	65.0
Lewisham	63.0	59.3
Leicester	62.9	56.5
Liverpool	62.2	58.0
Oldham	60.6	65.6
Haringey	60.2	54.5
Islington	60.1	49.3
Birmingham A	59.4	64.9
Tower Hamlets	57.6	60.3
Rochdale	57.6	56.5
Salford	57.6	56.5
Sandwell	57.4	62.5
Norwich	57.0	61.0
Nottingham	56.8	55.9
Southwark	56.7	48.9
Brighton	54.3	49.0
Sheffield	53.8	43.3
Birmingham KN	53.7	56.6
Bristol	53.5	42.6
Coventry	53.5	42.6
Hackney	53.2	44.1

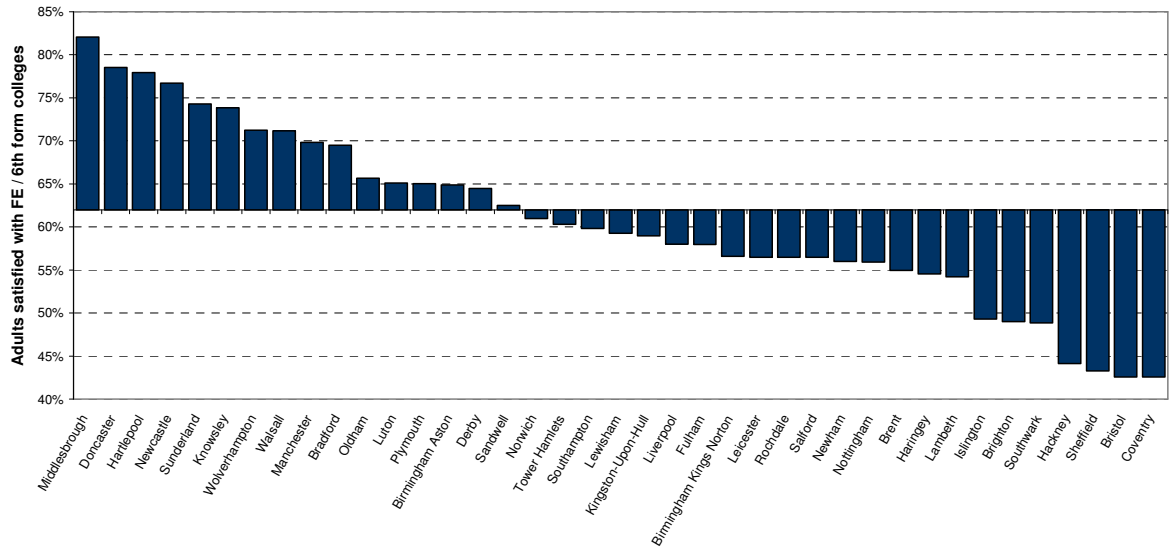
Source: MORI, 2002

Figure 6.9: Satisfaction with adult education centres



Source: MORI, 2002

Figure 6.10: Satisfaction with local sixth form/FE colleges



Source: MORI, 2002

Satisfaction with adult education provision is generally high. Average satisfaction rates are 64% for adult education centres and 62% for sixth form and FE colleges. However, we must not forget that these figures only relate to those who expressed an opinion on adult education, around 30% of respondents.

Two NDC areas, those in Doncaster and Manchester, have satisfaction rates greater than 75% for adult education centres and four NDC areas, those in Middlesbrough, Hartlepool, Doncaster, and Newcastle, have satisfaction rates greater than 75% for sixth form and FE colleges.

6.7 Use of adult education provision

Actual use of adult education provision by survey participants (excluding full-time students) is very low. Individuals were asked if they used any of the following facilities themselves: local secondary school, local adult education centre, local sixth form or FE college. Only 7% of respondents are using any of the facilities listed above. The proportion of respondents that have taken part in additional education and training is 18% so there is a discrepancy between these two figures. There may be several reasons for this. First, there may be a difference between time frames: the 7% of respondents using these facilities may only include those who are currently taking part in additional education or training. The 18% figure also includes those who are not currently taking part in additional education and training, but have done so in the last year. Another explanation could be that participants are using facilities other than those listed, perhaps in the workplace, or that they are not using local facilities.

Amongst respondents that do, themselves, use local adult education facilities satisfaction rates are high. Table 6.6 shows the satisfaction rates for adult education centres, FE colleges and local secondary schools.

Table 6.6: Satisfaction rates of users of adult education facilities		
Facility used	Proportion using the facility %	Satisfaction rate of users %
Local Adult Education Centre	4.1	86.4
Local Sixth Form College	1.6	76.3
Local Secondary School	1.2	70.6
Source: MORI, 2002		

6.8 Satisfaction with local services and area summary

Levels of satisfaction vary widely between NDC areas. 90% of Knowsley residents are satisfied with their local primary schools, while less than 60% of residents are similarly satisfied in Bristol and Hackney. The story is similar for residents' satisfaction with secondary schools, with over 80% satisfaction in Middlesbrough, less than 40% in Islington. Satisfaction levels for out of school childcare provision is also reasonably high, with an average satisfaction rate of 67%. There is, however, considerable variation between NDC areas with 81% of respondents expressing satisfaction in Doncaster but only 49% in Hackney.

Breaking the levels of satisfaction down by individual characteristics, there is clearly a strong link between age and satisfaction with the area as a place to live, with older residents more satisfied. There are a number of differences among ethnic groups, with individuals of Black African, Indian, Pakistani and Bangladeshi origin more satisfied with schooling and the area than Whites. However potentially the most interesting finding is the inverse relationship between adult qualification and satisfaction – highly qualified adults are significantly less likely to be satisfied with the schools in their area.

At NDC area level two findings emerge. First, as in the individual level NDC Household Survey analysis, satisfaction with local schools is negatively correlated with adult qualifications. In other words areas containing more highly educated adults are less satisfied with their local schools. Second, there is no significant link found between satisfaction with local schools and performance of children at Key Stage exams. It seems plausible that high satisfaction with local schools, and by extension local services, is related less to the actual quality of those services but is mediated by different levels of expectation.

Satisfaction with adult education provision is reasonably high, at around 60% on average. However, actual use of local adult education facilities is extremely low with only 7% of residents using any adult education facilities. It is not clear from the data why use of these facilities is so small but this may be due a difference in time frames (where the respondent did use the facility but not in the time frame specified by the survey) or to respondents using other facilities, for example, at a place of work, or using facilities in another area.

Section 7. NDC area characteristics and key education outcomes

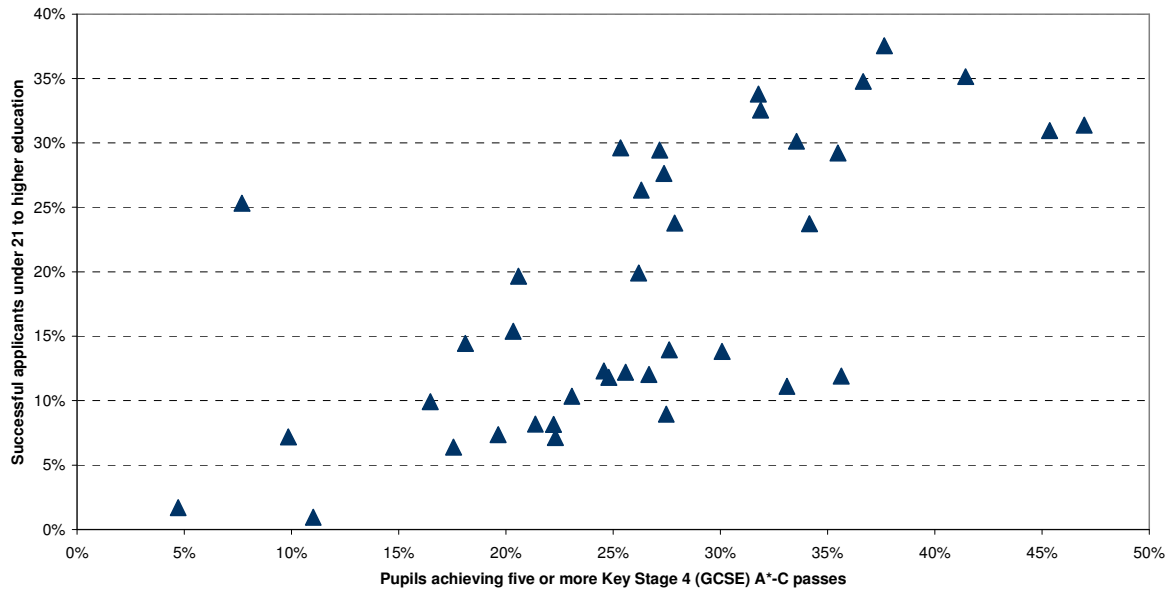
The previous sections focused on a number of measures of educational performance and qualifications, including educational deprivation, pupil attainment, adult qualifications, application to Higher Education, and satisfaction with schools. In this section we focus on the relationship between NDC area characteristics and the key education outcomes of pupil attainment and successful application to Higher Education.

In particular we investigate whether there are area level effects in the Key Stage and UCAS datasets; specifically whether there are significant relationships at NDC level between pupil attainment and successful application to Higher Education on the one hand, and on the other adult qualification levels, proportions of non-white ethnic groups, and population mobility.

7.1 Pupil attainment and applications to Higher Education by NDC characteristics

The key education outcomes of pupil attainment and successful application to Higher Education are strongly linked at area level – figure 7.1 below shows successful applicants to Higher Education against pupil attainment for all 39 NDC areas (P<0.001).

Figure 7.1: Successful applicants to Higher Education against pupil attainment



Source: DfES 2002; UCAS 2002

In this section we look at how these two indicators are predicted by NDC area characteristics including the proportion of non-white ethnic groups, adult qualifications, and household mobility.

Table 7.1 below shows the proportion of non-whites, the average number of household moves over the last five years, and the proportion of households that have moved in the last year. For data on the proportion of adults with no qualifications / degree qualifications see Table 4.1. Data is drawn from the Census 2001 and the NDC Household Survey, with England averages and the average across areas grouped into IMD 2004 10% bands shown where available (Table 7.1a) as well as for all NDC areas (Table 7.1b).

Table 7.1a: NDC area characteristics

	Non-white ethnic groups (Census) %	Average moves in 5 years (MORI, 2002)	Households moved in past year (Census) %
All England	9.1	-	13.9
All NDC areas combined	25.7	0.88	17.6
IMD 2004 Decile 1 (most deprived 10%)	19.6	-	16.0
IMD 2004 Decile 2	17.3	-	15.5
IMD 2004 Decile 3	12.8	-	15.5
IMD 2004 Decile 4	9.8	-	15.0
IMD 2004 Decile 5	8.0	-	14.2
IMD 2004 Decile 6	6.2	-	13.4
IMD 2004 Decile 7	5.1	-	12.7
IMD 2004 Decile 8	4.4	-	12.4
IMD 2004 Decile 9	4.0	-	12.1
IMD 2004 Decile 10 (least deprived 10%)	3.8	-	11.9

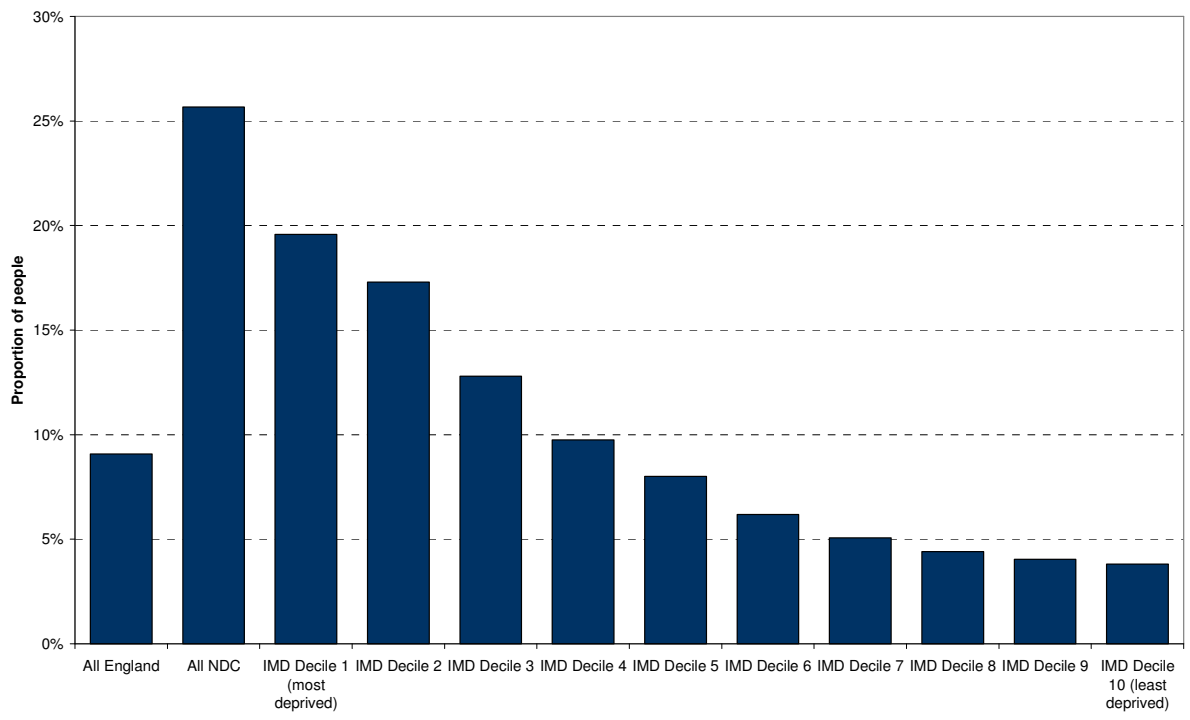
Source: Census 2001; MORI, 2002; SDRC 2004

Table 7.1b: NDC area characteristics			
	Non-white ethnic groups (Census) %	Average moves in 5 years (MORI, 2002)	Households moved in past year (Census) %
Birmingham A	75.7	0.63	15.6
Tower Hamlets	64.8	0.88	19.0
Southwark	57.8	0.56	13.3
Bradford	57.6	0.82	21.5
Brent	56.4	0.74	18.9
Wolverhampton	54.2	0.82	15.0
Newham	52.8	0.74	16.2
Lewisham	50.2	0.75	18.0
Haringey	48.9	0.74	17.7
Sheffield	46.4	0.89	18.7
Lambeth	43.6	0.97	19.8
Hackney	39.1	0.71	17.4
Sandwell	37.1	0.60	11.1
Luton	29.1	1.00	16.5
H'smith & Fulham	28.4	0.86	22.8
Nottingham	28.3	1.73	38.8
Newcastle	25.5	1.45	29.8
Islington	25.0	0.84	17.4
Bristol	14.0	1.17	18.3
Liverpool	13.9	1.00	21.9
Doncaster	11.6	1.36	21.2
Manchester	11.5	0.97	16.9
Oldham	11.1	0.84	15.7
Coventry	9.5	1.05	22.5
Birmingham KN	8.6	0.74	14.0
Leicester	6.9	0.82	15.1
Sunderland	6.6	1.05	19.1
Salford	5.9	0.68	16.4
Brighton	5.1	0.86	13.5
Middlesbrough	4.2	0.62	13.0
Derby	3.9	0.68	14.5
Walsall	3.6	0.45	10.4
Southampton	2.7	0.82	13.5
Hartlepool	2.6	1.04	19.0
Plymouth	2.4	1.27	22.0
Rochdale	2.1	0.88	15.4
Norwich	1.6	0.74	13.9
Knowsley	1.4	0.67	11.8
Hull	0.8	0.93	15.0
Source: Census 2001; MORI, 2002; SDRC 2004			

Figure 7.2 below shows the proportions of the population from non-white ethnic groups, for all England, the NDC areas, and the areas across England grouped into 10% bands by the IMD 2004. There is a clear trend of increasing proportion of non-white groups with increasing

levels of deprivation – the proportion of non-white ethnic groups in the most deprived 10% of areas across England (19.6%) is over five times the proportion in the least deprived 10% of areas (3.8%). At 25.7%, the proportion across all NDC areas is significantly higher than in the most deprived 10% of areas, in other words the proportion of non-white ethnic groups across NDC areas is higher than would be expected given the level of deprivation across the NDC areas.

