# Is there equity in assessment? A longitudinal study into the relationship between disadvantage and secondary school performance standards. 

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## Introduction

Since the mid-1990s educational policy in England has conceptualised excellence in schools in a singular form: performance in national examination league tables. This obsession with standards has resulted in a situation in the middle years of the first decade of the twenty-first century in which we have a majority of schools in which 'assessment is synonymous with testing' (Hall et al, 2004). This has been created by a single frame of reference reflecting a government imposed agenda revolving around a narrowed curriculum, strong teaching emphasis supported by well-resourced National Strategies on testable sub-domains of the tested subjects (English, mathematics and science for pupils aged 11 and 14) and increasingly test-wise teachers and pupils spending time on test preparation rather than on active learning. The problem with a single frame of reference is that it ignores what individual learners need and can gain from a national educational system. It becomes basically a crude accounting and accountability measure (Wiggins \& Tymms, 2002, Karsten et al, 2001) open to accusation of creating a simplistic and confusing notion of pupil 'performance' and underperforming schools (Gray, 2004). Soon inevitably a percentage of the population drop through the gaps in the system, they 'fail' to meet the 'standards' which are centrally set. That population then disconnects from the 'standards agenda' as they do not see its relevance to their situation. Rosenholz (1989) uses the expressions 'resigned pessimism' and 'deepening detachment' in her study of the relationship between student outcomes and social organisation. The government's own evaluation report on its national literacy (NLS) and numeracy strategies (NNS) contained the warning that: 'Setting even higher national targets may no longer serve to mobilise and motivate particularly if schools see the targets as unrealistic.' (Earl et al, 2003,p.7). It also contained the advice that there should be a shift in emphasis to 'consolidation targets' which enabled headteachers/teachers to maintain improvement and to address issues which they identify as significant in their schools.

This paper explores the 'disconnection' premise using sample data from the authors' longitudinal study of pupil performance in national end of key stage tests (QCA,1996-2006). Gray (2004) has indicated that schools which create a capacity for improvement move through three phases of school improvement: 'catching up, consolidating and moving ahead.' This paper suggests that there could be evidence that some schools are for reasons of alternative strategic prioritisation opting out of the 'catching up' game.

David Bell, until recently the Chief Inspector of Schools in England, has acknowledged the attainment gap between advantaged and disadvantaged pupils. 'We must look urgently at how to close the gap in achievement between youngsters in the most deprived areas and elsewhere.' (Bell, 2003). Bell supplies a list of contributory factors for the educational disadvantage suffered by children from lower socio-economic groups, 'lack of well-informed parental support, financial backing, benign peer pressure, racial inequality, family disruption, low educational ambition, weaknesses in useful academic skills especially in language and independent learning.' (Bell, 2003). Disturbingly this list is similar a decade later to that compiled by the National Commission on Education (1993) wherein 'poverty, long term unemployment, poor housing, lack of good amenities and high levels of crime and vandalism combined to make educational success difficult to obtain' (NCE, 1993, p.176). In 2004 the (then) Minister of State for School Standards, David Miliband, conceded that despite investing in a range of government initiatives and interventions such as Excellence in Cities, Education Action Zones, Schools Facing Challenging Circumstances, etc 'the barriers to achievement in communities marked by high levels of poverty, low levels of social capital, low levels of successful educational experience are significant' (Miliband, 2004). This
premise is taken further and put more bluntly by Lupton 'It is well known that academic attainment tends to be low in schools with high proportions of pupils from low income homes...one can infer from the statistics of low attainment in high FSM schools that attainment is also generally low in schools serving poor neighbourhoods.'(2004, p1). Thrupp (1999) supports this view positing that the socially disadvantaged suffer from unequal access to teachers, facilities and socially advantaged classmates. While Brehony comments that 'the application of the standards agenda in areas of social disadvantage and deprivation serves to highlight the contradiction with New Labour's advocacy of social inclusion.' (Brehony, 2005). The advocacy he refers to was summarised by Tony Blair prior to his party's election in 1997 his claim that he 'did not want to run a Tory economy with a bit of social compassion' rather the putative new government's focus would be on 'social justice, cohesion, equality of opportunity and community' (Blair,1994,p.2). His stated intention was to 'improve educational opportunities for the poor' (Chitty, 2004). Yet in 2003, five years after the introduction of the first of the national strategies, the government's selected evaluation team for the success of the strategies reiterated that 'the relationship between socio-economic status and educational achievement is recognised as one of the most stable relationships in educational research.'(Earl et al, 2003). Despite the Blairite rhetoric of social inclusion, the advocacy of competitively based performance standards negates the depth of commitment of New Labour to socially equitable policies. Significantly in 2004 the Institute of Fiscal Studies demonstrated that the UK had become one of the most economically unequal countries in Europe and that economic inequality had become the most important cause of social exclusion and child poverty. (Brewer,2004, Thrupp,2005)