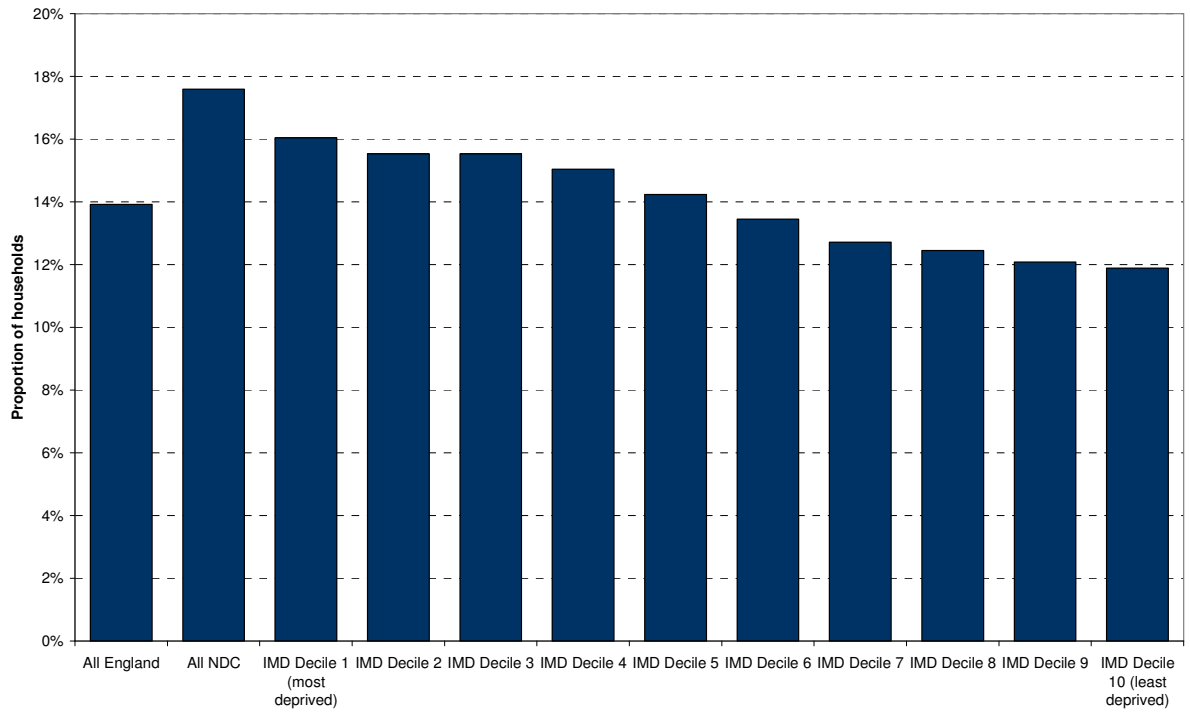
Figure 7.2: Proportion of NDC residents from non-white ethnic group



Source: Census, 2001

Figure 7.3 below shows the proportion of households not at the same address one year before the Census 2001 was taken. As with the proportions of non-white ethnic groups, the proportion of households not at the same address increases with the level of deprivation across the area. The level of household mobility across the NDC areas is again higher than each of the IMD 2004 10% deciles – the NDC area populations are significantly more mobile than on average even after allowing for deprivation.

Figure 7.3: Households not at same address one year before Census

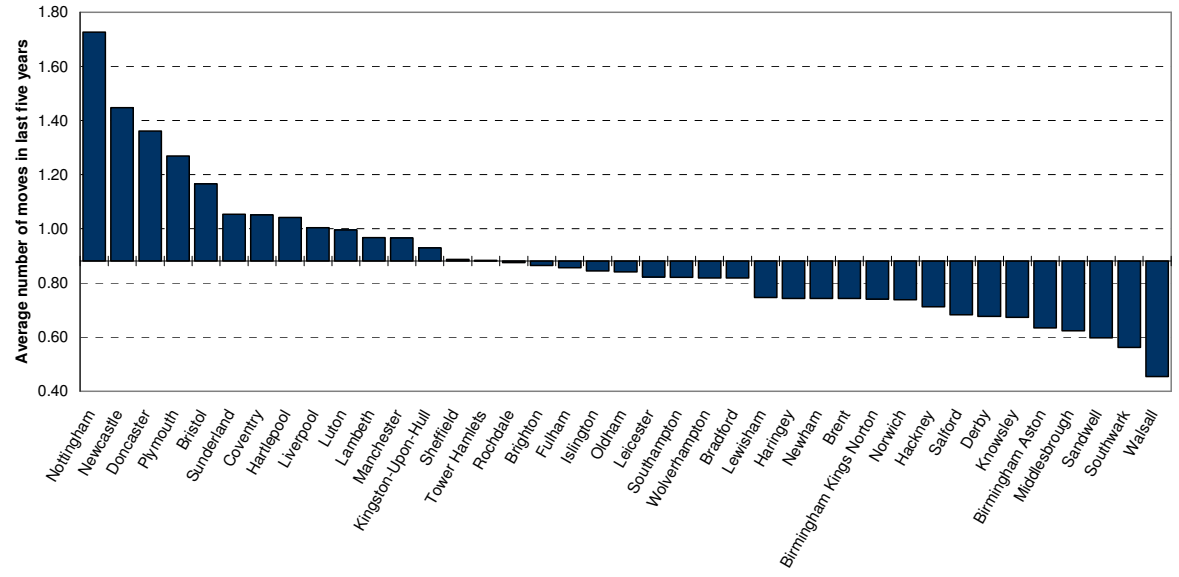


Source: Census, 2001

The NDC Household Survey asks a number of questions on household mobility, including how many times respondents have moved in the last five years. Figure 7.4 below shows this for all NDC areas, with NDC columns shown with baselines set to the NDC average[14]. The correlation with the Census 2001 household mobility indicator shown in figure 7.4 is strong ($P<0.001$), so in the remainder of this section we use the NDC Household Survey data. There is wide variation across the NDC areas in terms of household mobility (measured by average number of moves in the past five years), ranging from Nottingham (1.73), nearly double the NDC average of 0.88, to Walsall (0.45) at only just over half the NDC average.

14 11,100 missing responses for the question "How many times have you moved home in the last five years" have been coded to zero, as respondents who had not moved would not have completed this question.

Figure 7.4: Average number of moves in last five years by NDC area



Source: MORI, 2002

Table 7.2 below shows the strength of the relationship at NDC area level between proportion of adults with no qualifications / degree level qualifications, proportion of non-whites, average moves in the last five years, and satisfaction with local schools against successful applicants to Higher Education, and pupils achieving five or more A*-C Key Stage 4 (GCSE) passes.

The level of qualifications across the adult population shows a strong relationship with Key Stage 4 results and applications to Higher Education – areas with lower proportions of adults with no qualifications and/or higher proportions of adults with degree level qualifications are likely to have both higher proportions of pupils achieving five or more Key Stage 4 A*-C grades and higher proportions of people successfully applying to Higher Education. Ethnic group is also a strong predictor of educational outcome, with areas having higher proportions of non-white individuals also more likely to have higher pupil attainment and successful Higher Education applications.

The average number of moves across the area had no significant links with either the Key Stage or Higher Education application indicators. Satisfaction with local schools shows up as a weak negative predictor of the level of successful applications to Higher Education, but not a predictor of Key Stage 4 results.

Table 7.2: NDC area level correlations

	Proportion achieving 5+ A*-C Key Stage 4 passes	Proportion of successful applicants under 21 to HE
Proportion of adults aged 16-74 with no qualifications (MORI)	Negative (**)	Negative (*)
Proportion of adults aged 25-74 with degree level qualification (MORI)	Positive (**)	Positive (**)
Proportion of individuals of non-white ethnic origin (Census)	Positive (**)	Positive (**)
Average moves in last five years (MORI)	n.s.	n.s.
Proportion expressing satisfaction with primary school (MORI)	n.s.	Negative (*)
Proportion expressing satisfaction with secondary school (MORI)	n.s.	Negative (*)

** Pearson correlation significant at the 0.01 level (2-tailed)
* Pearson correlation significant at the 0.05 level (2-tailed)
N=39

Source: MORI, 2002; Census 2001; DfES 2002; UCAS 2002

To explore the relationship between these indicators, stepwise multiple linear regression analyses were carried out with the proportion of children achieving five or more A*-C Key Stage 4 (GCSE) passes, and the proportion of under 21 successfully applying to Higher Education as the dependent variables.

With the Key Stage 4 outcome, the significant factors were identified as proportion of non-white groups in the area (positive weight, $P<0.001$) and the proportion of adults with no qualifications (negative weight, $P<0.01$). The average number of moves and satisfaction with local schools were not significant in the analysis.

For the proportion of successful applicants to Higher Education, the two significant factors were identified as proportion of non-white groups in the area (positive weight, $P<0.001$) and the proportion of adults with degree level qualifications (positive weight, $P<0.001$). Again the average number of moves and satisfaction with local schools were not significant in the analysis.

7.2 Grouping the NDC areas

The analysis in the previous section indicates that there are a number of potential area level indicators for pupil attainment and applications to Higher Education, although we stress that with the information available it is not possible to assess whether these indicators are direct drivers of attainment and Higher Education application, or simply correlates.

Table 7.3: NDC grouping by proportion of individuals of non-white ethnic origin

	Non-white ethnic group (Census) %	Average moves in last five years (MORI)	Adults 16-74 with no qualifications (MORI) %	Adults 25-74 with degree level qualification (MORI) %
Group 1 (proportion < 10%), 16 areas				
Hull	0.8	0.9	44.2	0.3
Knowsley	1.4	0.7	44.7	0.7
Norwich	1.6	0.7	25.1	5.3
Rochdale	2.1	0.9	23.7	2.6
Plymouth	2.4	1.3	25.7	3.7
Hartlepool	2.6	1.0	31.2	2.9
Southampton	2.7	0.8	27.4	4.4
Walsall	3.6	0.5	33.5	2.4
Derby	3.9	0.7	34.3	5.0
Middlesbrough	4.2	0.6	35.9	2.0
Brighton	5.1	0.9	25.7	7.0
Salford	5.9	0.7	33.6	5.7
Sunderland	6.6	1.1	37.8	5.4
Leicester	6.9	0.8	41.8	2.5
Birmingham KN	8.6	0.7	27.4	4.0
Coventry	9.5	1.1	49.5	1.6
Group 2 (proportion 10-30%), 10 areas				
Oldham	11.1	0.8	29.4	2.7
Manchester	11.5	1.0	38.8	3.6
Doncaster	11.6	1.4	29.8	7.1
Liverpool	13.9	1.0	34.4	5.6
Bristol	14.0	1.2	25.6	12.5
Islington	25.0	0.8	26.3	24.3
Newcastle	25.5	1.5	36.6	10.4
Nottingham	28.3	1.7	29.4	13.6
H'smith & Fulham	28.4	0.9	25.4	23.9
Luton	29.1	1.0	20.1	8.0
Group 3 (proportion > 30%), 13 areas				
Sandwell	37.1	0.6	33.1	4.8
Hackney	39.1	0.7	31.7	14.2
Lambeth	43.6	1.0	18.2	27.2
Sheffield	46.4	0.9	36.0	12.3
Haringey	48.9	0.7	30.1	19.5
Lewisham	50.2	0.8	21.2	16.5
Newham	52.8	0.7	26.6	16.4
Wolverhampton	54.2	0.8	24.9	9.3
Brent	56.4	0.7	26.3	15.1
Bradford	57.6	0.8	34.9	7.2
Southwark	57.8	0.6	31.4	9.4
Tower Hamlets	64.8	0.9	41.1	14.5
Birmingham A	75.7	0.6	37.4	6.3

Source: MORI, 2002; Census 2001; DfES 2002; UCAS 2002

Based on these indicators we can start to analyse the performance of NDC areas and groups of areas in terms of their characteristics. It should be emphasised that this exploratory analysis is designed to show what can be done with the data available, rather than giving the final definitive story. Further analysis will be possible with the next round of the NDC Household Survey, and additional individual level DfES Key Stage datasets.

Table 7.3 above shows the NDC areas split into three groups based on the proportion of people in each NDC area from non-white ethnic groups (from the Census 2001). Group 1 areas have less than 10% of individuals from non-white ethnic groups, Group 2 10-30% and Group 3 over 30%; it should be emphasised that this grouping is simply an exploratory exercise, and not intended as a hard result or recommendation for future analysis.

As may be expected, there is a strong regional slant to the grouping, with all London NDC areas in Group 3 except for Fulham and Islington in Group 2. The majority of Group 1 NDC areas are from the Midlands and North, although the group contains three NDC areas from the South - Brighton, Plymouth and Southampton. Many of the NDC areas in Group 1 are in former heavy industrial areas, with long established predominantly white working class populations. Some of these areas might be termed 'residual', in that they have stable populations, but much of the industry has cut back or closed down. They are marked by very low proportions of adults with degree level qualifications. Groups 2 and 3 contain more mixed populations and these areas also have rather higher proportions of adults with degree level qualifications, suggesting that they are able to attract or retain more highly qualified people. Group 3 consists of mainly London areas, with other areas with high proportions of ethnic minorities such as Bradford, Sheffield, Birmingham Aston, Sandwell and Wolverhampton.

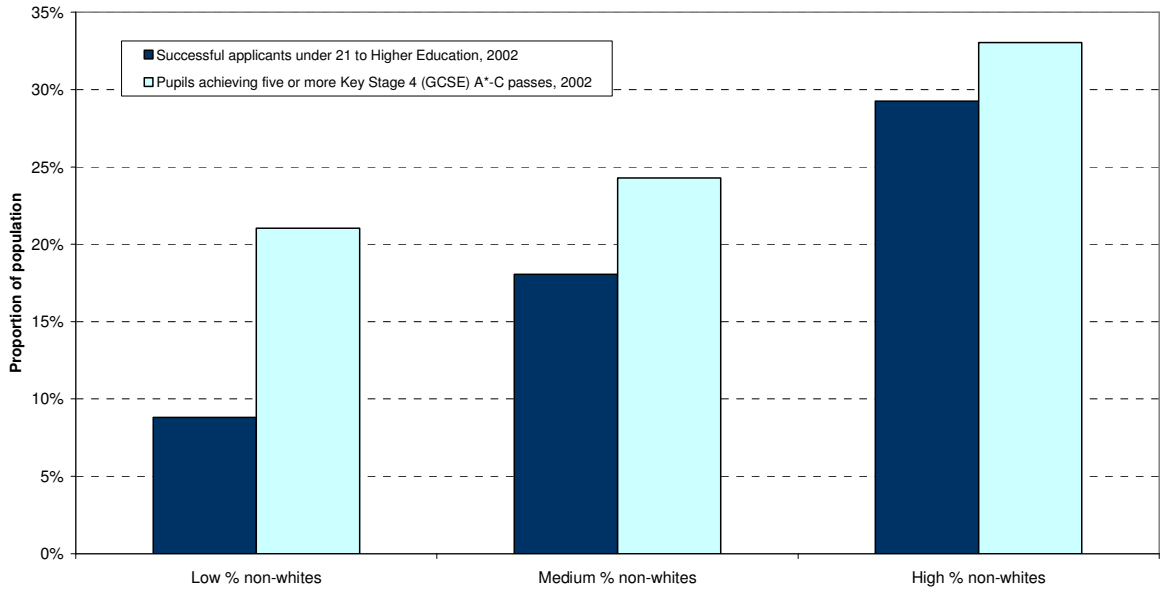
Table 7.4 below shows the average properties across each of the 3 groups. Group 1, with the lowest proportions of non-white ethnic groups, shows the lowest levels of adults with degree qualifications, the highest satisfaction with local schools, and the lowest pupil attainment and proportions of people going on to Higher Education. By contrast, Group 3, with the highest proportions of non-white ethnic groups, shows the highest levels of adults with degree qualifications, the highest pupil attainment and proportions of people going on to Higher Education, but the lowest satisfaction with local schools.

Table 7.4: NDC non-white ethnic grouping characteristics

	Group 1	Group 2	Group 3
Number of NDC areas in group	16	10	13
Non-white ethnic group (Census)	4.4%	19.8%	52.6%
Average moves in last five years (MORI)	0.83	1.12	0.76
Adults aged 16-74 with no qualifications (MORI)	33.9%	29.6%	30.2%
Adults aged 25-74 with degree level qualification (MORI)	3.5%	11.3%	13.4%
Satisfaction with primary school (MORI)	77.5%	74.4%	71.8%
Satisfaction with secondary school (MORI)	62.9%	56.1%	56.2%
Satisfaction with area (MORI)	63.4%	59.1%	59.5%
Achieving 5+ A*-C Key Stage 4 passes	21.0%	24.3%	33.0%
Successful applicants under 21 to HE	8.8%	18.1%	29.2%

Source: MORI, 2002; Census 2001; DfES 2002; UCAS 2002

Figure 7.5: Pupil attainment and successful applicants to Higher Education by NDC Group



Source: Census 2001; DfES 2002; UCAS 2002

Figure 7.5 above shows the key pupil attainment and HE applicant outcomes by NDC Group. As shown in Table 7.4, the key educational outcomes of pupils achieving five or more Key Stage 4 (GCSE) A*-C passes, and proportion of successful applicants to Higher Education,

both increase across the three groups with increasing proportions of individuals of non-white ethnic origin.

Table 7.5: NDC grouping by proportion of adults with no qualifications

	Adults aged 16-74 with no qualifications (MORI) %	Non-white ethnic group (Census) %	Average moves in last five years (MORI)	Adults aged 25-74 with degree level qualification (MORI) %
Group 1, 13 areas				
Coventry	49.5	9.5	1.1	1.6
Knowsley	44.7	1.4	0.7	0.7
Hull	44.2	0.8	0.9	0.3
Leicester	41.8	6.9	0.8	2.5
Tower Hamlets	41.1	64.8	0.9	14.5
Manchester	38.8	11.5	1.0	3.6
Sunderland	37.8	6.6	1.1	5.4
Birmingham A	37.4	75.7	0.6	6.3
Newcastle	36.6	25.5	1.5	10.4
Sheffield	36.0	46.4	0.9	12.3
Middlesbrough	35.9	4.2	0.6	2.0
Bradford	34.9	57.6	0.8	7.2
Liverpool	34.4	13.9	1.0	5.6
Group 2, 13 areas				
Derby	34.3	3.9	0.7	5.0
Salford	33.6	5.9	0.7	5.7
Walsall	33.5	3.6	0.5	2.4
Sandwell	33.1	37.1	0.6	4.8
Hackney	31.7	39.1	0.7	14.2
Southwark	31.4	57.8	0.6	9.4
Hartlepool	31.2	2.6	1.0	2.9
Haringey	30.1	48.9	0.7	19.5
Doncaster	29.8	11.6	1.4	7.1
Nottingham	29.4	28.3	1.7	13.6
Oldham	29.4	11.1	0.8	2.7
Birmingham KN	27.4	8.6	0.7	4.0
Southampton	27.4	2.7	0.8	4.4
Group 3, 13 areas				
Newham	26.6	52.8	0.7	16.4
Islington	26.3	25.0	0.8	24.3
Brent	26.3	56.4	0.7	15.1
Brighton	25.7	5.1	0.9	7.0
Plymouth	25.7	2.4	1.3	3.7
Bristol	25.6	14.0	1.2	12.5
H'smith & Fulham	25.4	28.4	0.9	23.9
Norwich	25.1	1.6	0.7	5.3
Wolverhampton	24.9	54.2	0.8	9.3
Rochdale	23.7	2.1	0.9	2.6
Lewisham	21.2	50.2	0.8	16.5
Luton	20.1	29.1	1.0	8.0
Lambeth	18.2	43.6	1.0	27.2

Source: SDRC 2004.

Table 7.5 above shows a different potential grouping, based on three equal sized groups split by the proportion of adults with no qualifications.

As with the previous grouping based on proportions of non-white ethnic groups there is a strong regional slant to the groups. Group 1, with the highest proportions of adults with no qualifications, consists mainly of NDC areas from the North and Midlands although a single London area is included – Tower Hamlets, possibly due to the large proportions of ethnic groups such as Bangladeshis with low adult qualifications (see Section 4.3 for further analysis of these groups).

Table 7.6 below shows the average properties across each of the 3 groups. Group 1, with the highest proportions of adults with no qualifications, as expected shows the shows the lowest levels of adults with degree qualifications. Group 1 also shows the highest satisfaction with schools (although not area), and the lowest proportion of pupils achieving five or more Key Stage 4 (GCSE) A*-C passes and the lowest proportion of people going on to Higher Education. By contrast, Group 3, with the lowest proportions of adults with no qualifications, shows the highest levels of adults with degree qualifications, the highest pupil attainment and proportions of people going on to Higher Education, but the lowest satisfaction with local schools.

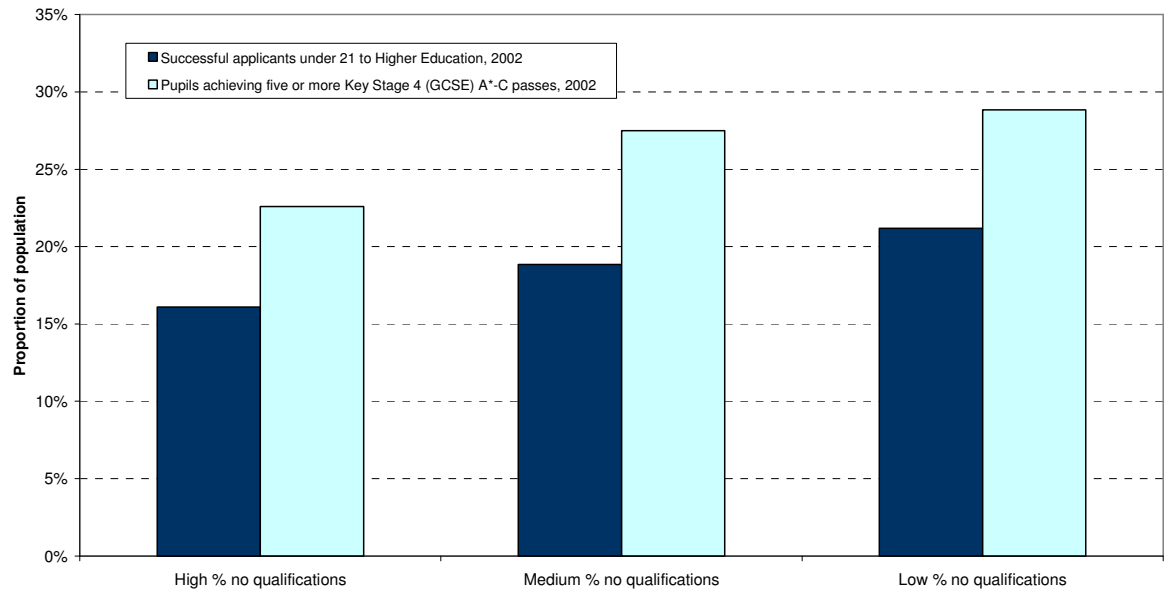
Table 7.6: NDC adults with no qualifications grouping characteristics

	Group 1	Group 2	Group 3
Number of NDC areas in group	13	13	13
Adults aged 16-74 with no qualifications (MORI)	39.4%	30.9%	24.2%
Non-white ethnic group (Census)	28.4%	21.3%	27.8%
Average moves in last five years (MORI)	0.91	0.84	0.89
Adults aged 25-74 with degree level qualification (MORI)	5.5%	7.4%	13.4%
Satisfaction with primary school (MORI)	78.7%	74.5%	71.5%
Satisfaction with secondary school (MORI)	65.7%	57.3%	54.6%
Satisfaction with area (MORI)	61.7%	57.5%	63.7%
Achieving 5+ A*-C Key Stage 4 passes	22.6%	27.5%	28.8%
Successful applicants under 21 to HE	16.1%	18.8%	21.2%

Source: MORI, 2002; Census 2001; DfES 2002; UCAS 2002

Figure 7.6 below shows the key educational outcomes (pupil attainment and successful applicants to Higher Education) by NDC areas grouped by the proportions of adults with no qualifications. There is a clear trend for improved outcome with decreasing proportion of adults with no qualification.

Figure 7.6: Pupil attainment and successful applicants to Higher Education by NDC Group



Source: MORI, 2002; DfES 2002; UCAS 2002

In Section 8 we use the two groupings described here to focus on how the situation is changing for different groups of NDC areas.

7.3 NDC area characteristics and key education outcomes summary

A number of NDC area level characteristics were seen to be strongly related to the key education outcomes of pupil attainment and successful application to Higher Education at NDC area level. In particular high levels of adult education were a strong predictor of better performance on the pupil attainment and Higher Education applications, as were high proportions of non-white ethnic groups. Population mobility was not seen to be a significant factor in the analysis, although more detailed analysis may well show differences between specific mobile or static groups. Some of the NDC areas appear to fall into a more 'residual' category e.g. stable areas with disadvantaged populations previously dependent on a local

economy and employment that has moved on or closed down; others are more 'transitional' in the sense that there are groups moving in or out, potentially changing the profile of the area and giving it a more dynamic character.

Exploratory analysis organised the NDC areas into three separate groups, by ethnic and adult qualification characteristics. There is wide variation between the groups in pupil attainment and application to Higher Education. Supporting the analysis earlier in this section, groups of NDC areas with high proportions of ethnic minorities and groups of NDC areas with low proportions of adults with no qualifications are likely to have higher pupil attainment and higher rates of successful application to Higher Education.

Section 8. Analysing change across the NDC areas

The analysis shown in previous sections focused on a ”snapshot” picture of the NDC areas based on information from 2001 and 2002, often in the broader context of England as a whole. In this section we turn to analyse the changing picture over time in the NDC areas. Again we place the NDC areas in the context of England as a whole, and also look at the more specific context of the most deprived areas across the country.

In this section we show analysis of change over five years, 1999 to 2003, drawn from data on successful applications to Higher Education made available by the University Central Admissions Service (UCAS). We also show the change over time for the Key Stage 2 and Key Stage 4 pupil attainment data from 2002 to 2004. This does show some interesting results, although with limited years of data available the danger is in identifying year-to-year fluctuation rather than significant trends. As more annual DfES datasets become available it will be possible to extend this analysis (and add in individual level pupil progress).

Finally, this section presents some headline figures from the second wave of the NDC Household Survey conducted in 2004[15]. The second survey aimed to track as many of the individuals as possible who originally completed the survey in 2002. Although a detailed analysis has not been performed at this stage, this provides an indication of some of the changes that may be taking place and enables comparisons to be drawn between NDC and comparator areas.

For snapshot analysis of the situation in 2002 for Key Stage pupil attainment data see Section 3, and for applications to Higher Education see Section 5.

8.1 Identifying an “NDC effect”?

This section does not try to identify and measure an “NDC effect”. This would require a detailed analysis at individual level, comparing a range of outcomes across similar groups differing only in whether or not they are in an NDC area programme. To assess an NDC effect at this point would be premature. The longest data series we have is for the UCAS data, but much of this precedes the NDC programme. We have three years of PLASC/NPD,

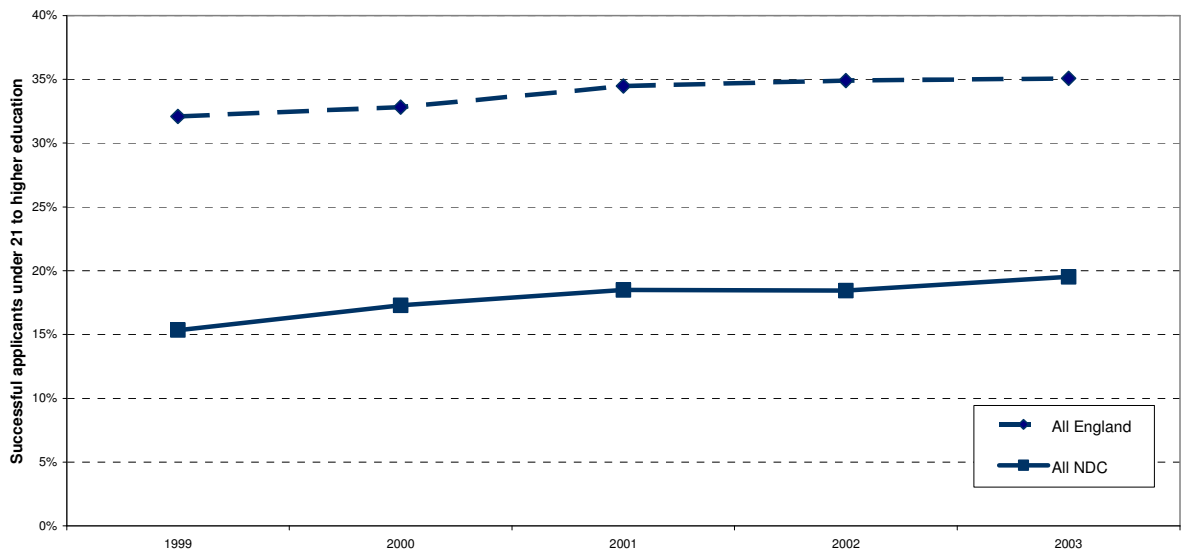
[15] SDRC are grateful to the Centre for Regional Economic and Social Research (CRESR) at Sheffield Hallam University for providing the analysis presented in section 8.6.

which does hint at some of the changes that may be taking place. However, this is still too short a time span to be able to confidently identify long-term trends as it may be subject to year-on-year fluctuations.

8.2 Change across all NDC areas for applicants to Higher Education

Figure 8.1 below shows the proportion of successful applicants under 21 to Higher Education for the most recent five years of data available, 1999 to 2003, for England and the NDC areas as a whole. The five years have seen the proportion of successful applicants across England increase from just over 32% to just over 35% (an increase of over 9%); while in the NDC areas the increase has been from 15.3% to 19.5% (an increase of over 27%)[16]. In other words the proportion of successful applicants to HE is rising faster in the NDC areas than across England as a whole.

Figure 8.1: Successful applications under 21 to Higher Education, NDC areas and England

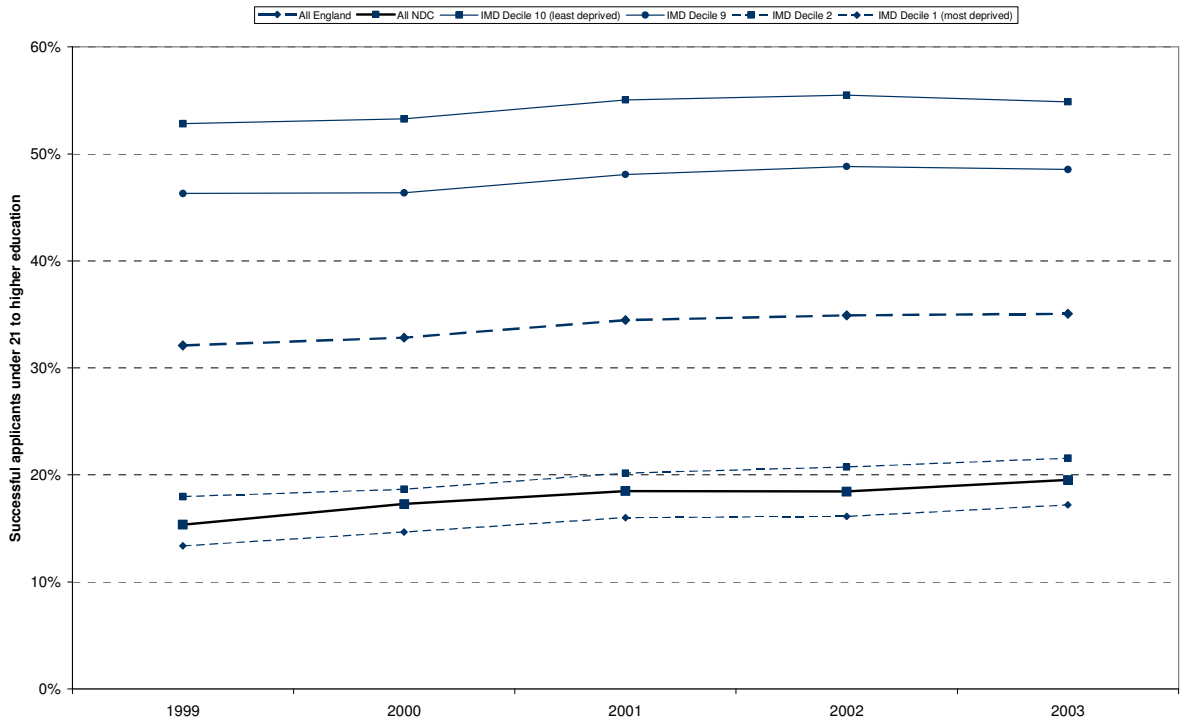


Source: UCAS, 1999 to 2003

16 Note that the percentage is based on the number of successful applicants aged under 21 each year over the estimated number of young people in any one year group aged 15-17 (see Section 5.1 for the explanation of why this denominator was used). This ignores successful applicants 22 and over which make up a significant number of applicants each year. The percentages therefore significantly understate the full proportion entering HE each year. The reason for adopting this method is also explained in Section 5.

We can also compare the NDC areas with all areas across England grouped into 10% bands of the IMD 2004. Figure 8.2 below shows the proportions of successful applicants aged under 21 across England and the NDC areas, compared with the same indicator across the areas that fall into the least and most deprived 20% of all areas across the country. We see that the least deprived areas across the country (the “IMD 2004 Decile 10 (least deprived)” line) have the highest rate of such applicants (over 50% for all five years), with this proportion increasing over the five year period. The most deprived areas (the “IMD 2004 Decile 1 (most deprived)” line) has the lowest proportion of such applicants, starting from just over 13% in 1999 and increasing to 17% in 2003.