## Data and discussion

Since 1996 the authors have been funded by the English government's Qualifications and Curriculum Authority (QCA) to monitor school curriculum provision and change and to analyse the annual national end of key stage (KS) test performance scores for a national representative sample of schools (both primary and secondary, although this paper focuses on secondary schools). The longitudinal data produced by our work over this period have supplied the evidence for this paper as a contribution to the international debate on the issue of academic performance by pupils from schools located in disadvantaged areas (Harris \& Chapman, 2004; Reynolds et al,2004; Gray 2004; Whitty 2002; Gray 2001; National Centre for Education Statistics, 2001).

We start by analysing data from our most recent survey (2005), where $11 \%$ of secondary schools (from the state sector only) form our representative quota sample. Tables 1-4 show the sample of 375 maintained schools by geographical distribution, school type, gender and size against the national statistics, illustrating that a wide range of schools across the whole of England are represented. We then draw a matched longitudinal sample of 138 secondary schools which returned completed curriculum surveys for the years 2003, 2004 and 2005, in order to study changes and effects across the time span.

Table 1: Sample by regional distribution

|  | 2005 sample |  | National Statistics* |  |
| :--- | ---: | ---: | ---: | ---: |
|  | $\mathbf{N}$ | $\mathbf{\%}$ | $\mathbf{N}$ | $\boldsymbol{\%}$ |
| East Midlands | 39 | 10.4 | 317 | 9.3 |
| Eastern | 47 | 12.5 | 427 | 12.5 |
| Inner London | 21 | 5.6 | 132 | 3.9 |
| North East | 16 | 4.3 | 211 | 6.2 |
| North West and Merseyside | 38 | 10.1 | 476 | 14.0 |
| Outer London | 31 | 8.3 | 273 | 8.0 |
| South East | 72 | 19.2 | 502 | 14.7 |
| South West | 41 | 10.9 | 329 | 9.7 |
| West Midlands | 40 | 10.7 | 415 | 12.2 |
| Yorkshire and Humber | 30 | 8.0 | 327 | 9.6 |
| Total | $\mathbf{3 7 5}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{3 , 4 0 9}$ | $\mathbf{1 0 0 . 0}$ |

* DfES January 2004.

Table 2: Sample by school type

|  | 2005 sample |  | National Statistics |  |
| :--- | ---: | ---: | ---: | ---: |
|  | $\mathbf{N}$ | $\%$ | $\mathbf{N}$ |  |
| Comprehensive | 321 | 85.6 | 2,897 | 85.0 |
| Secondary modern | 24 | 6.4 | 130 | 3.8 |
| Grammar | 29 | 7.7 | 164 | 4.8 |
| Other | 0 | 0.0 | 29 | 0.9 |
| Middle deemed secondary | 1 | 0.3 | 279 | 8.2 |
| Total | $\mathbf{3 7 5}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{3 , 4 0 9}$ | $\mathbf{1 0 0 . 0}$ |

* DfES January 2004.

Table 3: Sample by gender

|  | 2005 sample |  | National Statistics |  |
| :--- | ---: | ---: | ---: | ---: |
|  | $\mathbf{N}$ | $\%$ | $\mathbf{N}$ | $\boldsymbol{\%}$ |
| Boys | 21 | 5.6 | 184 | 5.4 |
| Girls | 38 | 10.2 | 226 | 6.6 |
| Mixed | 315 | 84.2 | 3,000 | 88.0 |
| Total | $\mathbf{3 7 4}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{3 , 4 1 0}$ | $\mathbf{1 0 0 . 0}$ |

* Edubase (different N due to alternate source of data).