Figure 8.2: Successful applications under 21 to Higher Education

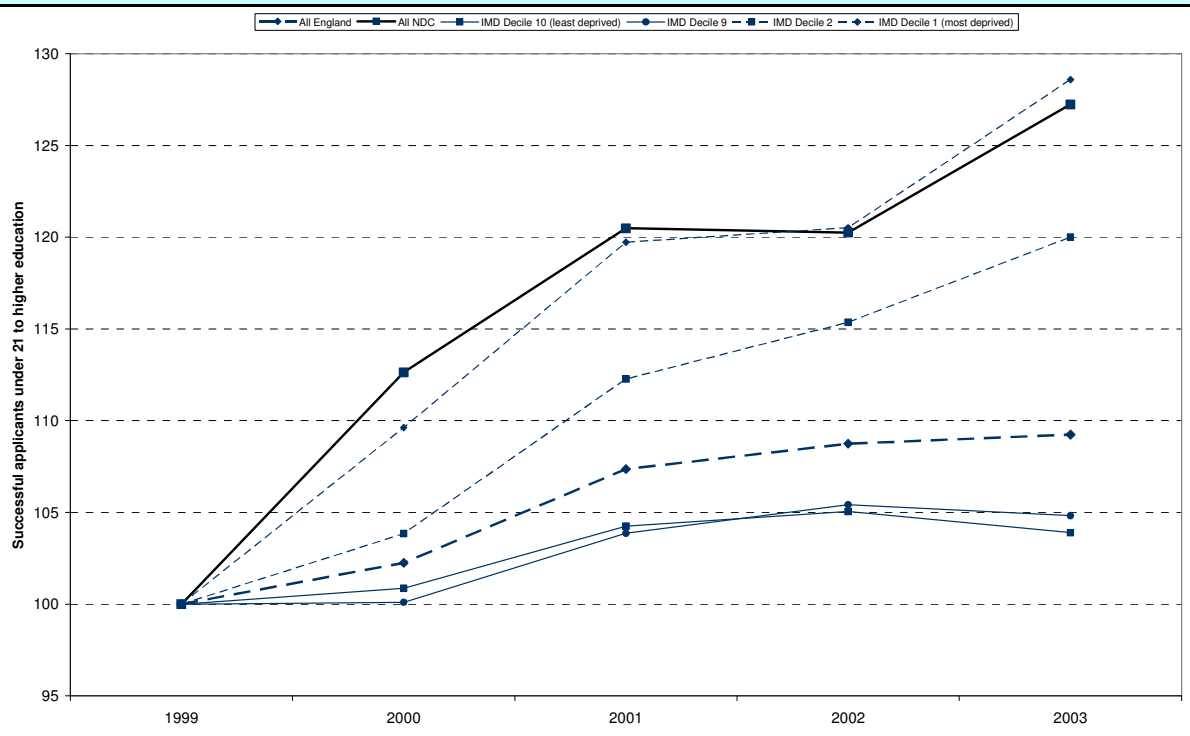


Source: UCAS, 1999 - 2003

The NDC areas as a whole show similar features to the most deprived 20% of areas, lying between the ninth and tenth deciles of the IMD 2004 distribution; the level of successful applications to Higher Education across the NDC areas for each of the five years 1999 to 2003 lies between the levels for the most deprived 10% of all areas in the country, and the level for the 10%-20% most deprived areas. This is consistent with the levels of deprivation across the NDC areas seen in Section 2. Thus the increase for NDC areas shown in Figure 8.1 turns out to be the pattern for more disadvantaged areas more generally.

Figure 8.3 below shows the proportion of successful applicants to Higher Education over the five years, standardised to a 1999 figure of 100.This provides easy comparison of the relative increases over the five years across the different groups.

Figure 8.3: Successful applications under 21 to Higher Education, standardised to 1999 rate



Source: UCAS, 1999 to 2003

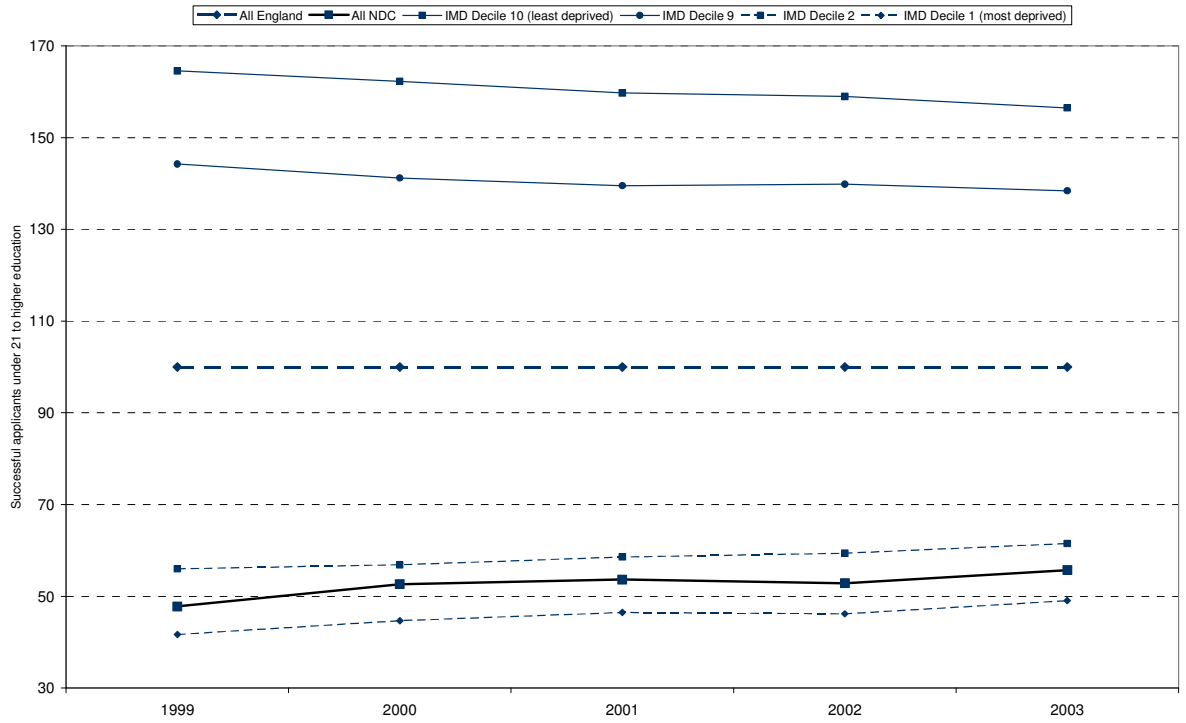
As noted above, the England figure increases by just over 9%, while the NDC figure increases by over 27%. The figure for the most deprived areas across the country, the "IMD 2004 Decile 1 (most deprived) line", increases by a similar amount to the NDC areas.

Although proportions of successful applicants to Higher Education in the NDC areas are increasing significantly faster than England as a whole, they are increasing broadly in line with similarly disadvantaged areas. By contrast, the least deprived 20% of areas are increasing more slowly, less than 5% over the five years. This is likely due, at least in part, to a "maximum" effect – it is difficult to increase much beyond the current level of more than half the year-group going on to Higher Education. For the areas with the lowest levels, there is much more scope for improvement.

Finally, Figure 8.4 below shows the relative increases across the different groups standardised to the England figures of 100. The proportion of successful applicants in the most disadvantaged areas is increasing relative both to England as a whole and to the least

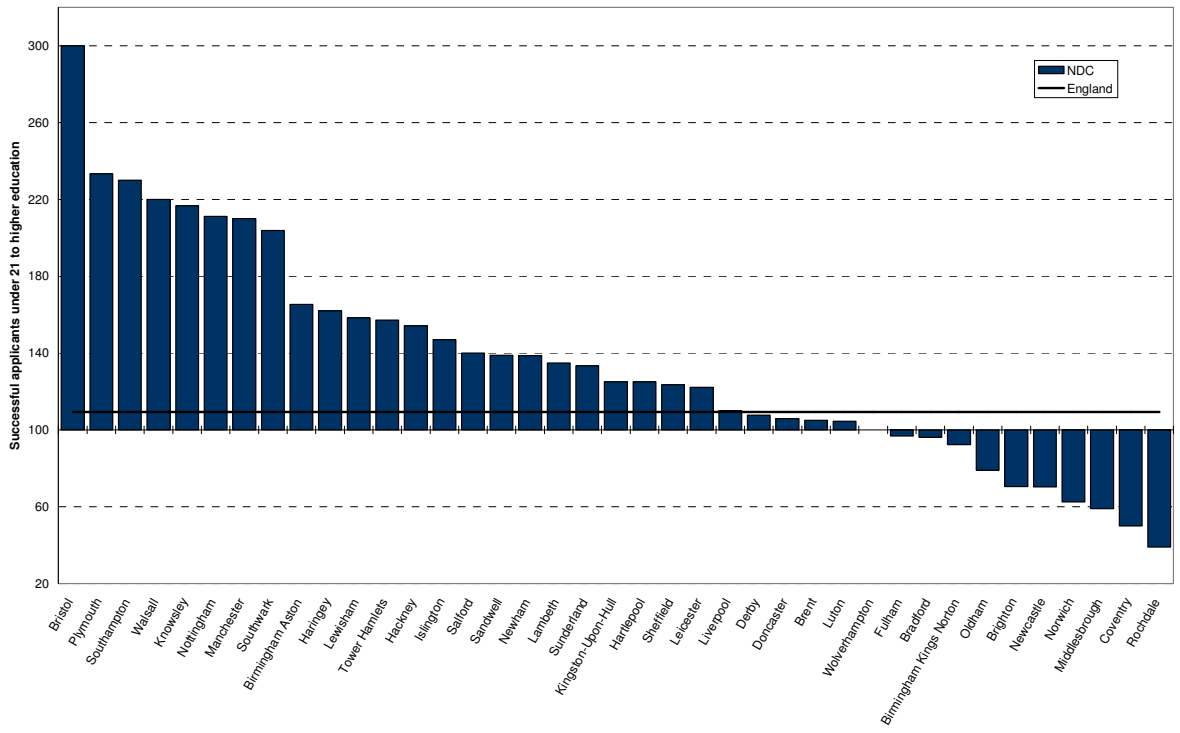
deprived areas. The proportion of successful applicants across England is also increasing relative to the least deprived areas.

Figure 8.4: Successful applications under 21 to Higher Education, standardised to England rate



Source: UCAS, 1999 to 2003

Figure 8.5: Change in successful applications under 21 to Higher Education, NDC areas standardised to 1999 figure



Source: UCAS, 1999 to 2003

The figures over all NDC programmes mask considerable variation across the individual NDC areas. Figure 8.5 above shows the increase in proportions of successful applicants to Higher Education over the five years, standardised to a 1999 NDC area figure of 100. The NDC columns are shown with baselines set to the NDC 1999 figure (100), and the England figure is shown as the thick horizontal line.

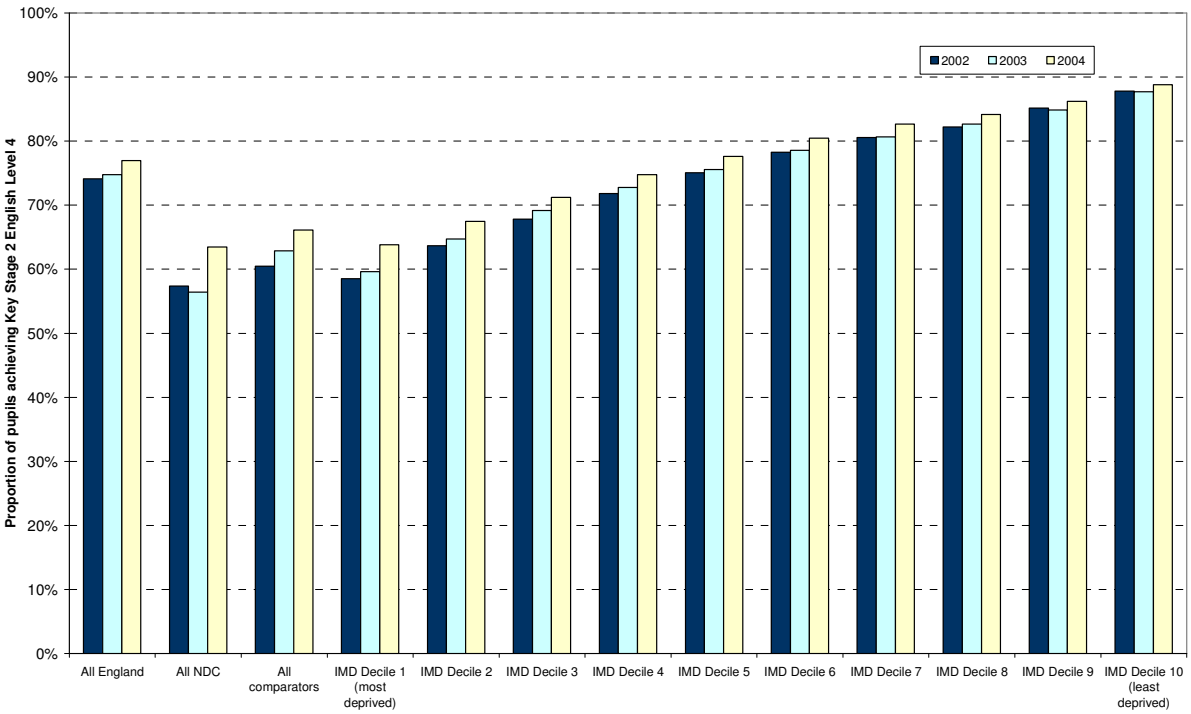
It should be emphasised that in some areas the numbers of people shown are very small; so small changes in the raw counts of successful applicants can result in large changes to the proportion of such people standardised to the 1999 figure. For example in Bristol the numbers of successful applicants under 21 has increased from three in 1999 to seven in 2003. However Figure 8.5 shows clearly that increases in the proportions of people going on to Higher Education are not occurring across the board in all NDC areas.

8.3 Change across all NDC areas for pupil attainment

Figures 8.6 to 8.9 below show the proportion of pupils in maintained schools reaching Level 4 Key Stage 2 from 2002 to 2004[17] for English (Figure 8.6), Maths (Figure 8.7) and Science (Figure 8.8). Each figure shows the England, All comparator area and All NDC area figures; also the figures for all areas grouped by the IMD 2004 10% bands. In each of the assessments there is a clear trend for decreasing pupil attainment with increasing levels of deprivation, with the average across NDC areas similar to the comparator areas and the most deprived 10% of all areas across England.

[17] It should be noted that Key Stage data for 2004 is, at this stage (June 2005), 'unamended', that is, it is published in the School & College Achievement & Attainment Tables, but has not yet been checked with the schools/colleges to ensure its accuracy. Schools/Colleges are sent the data for their pupils, and are asked to confirm that the information they have been provided with is accurate. During this checking exercise (so long as the right evidence is provided) the institution is able to amend individual results, which may or may not result in changes to headline figures.
The amendment process usually has an impact on the national figures, resulting in the headline figures increasing between unamended and amended. This effect is more noticeable at LEA and school level, where some schools and LEAs see a considerable change between unamended and amended.

Figure 8.6: Proportion of pupils reaching Key Stage 2 level 4 in English, 2002-2004



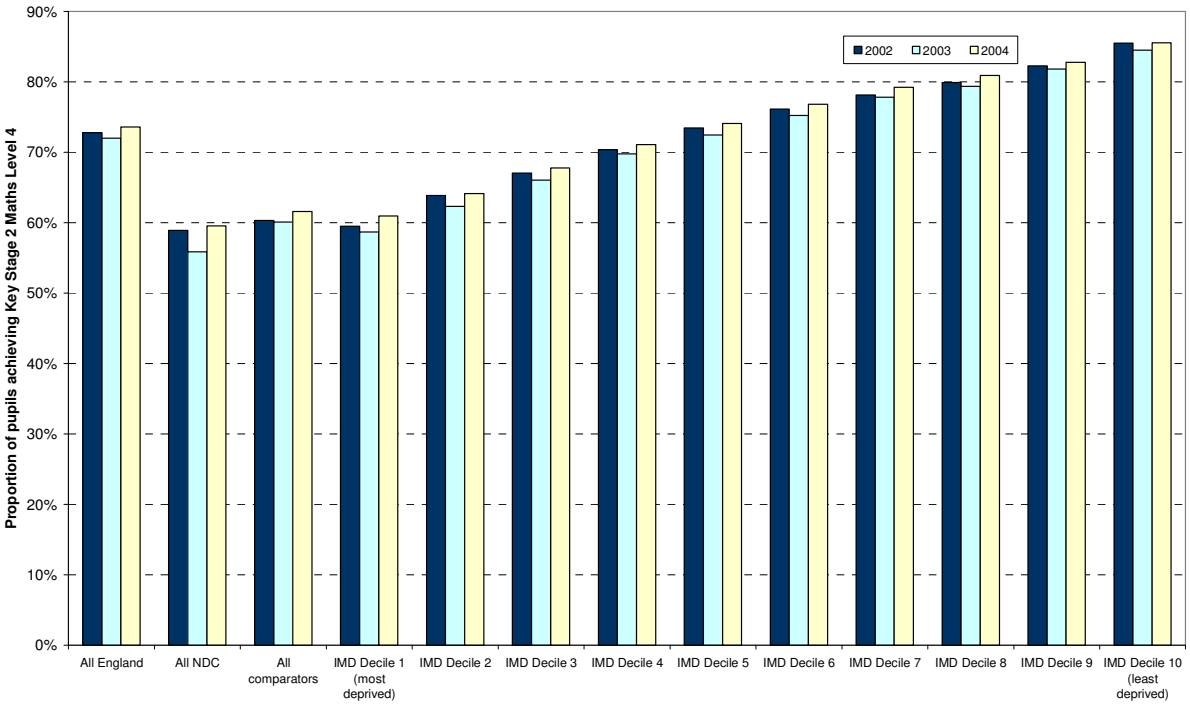
Source: DfES, 2002-2004

With only three years of data available, there is a danger in placing too much emphasis on the results shown here – year-to-year fluctuation can mask longer term trends, and there is also the issue of exactly matching the 2002 and 2003 procedures.

At Key Stage 2 in 2003, the results for the NDC areas as a whole dropped slightly from the results in 2002. This trend was not mirrored nationally; the majority of the ID 10% decile groups and the comparator areas experienced a small increase or little change in results between 2002 and 2003. The exception was for KS2 Maths where all areas had poorer results in 2003 (see Figures 8.7).

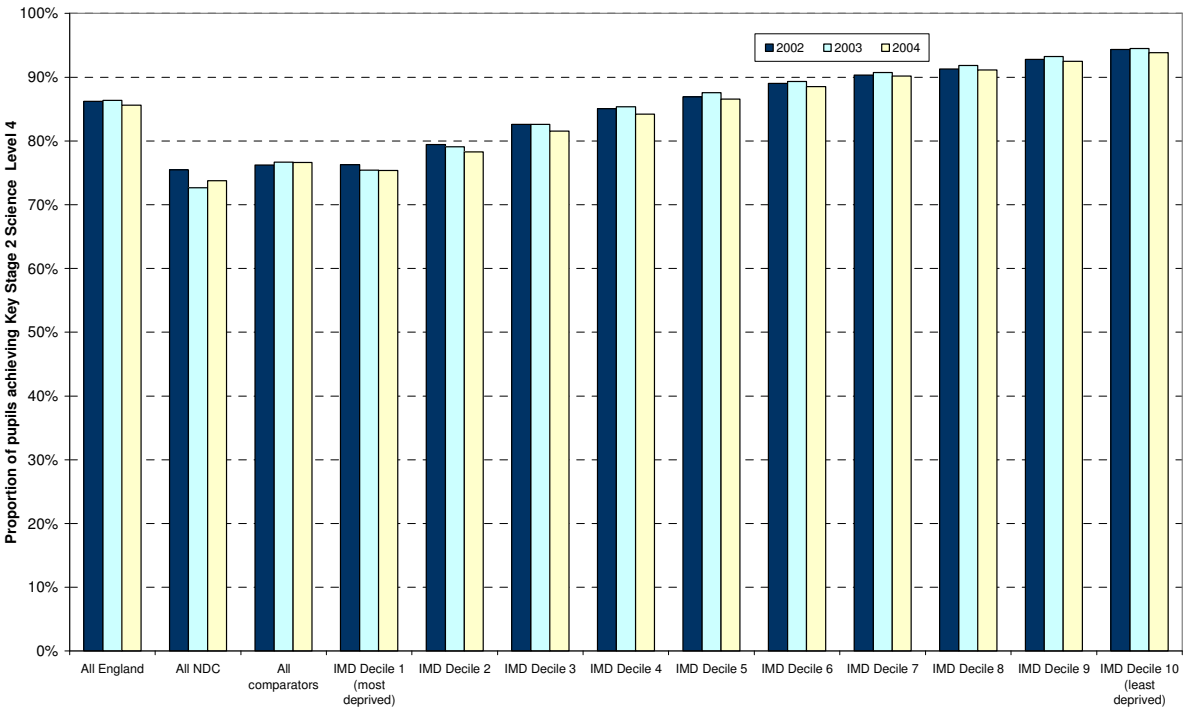
Between 2003 and 2004 a significant improvement occurred in the NDC KS2 results. In English and Maths results in 2004 were better than in 2002. In Science the NDC areas did improve (although 2004 results remained below the 2002 results), whereas all other areas had poorer results in 2004 than in 2003. It is likely that there is a "ceiling" effect, with Key Stage 2 Science results already extremely high in many areas.

Figure 8.7: Proportion of pupils reaching Key Stage 2 level 4 in Maths, 2002-2004



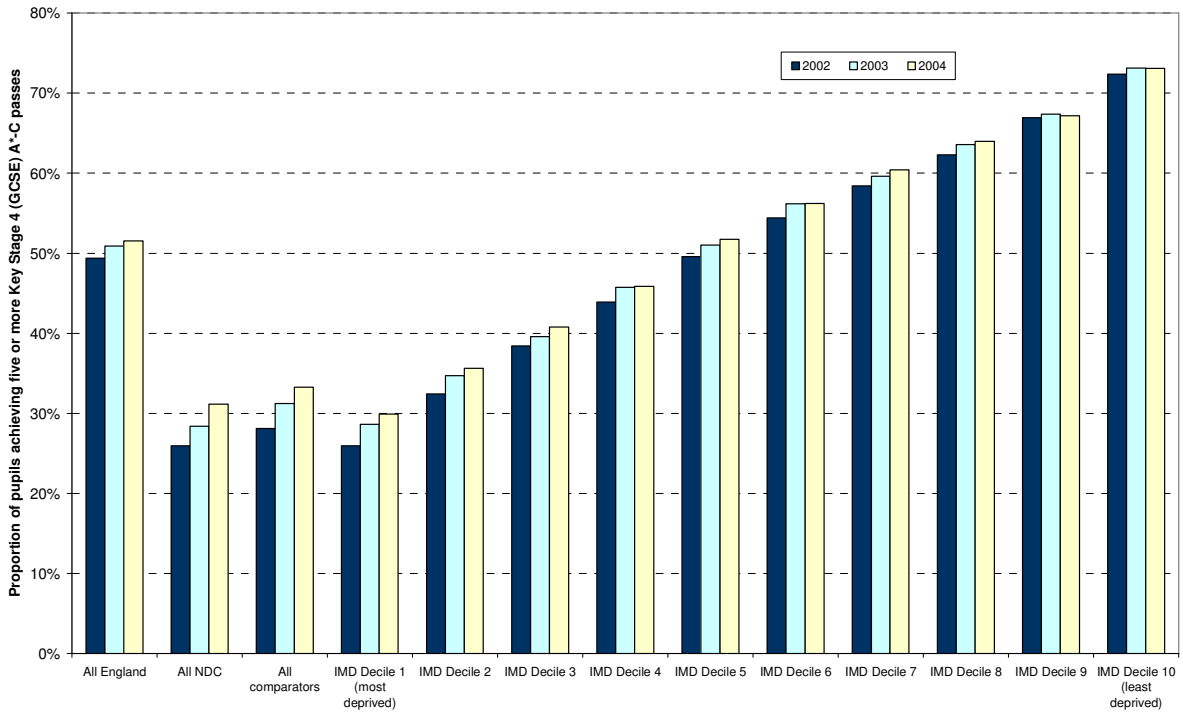
Source: DfES, 2002-2004

Figure 8.8: Proportion of pupils reaching Key Stage 2 level 4 in Science, 2002-2004



Source: DfES, 2002-2004

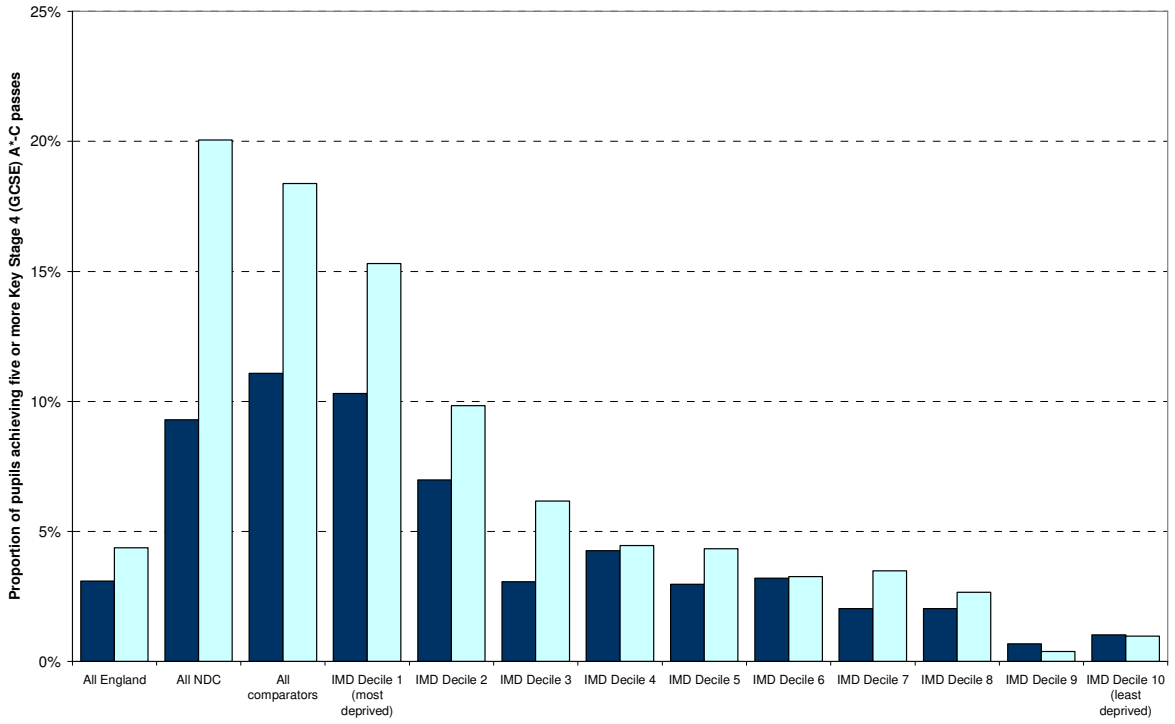
Figure 8.9: Proportion of pupils achieving five or more Key Stage 4 (GCSE) A*-C passes, 2002-2004



Source: DfES, 2002-2004

Figure 8.9 above shows the proportion of pupils in maintained schools achieving five or more Key Stage 4 (GCSE) A*-C passes from 2002 to 2004. The figure shows the England rate, the rate for the comparator areas combined and the rate for the NDC areas combined; also the averages are shown for all areas grouped by the IMD 2004 10% bands. As with the Key Stage 2 data, there is a clear trend for decreasing pupil attainment with increasing levels of deprivation, with the average across NDC areas similar to the most deprived 10% of all areas across England.

Figure 8.10: Proportion of pupils achieving five or more Key Stage 4 (GCSE) A*-C passes, 2002 - 2003 and 2002 - 2004 percentage improvement



Source: DfES, 2002-2004

In every one of the groups there is an increase in the proportion of pupils achieving 5 or more A*-C passes between 2002 and 2003 and between 2002 and 2004. Figure 8.10 above shows the percentage increase over 2002 to 2003 and 2002 to 2004 – as seen with the applicants to Higher Education, areas with the highest levels of deprivation have experienced the largest percentage improvements[18.] Between 2002 and 2003, the increase across the NDC areas is broadly consistent with the increase in the most deprived two deciles of the IMD 2004 distribution; however, between 2002 and 2004 the NDC areas have the largest percentage improvement; the improvement is greater than any of the 10 decile groups and the comparator areas with a 20% increase in the proportion achieving 5 or more A*-C passes.

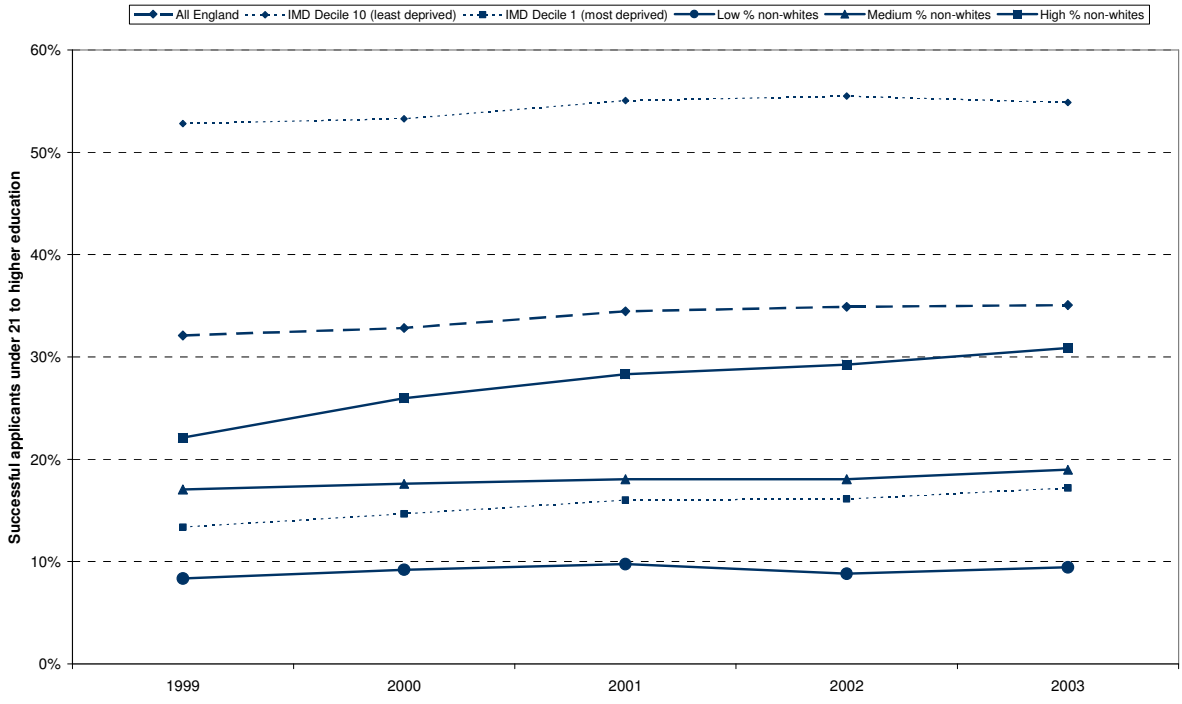
18 Note that an increase from 50% to 55%, is a five percentage points increase, but the figure has increased by 10%.

8.4 Change by NDC area groups

Due to the small numbers of successful applicants at individual NDC area level, the driving features of change across the NDC areas are further analysed by focussing on the groupings and area characteristics identified in Section 7. Both groupings used in Section 7 are analysed; proportion of non-white ethnic group, and proportion of adults with no qualifications.

Figure 8.11 below shows the proportion of successful applicants to Higher Education across the five years 1999 to 2003. Information for the three NDC groups by proportion of non-white ethnic group is shown (see Table 7.3 for details of membership of each group) alongside the England average and the least and most deprived 10% of all areas.