One missing case.
Table 4: Sample by school size

|  | 2005 sample |  | National Statistics |  |
| :--- | ---: | ---: | ---: | ---: |
|  | $\mathbf{N}$ |  | $\mathbf{\%}$ | $\mathbf{N}$ |
| Up to 200 | 6 | 1.6 | 29 | 0.9 |
| $201-400$ | 7 | 1.9 | 160 | 4.7 |
| $401-600$ | 29 | 7.8 | 358 | 10.5 |
| $601-800$ | 71 | 19.0 | 580 | 17.0 |
| $801-1000$ | 84 | 22.5 | 739 | 21.7 |
| $1001-1200$ | 76 | 20.4 | 634 | 18.6 |
| $1201-1400$ | 52 | 13.9 | 463 | 13.6 |
| $1401-1600$ | 31 | 8.3 | 275 | 8.1 |
| $1601-1800$ | 8 | 2.1 | 104 | 3.1 |
| 1801 and over | 9 | 2.4 | 67 | 2.0 |
| Total | $\mathbf{3 7 3}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{3 , 4 0 9}$ | $\mathbf{1 0 0 . 0}$ |

* DfES January 2004.

Two missing cases.
The sample schools were then categorised according to their pupils' eligibility for free school meals. The 115 schools in which more than $17.3 \%$ of pupils are eligible for free school meals form a sample of 'disadvantaged' schools (see Table 5). The average FSM for the whole sample was $14.5 \%$, only $0.2 \%$ higher than the national average of $14.3 \%$.

Table 5: Percentage of pupils who are eligible for free school meals

|  | Frequency | Valid Percent |
| :--- | ---: | ---: |
| $0 \%$ | 4 | 1.1 |
| $1-10 \%$ | 196 | 52.3 |
| $11-20 \%$ | 76 | 20.3 |
| $21-30 \%$ | 50 | 13.3 |
| $31-40 \%$ | 32 | 8.5 |
| $41-50 \%$ | 10 | 2.7 |
| $51-60 \%$ | 5 | 1.3 |
| $61-74 \%$ | 2 | 0.5 |
| Valid total | $\mathbf{3 7 5}$ | $\mathbf{1 0 0 . 0}$ |

To further validate the definition of 'disadvantaged', each school has been ranked according to the Indices of Multiple Deprivation (IMD) constructed by the Social Disadvantage Research Centre at the University of Oxford on behalf of the Office of the Deputy Prime Minister (Oxford, 2005). Level of deprivation is categorised at Super Output Area level (small
designated areas within each Local Education Authority ward) across the seven domain indices:

- Income
- Employment
- Health Deprivation and Disability
- Education, Skills and Training
- Barriers to Housing and Services
- Crime
- Living Environment.

Although the IMD is a robust measurement of deprivation at the detailed level of super output area, it cannot be applied as primary or sole representation for a secondary school as their intake typically draws from a wide catchment area which may incorporate a diverse range of areas. For example, a school in a more affluent area ie low ranking in terms of deprivation, may be located in very close proximity to a highly deprived council estate which forms a significant percentage of the school's catchment area.

Our 'disadvantaged' school sample has an IMD which ranges between 314 and 30108, where rank 1 indicates the most deprived areas and 32482 the least. The school with IMD of 30108 has $24 \%$ of pupils eligible for free school meals. The rest of the schools ( $\mathrm{N}=260$ ) have an IMD which ranges between 1648 and 32438 . Chart 1 illustrates that in general those schools with a higher percentage of pupils eligible for free school meals also have a low score on the IMD (University of Oxford, 2005). The Pearson correlation between the IMD and the FSM proved significant,( $\mathrm{r}=.60, \mathrm{p}<.01$ ) the correlation being negative since high IMD means not deprived whereas high FSM indicates deprivation. As, IMD cannot be the primary measure of deprivation its validation of the FSM definition of our 'disadvantaged' sample is necessary. For a range of reasons, not all pupils who are eligible for free school meals register for them with the school, eg parents may not like the perceived social stigma attached to the FSM status, or some pupils may take a packed lunch and as they do not require a supplied lunch, are not registered as a free meal recipient.

## Chart 1: Definition of disadvantaged schools



Once the disadvantaged sample had been established, a second group consisting of selective schools $(\mathrm{N}=30)$ was identified. This group comprises grammar schools and some religious schools, in which due to selection of intake the measure of socio-economic status does not apply. Having separated off the two comparison groups, a control group of 230 schools remained.

The performance data of the 375 sample schools in the national key stage 3 tests (pupils aged 14 years) from 1997 to 2005 were obtained. Tables $6 a-6 c$ show the percentage of pupils gaining level 5 (the expected level for performance in key stage 3) in English, mathematics and science in the control group of 230 schools and in the two comparison groups of 'disadvantaged' and 'selective' schools. The percentages show that the control group recorded higher achievement at level 5 or above (19-23\% in English, 17-26\% mathematics and 22-26\% in science) than the 115 schools in the 'disadvantaged' category in the key stage 3 tests from 1997 to 2005. In each of those subjects, the 'disadvantaged' schools were under-scoring the nationally expected level (ie Level 5) by at least $13 \%$ in English, 12\% in mathematics and by 15\% in science.