Figure 8.11: Successful applications under 21 to Higher Education, NDC areas split by proportion of non-white ethnic group



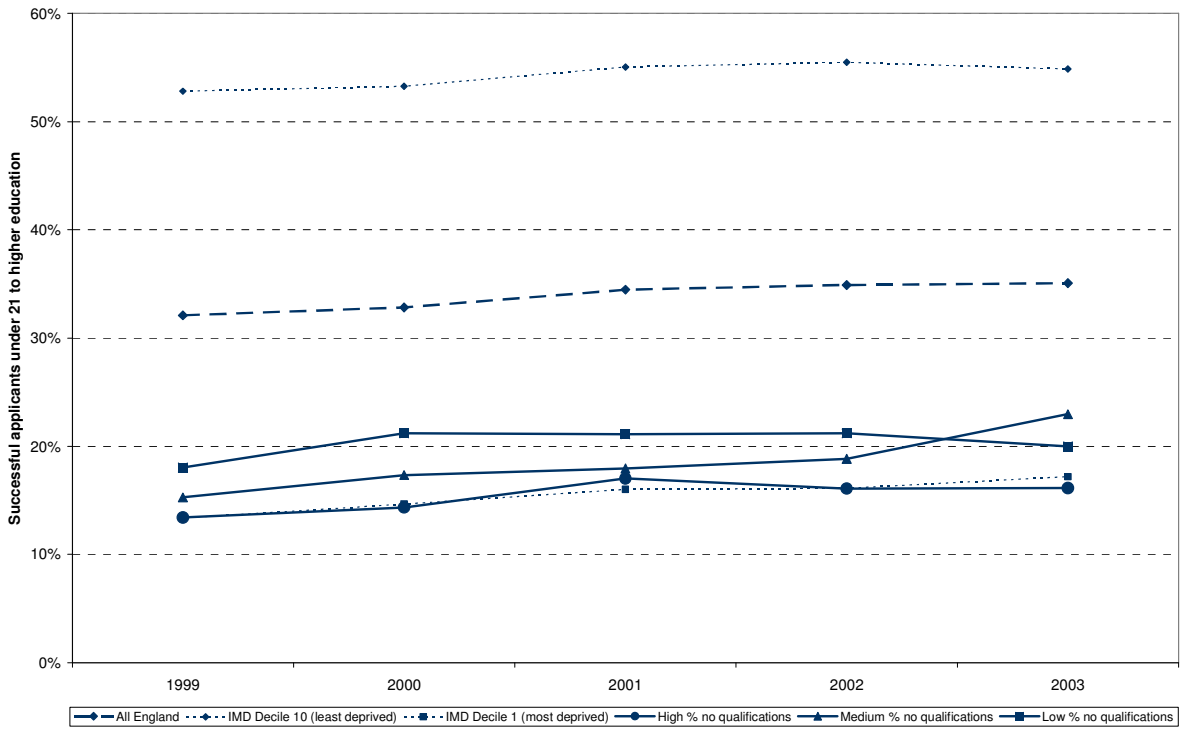
Source: UCAS, 1999 - 2003

It is clear from Figure 8.11 that the increase in successful applicants to Higher Education is not equal across all NDC areas. In particular, rates of successful application in areas with high proportions of individuals of non-white ethnic origin are increasing much faster than other areas across the NDC programmes, and much faster than the England average as a

whole. As Figure 8.11 shows these NDC areas have closed the gap with the national average very rapidly since 1999. There are a number of reasons why these areas may be doing better than average. For example the areas contain relatively high proportions of adults with degree qualifications, possibly acting as a driver for applications to Higher Education. There may also be regional effects at work with London areas doing particularly well, possibly for a number of different reasons. There may also be substantial migration over the five years into these areas by groups likely to go on to Higher Education. There may indeed be an NDC area effect. With the data currently available it is not possible to distinguish between these cases, and further detailed analysis is needed.

Figure 8.12 below shows the proportion of successful applicants to Higher Education for the three NDC groups by proportion of adults with no qualifications (see Table 7.5 for details of membership of each group) alongside the England average and the least and most deprived 10% of all areas. The picture here is less clear cut than with the proportions of non-white ethnic group shown in Figure 8.11. All three groups have increasing proportions of people going on to Higher Education, but there is no obvious trend across the groups.

Figure 8.12: Successful applications under 21 to Higher Education, NDC areas split by proportion of adults with no qualifications



Source: UCAS, 1999 - 2003

8.5 Analysing change using the NDC Household Survey

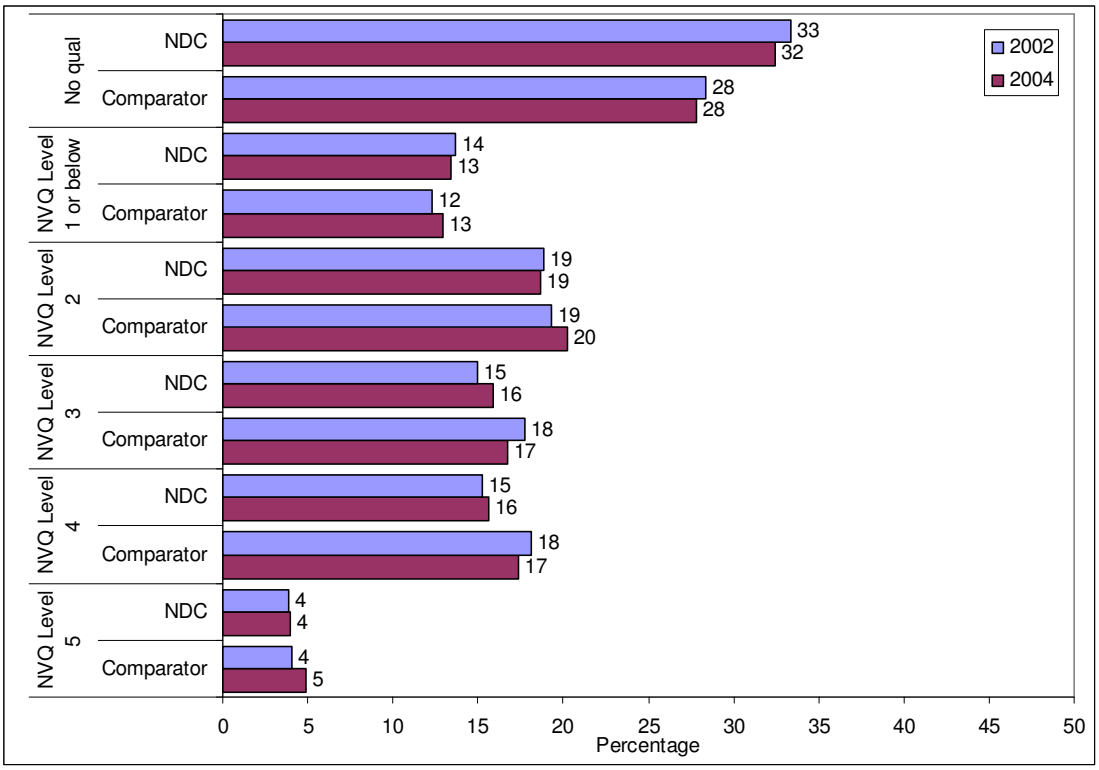
This section shows the changes in relation to: adult qualifications, adult education and training; use of IT and satisfaction with educational services. These areas were analysed in previous sections using 2002 data only (see Section 4 and Section 6). It should be noted that a more detailed analysis has not yet been performed on the 2004 data, and because of possible error introduced due to sample attrition, small percentage point changes in results may not be significant. As mentioned above, charts for inclusion in this section were produced by CRESR.

8.5.1 Adult qualifications

The two waves of the NDC Household Survey indicate modest, generally positive, changes in relation to educational qualifications for those of working age between 2002 and 2004 (Figure 8.13). Not surprisingly, fewer NDC residents hold higher level qualifications than is the case nationally: in 2004, 36% of NDC residents held NVQ level 3 or higher level qualifications, compared with a national figure of 49%. In total, 32% of NDC residents had no

qualifications, whereas the national equivalent is 15%[19]. Figure 8.13 shows that only very minor changes occur in adult qualification levels between 2002 and 2004. There is a slight trend of decreasing proportions of individuals with low level qualifications and increasing proportions of individuals with higher level qualifications in NDC areas but this may not be significant.

Figure 8.13: Working age residents: educational qualifications



Base: All working age; NDC aggregate 2002 (15,158) 2004 (14,858); Comparator 2002 (1,508) 2004 (2,986)

Source: CRESR (data originally from MORI/NOP)

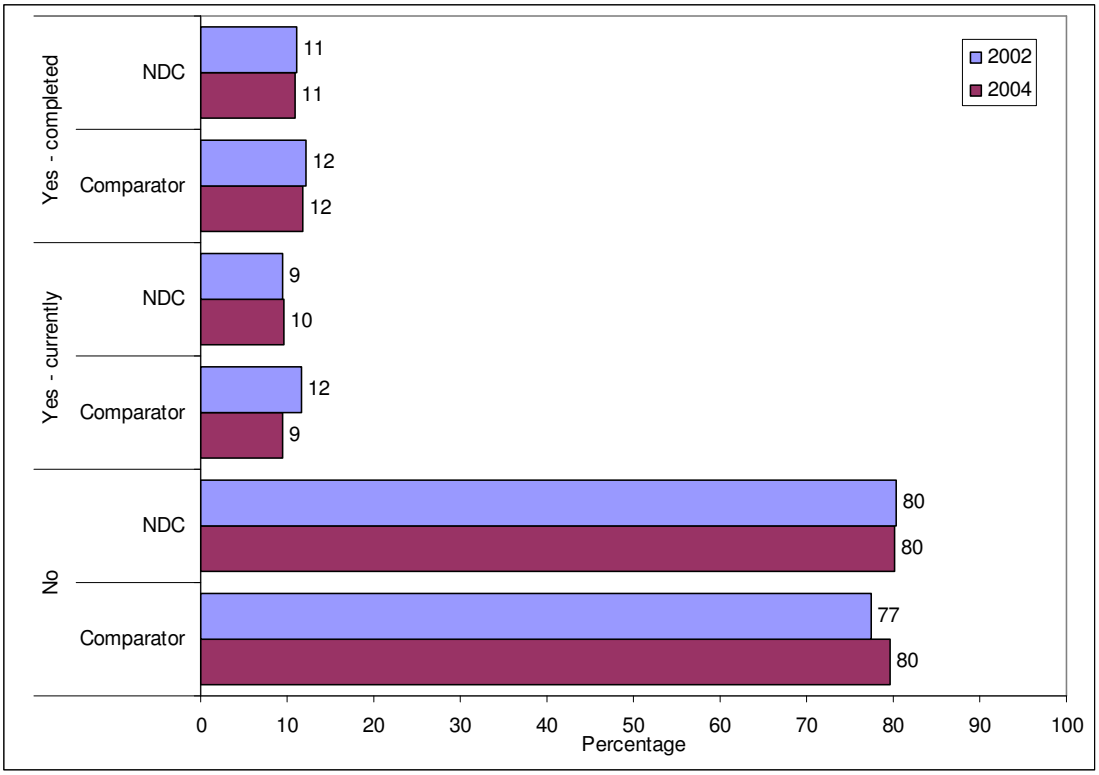
8.5.2 Additional education and training and basic skills

In 2004, 20% of NDC residents (not including those in full-time education) had either completed (in last 12 months), or were taking part in, some form of education or training. This figure is 10 percentage points below the national figure[20], and has changed little between 2002 and 2004, although the small changes which did occur were generally more positive than occurred in the comparator areas (Figure 8.14).

[19] Labour Force Survey, Summer 2004

[20] MORI Omnibus 2004

Figure 8.14: Residents undertaking additional education and training

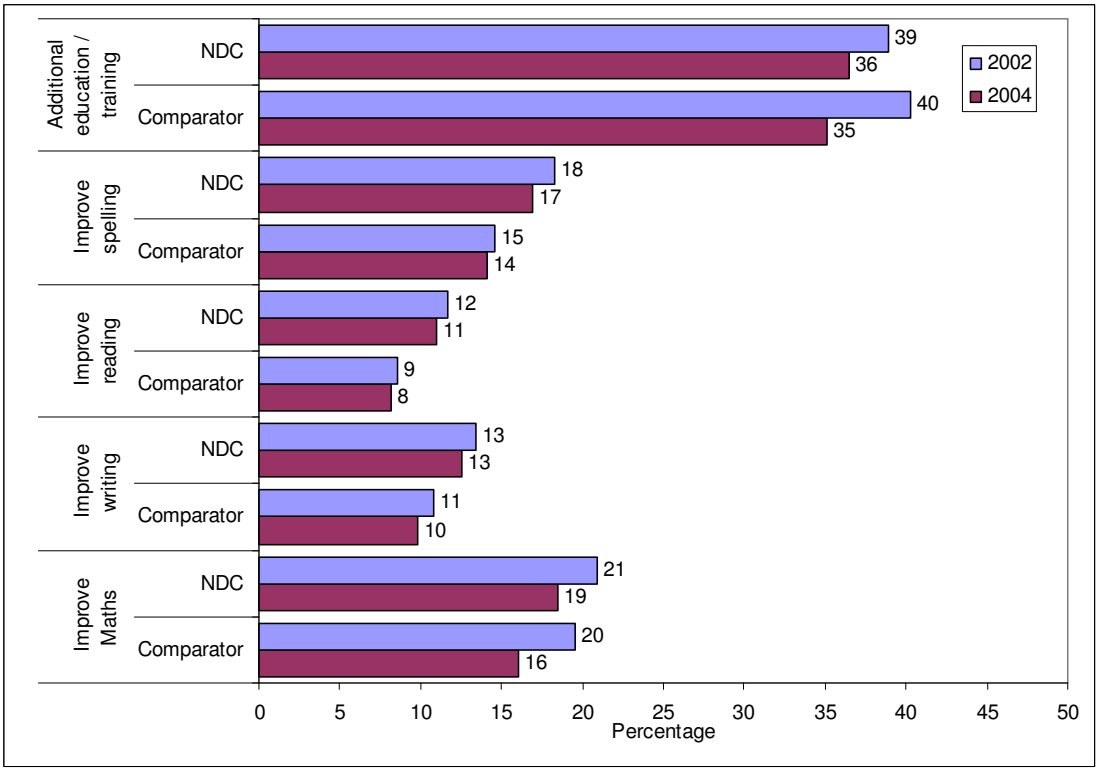


Base: All except in full time education; NDC aggregate 2002 (18,635) 2004 (18,739); Comparator 2002 (1,919) 2004 (3863)

Source: CRESR (data originally from MORI/NOP)

Despite the fact that some 47 per cent of NDC residents have either only NVQ Level 1 or no qualifications, there is not a strong sense that most residents want to improve their skills. In NDC areas 70% of residents surveyed in 2004 do not think they need to improve any basic skills, compared to 73% in comparator areas and 77% nationally. Although the proportion of residents wanting to improve basic skills did fall between 2002 and 2004 (see Figure 8.15) the same trend was also seen in the comparator areas. It is not clear whether this trend is due to improving skill levels or a declining appetite to improve skills.

Figure 8.15: NDC Residents: need to improved skills/wanting additional education/training



Base: All

Source: CRESR (data originally from MORI/NOP)

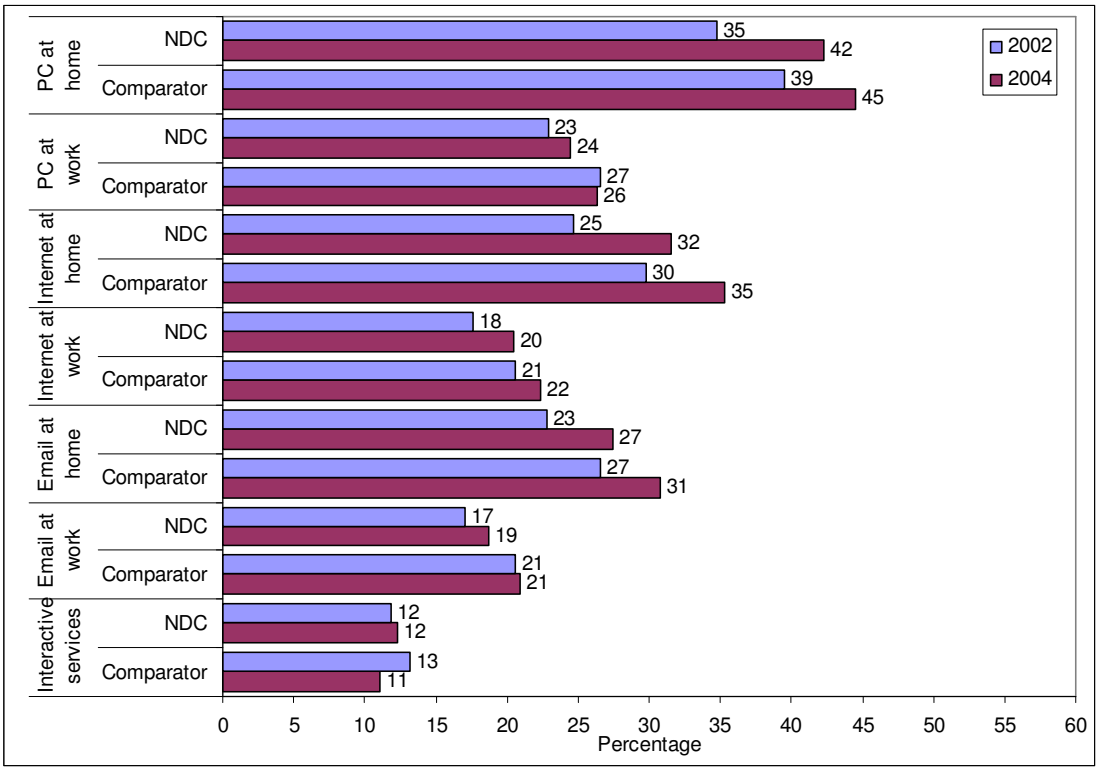
Interestingly, findings from the 2004 Focus Groups, of which two were held in each of the 39 NDC areas, reveal that most participants recognise that skills training and enhanced education are important in reducing worklessness. Roughly one group in ten specifically mentioned that local opportunities for adult learning and training had increased during the previous three years.

8.5.3 Use of IT

Use of all forms of IT (other than interactive services through digital TVs) rose between 2002 and 2004. In all instances increasing use of IT in the home was greater than at work or place of study. Use of IT has increased nationally over recent years. Thus the fact that this trend is observed in the NDC areas is not entirely surprising; however, it is interesting to note that, in every instance, the increase in the use of IT in NDC areas was greater between 2002 and 2004 than occurred in the comparator areas. This may reflect the fact that most recent NDC

Delivery Plans indicate Partnerships are supporting at least 50 separate projects which are intended to enhance IT usage. Although use of IT facilities by NDC residents rose between 2002 and 2004, absolute totals are nevertheless lower than national averages. For instance 42% of NDC residents use a PC at home, whereas the national equivalent is 56%[21].

Figure 8.16: Use of IT amongst NDC residents



Base: All

Source: CRESR (data originally from MORI/NOP)

8.5.4 Satisfaction with educational provision

The survey questioned residents on the use of educational facilities by either themselves or their children. In 2004, 37% of residents were either parents or guardians of children aged 16 or under and some 24% of households had at least one child using a local primary and/or secondary school. Users were asked to indicate their satisfaction in relation to some six tiers of educational provision (Figure 8.17):

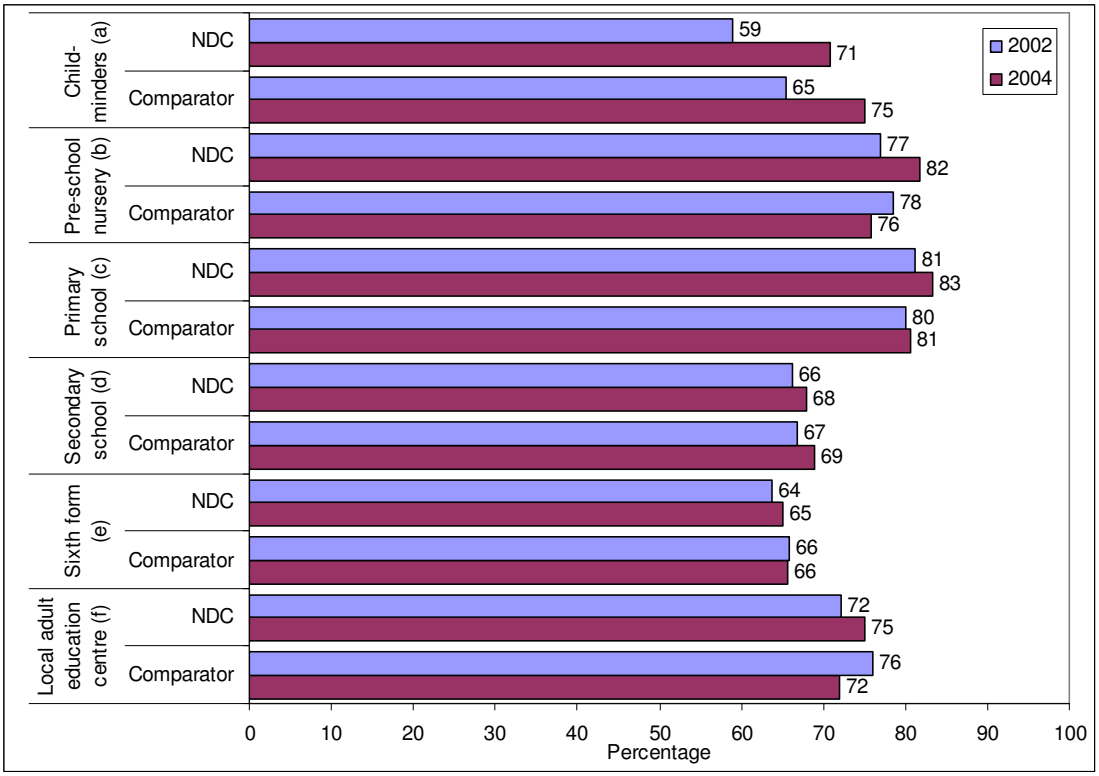
- For all six services at least 65% of users are very/fairly satisfied in 2004; more than 80% are satisfied with nursery and primary school provision.

[21] MORI Tech Tracker, 2004

- Satisfaction levels rose in relation to all six services during the period 2002 to 2004; satisfaction with childminding services rose fully 12 percentage points. This may reflect the fact that Partnerships are supporting about 90 projects designed in some way to create or improve local childminding facilities and services.
- Satisfaction levels tended to rise slightly more in NDCs than in the comparator areas.

As mentioned in Section 6, rising satisfaction levels should be treated with caution. Previously it has been observed that high satisfaction tends to correlate with comparatively poor results, and vice versa. Further analysis is needed to investigate whether or not educational performance has improved where satisfaction rates have gone up between 2002 and 2004.

Figure 8.17: Satisfaction with educational services



Base: [a]All used childminders/childcare clubs; NDC aggregate 2004 (410), 2002 (401); Comparator 2004 (76), 2002 (44) [b]All used pre-school nursery provision; NDC aggregate 2004 (1,190) 2002 (1,176); Comparator 2004 (239) 2002 (130) [c]All used local primary schools; NDC aggregate 2004 (3,696) 2002 (3,551); Comparator 2004 (682) 2002 (379) [d]All used local secondary schools; 2004 (2,482) 2002 (2,359); Comparator 2004 (484) 2002 (283) [e]All used local sixth form/FE colleges; NDC aggregate 2004 (831) 2002 (844); Comparator 2004 (96) 2002 (186) [f]All used local adult education centre; NDC aggregate 2004 (984) 2002 (862); Comparator 2004 (186) 2002 (96)

Source: CRESR (data originally from MORI/NOP)

8.6 Analysing change across the NDC areas summary

From 1999 to 2003 the numbers and proportions of people going on to Higher Education has significantly increased across the country, with the largest increases seen in the most deprived areas including the areas covered by NDC programmes. Similarly, the numbers and proportions of pupils achieving five or more A*-C passes in the crucial Key Stage 4 (GCSE) exams has increased across the country, again with the largest increases in the most deprived areas including the NDC programme areas.

These increases do not occur equally across the board in all NDC areas – individual areas show a wide variation in the change in proportions of people successfully applying to Higher Education, although the small numbers involved for many NDC areas introduces significant fluctuations. Grouping the areas on characteristics such as the proportion of non-white ethnic groups also suggests that there may be systematic factors playing a part in the improvements in key educational outcomes seen in the NDC areas.

Headline results from the two waves of the MORI survey indicates that there are some positive trends emerging but further analysis is required before any firm conclusions can be drawn.

Section 9. Discussion and conclusions

The majority of this report has explored the educational position of the 39 New Deal for Communities areas in 2001 and 2002, placing them in the context of England overall. It is clear that the NDC areas are consistently in the most deprived groups compared with the country as a whole, both in educational outcomes and other deprivation measures. However there is very considerable variation across the 39 NDC areas.

Analysis of change over time, focused on the proportions of people successfully applying to Higher Education, shows that the NDC areas are improving overall, and improving faster than England as a whole. However this improvement is broadly consistent with other areas of similar levels of deprivation to the NDC areas, so the change cannot simply be attributed to an "NDC effect". At Key 2 and Key Stage 4 it appears that some progress has been made. Again, the NDC areas are broadly in line with similarly deprived areas; however, there are some instances, particularly at Key Stage 4, where the NDC areas are improving more rapidly than comparator areas and other areas with similar levels of deprivation.

Again there is wide variation across the individual NDC areas in the change analysis, with some areas even showing decreases over time in the proportions of people successfully applying to Higher Education.

The data presented in this report is primarily concerned with establishing a baseline of detailed information about the levels and standards of education in NDC areas across all age groups. This report draws on data that has not previously been presented at this level of detail for small areas; and some data on trends and progress has already been included. As this data builds up, it will be possible to focus specifically on the main factors behind changes in educational outcomes, and to analyse whether there is any evidence of an "NDC effect". Identifying potentially different groups of NDC areas that may be on different trajectories is one way of unravelling what may be going on. In this report we have dug a little way below the surface, developing the information and tools available with which to dig deeper in order to more fully evaluate the NDC programme contributions to educational achievement.

Some principal conclusions from the data and analysis presented in this study:-

- While the 39 NDC areas typically fall into the poorest 10% of areas in terms of the overall Index of Multiple Deprivation 2004, the position on the educational domain is

more mixed. Some NDC areas show rather lower levels of deprivation on this domain with some of the London NDC areas in particular in the third decile or above (Table 1.2).

- In some areas NDC areas are very close to the overall results for their local authority area, but in others they are very much more disadvantaged (Figures 1.7 & 1.8).
- Actual numbers of pupils in each NDC (Table 2.1) show that in some of the smaller NDC areas there are relatively few pupils at each key stage. This fact will be likely to cause fluctuations for the results from year to year at individual NDC level. As these are all the pupils there are, there is no way of increasing these numbers.
- Some of the London NDC areas appear to have significant numbers of pupils *not* in the maintained sector (Table 2.2). This is an *indirect* estimate, but if correct, means that the results will be likely to understate the results for the area (as they are based only on pupils in the maintained sector).
- Estimates of per pupil expenditure (drawn from Section 52 returns) show that in general expenditure at secondary level (11-16) in NDC areas is higher than the national average (Table 2.3). However there are some NDC areas where the expenditure is surprisingly low (Figure 2.2). In general these are not the NDC areas with particularly strong school results.
- Overall NDC areas score at about the level of the most deprived 10% of the country at Key Stage 2 (age 11) and Key Stage 4 (15+) (Tables 3.1 & 3.2). However there is very considerable variation among NDC areas, with a few of the best performing NDC areas close to (or even above) the national average results at KS2 and just below at KS4 (Figures 3.2, 3.3, 3.4 & 3.6). Some other NDC areas have very poor results.
- Some of the best performing NDC areas at school level are those in the London area, suggesting a possible regional effect.
- In terms of adults without qualifications, NDC areas overall are close to the figure for the 10% most deprived decile in England. However some NDC areas (mainly in London) contain significant proportions of adults with degrees (Table 4.1 & Table 4.4).
- Across the NDC areas, males and younger people are significantly less likely to have no qualifications and more likely to have degree level qualifications. Some ethnic groups are doing significantly better than white groups, with Chinese and Black African having higher proportions of adults with degree level qualifications. Bangladeshi groups are only half as likely as white groups to have degrees, and more than four times as likely to have no qualifications.
- The proportion of respondents needing to improve basic skills (reading, writing, spelling, and maths) in the NDC areas is higher than the national average. However,

the proportion having attended any additional education or training is lower than the national average (Table 4.5 & Table 4.13).

- Those with no formal qualifications are more likely to want to improve basic skills but less likely to have participated in additional education, and less likely to want to participate in additional education and training, than those with formal qualifications (Table 4.8, Table 4.12 & Table 4.15).
- Access to computing facilities at home increases the likelihood that an individual will take part in additional education and training and reduces the likelihood that the individual will feel they need to improve basic skills (Table 4.19).
- The rate of successful applications to Higher Education for those aged under 21 across the NDC areas overall falls between the 10th and 9th most deprived deciles (Figure 5.1), though NDC areas are marked by well above average rates of entry by mature students (aged 25+). This may in part reflect some 'catching up', but it may also be that prospective mature students move to NDC type areas to join 'access to HE' courses.
- Drawing on the NDC Household Survey of NDC residents shows some quite high levels of satisfaction with local educational provision (primary and secondary schools) (Table 6.1). However the objective grounds for such satisfaction (in terms of results) do not always back this up (Figure 6.6).
- Areas containing more highly educated adults are less satisfied with their local schools (Figure 6.5). Thus in some of the London areas (with above average numbers of qualified adults) satisfaction with secondary schooling is low. This and other analyses of the varying levels of satisfaction by ethnic group, age and gender suggest that satisfaction is strongly influenced by expectations (Table 6.2).
- Further analysis of variations in NDC area results in education suggests a number of key factors. Higher levels of adult qualification were a strong predictor of better results at school level and in entry to HE. The proportion of the NDC population from non white ethnic groups was also a good predictor.
- Exploratory analysis of ways of classifying NDC areas into different groups on the basis of a limited number of key variables (proportions non white, population mobility and proportions of adults with a degree) show some striking differences in average outcomes at KS4 and entry to HE (Table 7.4 & Table 7.6).
- Analysis of HE entry data over a significant time period (1999-2003) shows a very rapid increase in entry to HE for NDC areas overall , but this is more or less matched by other disadvantaged areas in England over the same time period (Figure 8.2). More detailed analysis using the groups of NDC areas from Section 7 shows a very

rapid rate of change in the progress of NDC areas containing high proportions in ethnic minority groups (Figure 8.11). This group of NDC areas has very significantly closed on the national average rate of entry to HE over this five year period. Other groups of NDC areas are more or less static over this period (Figure 8.11) and thereby fall further behind the national average.

- At Key Stage 4 (GCSE) the proportion of pupils achieving 5 or more A*-C passes across the NDC areas is increasing quite rapidly; the increase between 2002 and 2004 is larger than that seen across England, the comparator areas and each of the IMD 10% decile groups.
- At Key Stage 2, there is some fluctuation in the results across the three years. Examining the year on year percentage change in results for the NDC areas, comparator areas and 10% deciles, it is clear that the NDC areas show large improvements between 2003 and 2004. However, it must be remembered that this is in part due to the drop in results in 2003. Comparator areas are generally performing better than the NDC areas at Key Stage 2; however, there is some evidence that the NDC areas are beginning to catch up.

Section 10. Policy implications

1. As we noted at the outset of this report, there are strong and persistent associations between social deprivation and educational performance. We should not therefore be surprised to find that socially deprived NDC areas have well below average levels of educational performance. This pattern is not restricted to NDC areas or even to the UK, but appears as a consistent feature across the developed world.

2. However the information compiled for this report underlines a second key point – there is no fixed or predetermined level in this relationship. The results presented show both considerable variation from one area to another, and importantly Section 8 demonstrates that there are quite rapid changes going on in terms of entry to Higher Education in some NDC areas, while others are more or less static (for example see Table 8.11). This has both local and national policy implications for trying to work out what may be happening and why, and perhaps focussing policy initiatives particularly on those areas or groups that are not making progress. When national levels of entry to HE are rising, they are falling further behind.

3. Section 2 of this report estimates the proportion of pupils in the maintained sector. This is an *indirect* estimate. The newly emerging data on performance and locality (based on the DfES PLASC and the NPD databases) does not include pupils educated outside the maintained sector (as their details are not recorded in PLASC). These estimates suggest that in some NDC areas there may be a significant proportion of young people educated *outside* the maintained sector, perhaps in some of the new institutions that are developing to serve very disadvantaged areas. As Section 2 shows, something like 10-15% of pupils in some London NDC areas may be being educated outside the maintained sector. Extending some of the PLASC style developments to the independent sector would assist in establishing the overall performance levels in such areas.

4. Educational funding for local schools is based on the complex interplay of national and local formulae for allocation of educational funding. In this study we have simply looked at the bottom line, what is actually spent per pupil by local secondary schools in each NDC. While the exact relationship between levels of educational spending and results is exceedingly difficult to establish, the results in the NDC areas show that some of the NDC areas have expenditure levels actually *below* the national average at secondary level. This is in a context where levels of expenditure nationally are generally skewed in favour of disadvantaged areas. Additionally those NDC areas where educational spend is low are

often performing quite poorly in comparison to other NDC areas – or in other words some of the NDC areas with very low levels of educational performance are actually spending less than the *national* average on secondary schooling and much less than some other NDC areas. In many cases this may reflect national allocation procedures rather than local decision or choices.