The control group outperformed the 'disadvantaged' group substantially across the eight survey years. One would therefore expect to see some strategic move by the 'disadvantaged' schools to balance this situation, one such strategy would be to have an increase in teaching time allocated to the tested subjects to improve pupil performance.

Table 6a: Percentage of pupils achieving level 5 or above in the KS3 national English tests from 1997 to 2005

| \% | $\mathbf{9 7}$ | $\mathbf{9 8}$ | $\mathbf{9 9}$ | $\mathbf{0 0}$ |  | $\mathbf{0 1}$ | $\mathbf{0 2}$ | $\mathbf{0 3}$ | $\mathbf{0 4}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 05 |  |  |  |  |  |  |  |  |  |
| National Data |  |  | 64 | 64 | 65 | 67 | 69 | 71 | 74 |
| Selective group N=30 | 94 | 96 | 96 | 96 | 96 | 96 | 97 | 97 | 98 |
| Control group N=228 | 64 | 70 | 70 | 71 | 71 | 71 | 75 | 77 | 80 |
| Disadvantaged group $\mathrm{N}=115$ | 42 | 51 | 48 | 52 | 50 | 52 | 52 | 57 | 61 |

Table 6b: Percentage of pupils achieving level 5 or above in the KS3 national mathematics tests from 1997 to 2005

| \% | $\mathbf{9 7}$ | $\mathbf{9 8}$ | $\mathbf{9 9}$ | $\mathbf{0 0}$ | $\mathbf{0 1}$ | $\mathbf{0 2}$ | $\mathbf{0 3}$ | $\mathbf{0 4}$ | $\mathbf{0 5}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| National Data |  |  | 62 | 65 | 66 | 67 | 71 | 73 | 74 |
| Selective group N=30 | 95 | 96 | 96 | 97 | 97 | 97 | 97 | 97 | 98 |
| Control group N=228 | 68 | 67 | 70 | 72 | 73 | 74 | 77 | 79 | 79 |
| Disadvantaged group N=115 | 42 | 44 | 46 | 49 | 52 | 53 | 57 | 61 | 62 |

Table 6c: Percentage of pupils achieving level 5 or above in the KS3 national science tests from 1997 to 2005

| \% | $\mathbf{9 7}$ | $\mathbf{9 8}$ | $\mathbf{9 9}$ | $\mathbf{0 0}$ | $\mathbf{0 1}$ | $\mathbf{0 2}$ | $\mathbf{0 3}$ | $\mathbf{0 4}$ | $\mathbf{0 5}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| National Data |  |  | 55 | 59 | 66 | 67 | 68 | 66 | 70 |
| Selective group N=30 | 95 | 94 | 95 | 96 | 97 | 96 | 97 | 97 | 98 |
| Control group N=228 | 69 | 63 | 63 | 68 | 74 | 74 | 76 | 73 | 77 |
| Disadvantaged group N=115 | 43 | 39 | 38 | 42 | 50 | 51 | 53 | 51 | 55 |

The performance of the different sample groups was evaluated in comparison with the national average of percentage of pupils achieving Level 5 or above at key stage 3. Table 7 shows the percentage of each sample group that under-performed in each core subject. As expected, those schools in the disadvantaged sample were more likely to under-perform (four out of five schools) than the control (one in five schools). No selective schools underperformed.

Table 7: Comparison with National average - performance achieving Level 5 or above at Key Stage 3 - percentage of under-performing schools in 2005

| $\%$ | English | Mathematics | Science |
| :--- | :---: | :---: | :---: |
| Whole sample N=373 | 41.3 | 41.9 | 39.9 |
| Selective sample N=30 | 0.0 | 0.0 | 0.0 |
| Control group N=228 | 26.3 | 23.8 | 21.5 |
| Disadvantaged sample N=115 | 81.7 | 88.7 | 87.0 |

Tables 8 a and b show that the average percentage teaching time allocated to English and mathematics is slightly higher amongst under-performing schools compared with those meeting the national averages. These schools, also appear to be allocating slightly less time to science than the control group, suggesting that more emphasis is placed on meeting the targets in English and mathematics. The under-performing disadvantaged schools allocate the largest percentage of teaching time on these two subjects.