5. One of the striking findings to emerge when the MORI survey is combined with the performance data is the relationship between satisfaction with the educational services and the objective levels of educational performance on Key Stage and other measures. These levels of satisfaction are clearly mediated by expectations, that are themselves influenced by the background of the respondents. Thus the more qualified tend to be *less* satisfied with local educational services in NDC areas. The result is in some areas there are high levels of expressed satisfaction, yet objectively very poor results. Clearly one mechanism to generate better results might be to raise such expectations and thereby *increase* levels of dissatisfaction. There is some evidence that this mechanism may work to raise performance by breaking the cycle of low expectations. Comparison among disadvantaged areas such as NDC areas, some of which are making rapid progress, may be a way of underlining the low and static levels of performance of others.

6. Evidence on the level of adult qualifications in the NDC working age population again shows a very considerable range. A small proportion of the adult population is taking part in further education and training. However, the results suggest that it is the already qualified that are very much more likely to do so, and they are also more likely to have the equipment such as a computer at home or work that may assist in this process. As the level of qualification is steeply age related (younger groups are much better qualified), there are in NDC areas very large numbers of working age adults, with low or no formal qualifications, who identify themselves as needing to improve basic literacy and numeracy skills. However, this group is the least likely to have attended training or, perhaps more importantly, to want to attend training. While the school system has a large number of local and national initiatives to raise performance, there could be more scope at the local level for a greater focus on this largely untapped adult population, who form by far the largest group in NDC areas. Further research is needed to identify what prevents those who want to attend training from doing so, and why a large proportion of those who acknowledge a need to improve basic skills are not keen to participate in additional training.

7. This report has drawn on a very substantial body of administrative and survey data that is now available for NDC areas in a form that allows comparison with other parts of the country. However there is much more to come. Thus data from PLASC and the NPD for 2005 and subsequent years, from UCAS, and new data sets from the Learning and Skills Council (LSC), and from OFSTED on levels of preschool and childcare facilities will very substantially extend our knowledge of the educational strengths and weaknesses in NDC areas, and allows us to measure the possible impact of the NDC programme over time. In addition, further analysis is needed on the second round of the MORI survey to explore areas such as adult education and satisfaction with educational provision more thoroughly.

Appendix A. Geographies and lookup tables

Administrative datasets are typically presented in an aggregated form at small area levels. For the analysis shown in this report, the important small areas are Census Super Output Areas (SOA) and Census Output Areas (OA), see below for further details. The smallest area at which Census 2001 data is released is at OA level, while the Index of Multiple Deprivation 2004 is released at SOA level. For completeness, this Appendix details all the major administrative and statistical area levels at which data is typically made available, from the smallest OA level up to Regional level.

Lookup Tables

To convert datasets between different geographies, for example transforming Census 2001 data to NDC area, the SDRC have developed population-weighted Lookup Tables from Output Area (OA) level to NDC area level. Using the grid coordinates for every residential property within the NDC areas, the population-weighted proportion of every OA area lying within the NDC area can be calculated. This is more accurate than simply using the geographical area of overlap between the NDC areas and every OA.

Census Output Areas (OAs)

2001 Census Output Areas (OAs) are the primary new geography created for the purpose of presenting 2001 Census results. OAs are built from clusters of adjacent unit postcodes and therefore represent the smallest Census geography; they are essentially the building block at which all Census data are collected. Census statistics for higher level geographies, such as SOAs, 2003 wards, districts and regions and so on, are created by aggregating the constituent OAs.

OAs are designed to have similar population sizes and be as socially homogenous as possible (based on tenure of household and dwelling type). Wherever possible, urban/rural mixes are avoided (i.e. postcodes in an OA should be either all urban or all rural). OAs usually have approximately regular shapes and they are usually constrained by boundaries such as major roads. In order to ensure the confidentiality of data, OAs are required to have a specified minimum population size. The Office for National Statistics set the minimum OA size at 40 resident households and 100 resident persons but the recommended size is actually rather larger at 125 households. These size thresholds mean that unusually small wards and parishes are incorporated into larger OAs. OAs nest within SOAs, 2003 wards, districts, counties and regions

Census Super Output Areas (SOAs)

Census Super Output Areas (SOAs) are a new statistical geography created for the purpose of presenting the 2001 Census, the Indices of Deprivation 2004, and other neighbourhood statistics. There are three layers to the SOA geography: 'lower layer'; 'middle layer'; and 'upper layer'. The Index of Multiple Deprivation 2004 is released at 'lower layer' SOA boundaries, while no Census 2001 data has yet been released at SOA level. See the 2001 Census website referenced above for further details of the different SOA layers.

Unlike wards, SOAs are designed to produce areas of approximately equal population size, with the mean population of lower layer SOAs being approximately 1500 people. Although there remains a degree of variation around this mean of 1500 persons (the smallest lower layer SOA population in England is just under 1000 whilst the highest population is over 6000), the large majority of lower layer SOAs have populations close to 1500. This standardised population size makes the lower layer SOA geography well suited to identifying smaller pockets of deprivation that may be averaged out over large wards.

There are 32,482 lower layer SOAs in England. Lower layer SOAs also nest perfectly within the Census Standard Table wards. Although the majority of lower layer SOAs do nest within the CAS wards, this is not true in every case. For more information on how lower layer SOAs relate to Census wards, please refer to the 2001 Census website referenced above.

Wards

Wards are essentially units of electoral administration and their boundaries therefore change relatively frequently (compared to higher level geographies such as districts). This makes the ward geography difficult to use when attempting to monitor change over time.

To reduce this problem of ward boundary changes, the 2001 Census defined two sets of ward boundaries, constructed from smaller Census Output Areas (discussed above): 'Census Area Statistics' (CAS) wards; and 'Standard Table' (ST) wards. The 2001 Census website contains a wealth of useful explanation regarding the differences between the two sets of Census wards - http://www.statistics.gov.uk/geography/default.asp.

CAS wards represent the electoral ward boundaries as at the beginning of 2003 (with a small number of wards merged together in order not to disclose information that might be used to identify individuals). For this reason, they are often referred to as '2003 wards'. Information

based on 2003 wards (i.e. CAS wards) may not be the same as information based on earlier wards, such as those used in the 1991 Census and the Indices of Deprivation 2000. Even where a ward has the same name, it may not have the same boundaries – sometimes the shape of a ward will change whilst the name stays the same.

The average population size of 2003 wards in England is just under 6,000 people, with a minimum population of just over 100 people and a maximum of over 35,000 people. The number of 2003 wards across England is 7,969.

Districts

There are 354 districts in England (including Unitary Authorities, Metropolitan and London Boroughs). The geographical boundaries of the districts in England have remained stable since 1998. Districts nest within regions and counties.

Counties

There are 35 Shire counties in England, as well as 6 metropolitan counties (Greater London is an 'administrative area', and is now a region in its own right). The geographical boundaries of the counties in England have remained stable since 1998, and counties nest within regions.

Regions

There are nine regions in England: North East, North West, Yorkshire and the Humber, East Midlands, West Midlands, East, London, South-East, and South West. Each region has its own Government Office which represents central government in the region. The geographical boundaries of the regions have remained stable since 1998.

Appendix B. Pupil attainment methodology

B.1 Methodology

Information presented in this report is based on the Pupil Level Annual School Census (PLASC) and National Pupil Database (NPD) datasets, provided to the SDRC NDC evaluation team by DfES at individual pupil record level.

For the 2002 PLASC dataset, full pupil home postcodes were provided by the DfES, and linked to NDC and other area codes (for example Output Area, Census Wards and so on) by the SDRC team. For the 2003 PLASC dataset, pupil records were attached to NDC and other area codes by Martin Johnson of the DfES UK and Local Statistics Unit team, based on pupil home postcodes and using the 'postcode-to-NDC' lookup tables prepared by the SDRC in Oxford. Something over 99% of pupils in maintained schools have a valid postcode. The NDC and other area codes were then used to provide "aggregate" counts and rates at area level.

Only pupils resident in England were used, regardless of where pupils attend school (this can provide results slightly different from published figures based on school-level data).

The PLASC datasets were linked to the National Pupil Database (NPD) datasets, using the unique Pupil Matching number which is present in both data sets. PLASC is restricted to pupils in the maintained sector. While the NPD contains performance details for individual pupils in the independent sector, these have no corresponding PLASC details and cannot therefore be attributed to NDC or any other area. This means that the results are for pupils in the maintained sector only (approximately 93% of the total)

The methodology used follows the DfES definitions of attainment data outcomes, as closely as allowed by the available data.

1) KS2 (Level 4+) methodology for English, Maths and Science:

- Numerator: All pupils with NPD KS2 test results of 4 or 5.
- Denominator: All pupils with an entry in the NPD KS2 dataset, excluding pupils with lost or stolen scripts, pupils with missing results, or ineligible pupils (note that the denominator includes pupils who are marked as absent or whom the tests are disapplied).

2) KS3 (Level 5+) methodology for English, Maths and Science:

- Numerator: All pupils with NPD KS3 test results of 5, 6 or 7
- Denominator: All pupils with an entry in the NPD KS3 dataset, excluding pupils with lost or stolen scripts, pupils with missing results, or ineligible pupils (note that the denominator includes pupils who are marked as absent or whom the tests are disapplied).

3) GCSE:

- Numerator: All pupils reported in the NPD KS4 dataset as having 5 or more GCSE passes at A*-C level
- Denominator: Total number of 15 year olds on the PLASC roll in reporting school year (note that pupils flagged as refugees and permanent exclusion pupils are included)

B.2 Health warning

The figures shown may differ slightly from other published statistics for a number of reasons. The figures also differ from previously produced NDC-level figures, as a result of following DfES 2003 methodology.

1) Note that DfES data shown for national figures often include pupils from independent schools (for example figures shown on the DfES website). As noted above the data presented here excludes pupils from independent schools.

2) The PLASC dataset reports pupils at their home postcode location, regardless of where they attend school. In some areas a significant number of pupils may attend schools outside their “home” LEA (particularly in the London area), resulting in differences between PLASC-based LEA scores and school-based LEA scores.

3) The PLASC dataset includes a number of pupils who may not be included in school league tables for attainment outcomes particularly at Key Stage 4. This is because a number of pupils attending school in January (when PLASC is conducted), have left the school before GCSE is taken and have not reappeared under another school. We have followed the DfES methodology and included these pupils in the denominator.

4) 2002 was the first year for which PLASC datasets were collected and used. For this reason figures based on 2002 pupil-based data may not be fully comparable with subsequent years. It should be emphasised that information is consistent within a single year, but not necessarily consistent and comparable between 2002 and later years. Note that in some earlier data issued for Key Stage 2, pupils marked 'absent' were dropped out of the analysis. Following the DfES methodology means that in the attached figures such pupils are included as not getting the relevant NC level. This will tend to pull down the proportions getting the relevant level.

Appendix C. Selection of comparator areas

The process by which the comparator areas used in this report have been selected is summarised below.

In selecting the comparator areas, the primary considerations to be addressed are:

- Where should the comparator area be located in relation to the NDC area?
- How should comparator and NDC areas be paired?
- How many comparator areas should be used?

Where should the comparator areas be located?

In order that comparator areas are subject to the same background economic trends and city or borough-wide programmes, the comparator areas fall within the same local authority area as the NDC areas. In order that the comparator areas are sufficiently removed from the prospect of 'spill over' from NDC areas, they are not geographically contiguous with the NDC area.

On what basis should NDC areas and comparator areas be paired?

The advantages of using comparator areas as a benchmark for change depend on achieving a good pairing between an NDC area and its comparator area. The recent release of the English Indices of Deprivation 2004 (ID 2004) provides an updated source of information on which to base the selection of comparator areas. As well as including an overall Index of Multiple Deprivation (IMD 2004), which provides a measure of the overall levels of multiple deprivation in an area, the ID 2004 also contains measures of seven separate domains of deprivation. Four of these domains: Employment; Education, Skills and Training; Health and Disability; and Crime are parallel themes of the NDC evaluation. For analysis of education in NDC areas, the education component of the IMD 2004 can be calculated for NDC areas, and comparator areas chosen based on a similar score or ranking.

How many comparator areas should be used?

The IMD 2004 was produced at Super Output Area (SOA) level. Super Output Areas are amalgamations of Census Output Areas[22]. As each SOA has a population of approximately 1500 people, a number of SOAs have been selected as comparators for each NDC area based on similar population size and levels of deprivation. The data for the comparator SOAs that were selected (ranging in number from 3 to 14, depending on the population size of the NDC area) were then pooled to create a statistical comparator for overall multiple deprivation as well as the Education, Training and Skills Domain.

Example: Rochdale NDC area

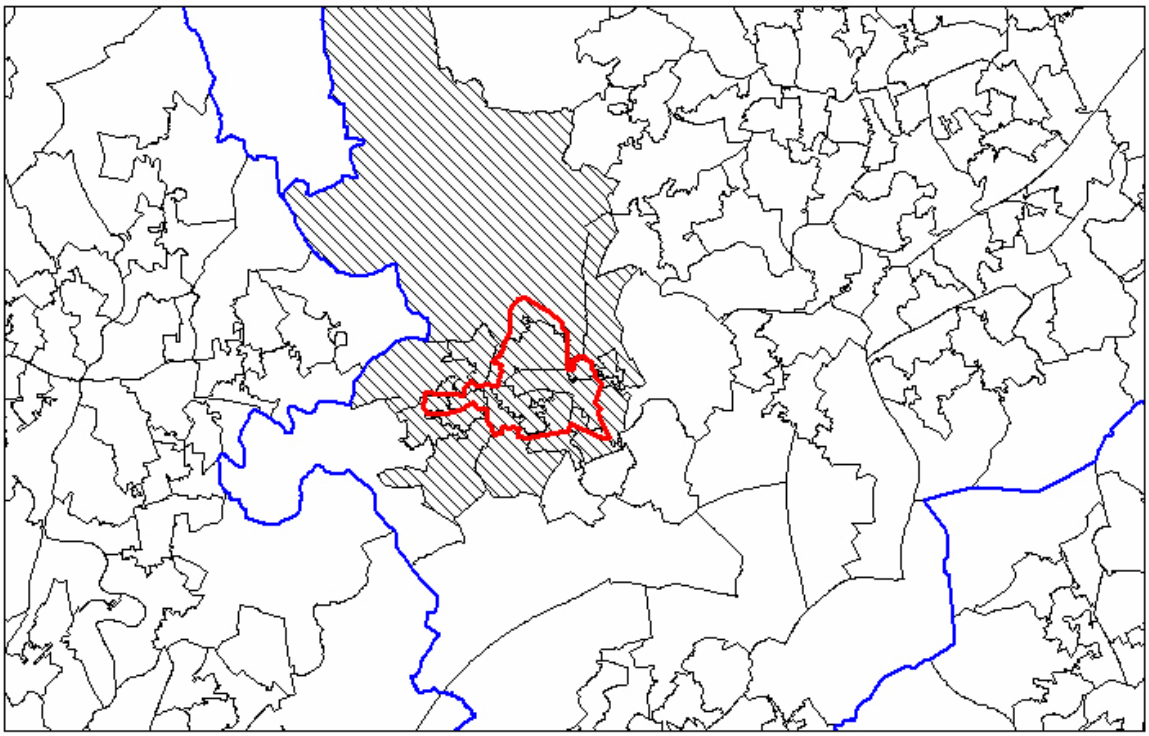
The Heywood NDC area in Rochdale is shown in Figure C.1. The NDC area is outlined in red, the district outlined in blue, and the SOAs outlined in black. Those SOAs that are shaded overlap the NDC area and thus are not suitable comparator areas.

The NDC area itself has an overall population-weighted IMD 2004 score of 43.40, as shown in Table C.1. When all the SOAs and the NDC area in Rochdale are sorted by their IMD score, those SOAs shown in Table C.1 have the closest levels of multiple deprivation and together have a combined population approximate to the NDC area.

Similar procedures were followed with the Education, Skills and Training Domain to create a set of theme-specific comparator areas. The comparator areas used in this report are those chosen based on the Education, Skills and Training domain for the purposes of evaluating changes in educational attainment.

22 For further information on Census geographies please see the 2001 Census website: http://www.statistics.gov.uk/census2001/default.asp

Figure C.1: Heywood NDC area in Rochdale



Source: SDRC

Table C.1: IMD 2004 scores for the Heywood NDC area and selected SOAs in Rochdale

Area	IMD score	2001 Population
E01005565	45.08	1630
E01005585	43.74	1455
E01005490	43.42	1110
NDC area	43.40	9190
E01005470	42.35	1541
E01005542	41.62	1290
E01005528	41.56	1530

Source: SDRC

Refinements to comparator area selection methodology

The method of selecting comparator areas based on resident population and the ID 2004 domain scores has produced a vitally important set of areas with which to compare and contrast trends and dynamics observed in NDC areas.