Table 8a: Performing schools 2005 - average percentage teaching time allocation at Key Stage 3

| \% | English | Mathematics | Science |
| :--- | :---: | :---: | :---: |
| Whole sample N=213 | 12.4 | 12.3 | 12.5 |
| Selective sample N=29 | 11.9 | 12.1 | 12.7 |
| Control group N=170 | 12.4 | 12.4 | 12.4 |
| Disadvantaged sample N=20 | 12.8 | 12.1 | 12.4 |

Table 8b: Under-performing schools 2005 - average percentage teaching time allocation at Key Stage 3

| $\%$ | English | Mathematics | Science |
| :--- | :---: | :---: | :---: |
| Whole sample N=149 | 13.2 | 12.6 | 12.3 |
| Selective sample N=0 | 0.0 | 0.0 | 0.0 |
| Control group N=59 | 13.0 | 12.5 | 12.4 |
| Disadvantaged sample N=97 | 13.3 | 12.7 | 12.3 |

One would expect the under-performing schools to increase the time allocated to English, mathematics and science. However as Tables 9a, b and c illustrate the changes in teaching times for English, mathematics and science at Year 9 between the 2004 and 2005 academic years do not reflect this. The vast majority of under-performing schools indicated that they had not made any changes to their allocation of teaching time for English, mathematics and science, despite two out of four schools (under-performance in English 37.4\%, mathematics $38.6 \%$ and science $37.9 \%$ ) stating that changes to time allocation had been made. This prompted us to investigate whether increases were occurring in other subject areas. Perhaps, if the under-performing disadvantaged schools really are opting out of the 'standards agenda' they are putting time and resources into other curriculum areas where their cohort may score greater educational success, for example ICT or art and design. Our analysis revealed that only small minorities were making changes across a number of different subject areas, offering no real evidence to support our hypothesis.

Table 9a: Under-performing schools - changes to teaching time allocation since 2004 in Year 9 in English

| \% | Increase | No Change | Decrease |
| :--- | :---: | :---: | :---: |
| Whole sample N= 154 | 10.4 | 86.4 | 3.2 |
| Control group N=60 | 5.2 | 33.1 | 0.6 |
| Disadvantaged sample N=94 | 5.2 | 53.2 | 2.6 |

Table 9b: Under-performing schools - changes to teaching time allocation since 2004 in Year 9 in Mathematics

| $\%$ | Increase | No Change | Decrease |
| :--- | :---: | :---: | :---: |
| Whole sample N=156 | 3.2 | 94.2 | 2.6 |
| Control group N=54 | 1.3 | 32.7 | 0.6 |
| Disadvantaged sample N= 102 | 1.9 | 61.5 | 1.9 |

Table 9c: Under-performing schools - changes to teaching time allocation since 2004 in Year 9 in Science

| $\%$ | Increase | No Change | Decrease |
| :--- | :---: | :---: | :---: |
| Whole sample N=149 | 3.4 | 94.6 | 2.0 |
| Control group N=49 | 1.3 | 31.5 | 0 |
| Disadvantaged sample N=100 | 2.0 | 63.1 | 2.0 |

What other measurable indicators of schools' 'catching up' are available to capture the effort being made? Table 10a shows that the menu of government provided 'catch up' programmes and booster classes is being utilised by all schools, both control and treatment groups in the sample. The relationship between the sample groups, control and disadvantaged tested against their use of catch-up programmes and booster classes proved to be statistically significant using $X^{2}$ (chi-square). (Sample group $x$ catch-up programmes $X^{2}=4.57, p<.05$. Sample group $x$ booster classes $X^{2}=7.68, p<.01$.)

Table 10a: All schools 2005 - use of catch-up programmes and booster classes

|  | Catch-up |  | Booster |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\mathbf{N}$ | \% | $\mathbf{N}$ | \% |
| Whole sample | 265 | 75.3 | 302 | 82.7 |
| Selective sample | 5 | 16.7 | 12 | 40.0 |
| Control group | 164 | 77.4 | 184 | 82.9 |
| Disadvantaged sample | 96 | 87.3 | 106 | 93.8 |

Tables 10b and 10c examine the use of catch-up programmes and booster classes against our different sample groups and whether they are performing to the national averages or not. The chi-square test revealed a significant difference between those disadvantaged schools and the control group, performing and under-performing in English that use catch-up programmes $\left(X^{2}=64.28, \mathrm{p}<.01\right)$ and booster classes $\left(X^{2}=78.04, \mathrm{p}<.01\right)$. The underperforming schools in the disadvantaged sample were more likely to use these improvement measures than those schools in the control group.

Table 10b: Schools 2005 which use catch-up classes (Performance in English)

| $\%$ | Performing | Under-performing |
| :--- | :---: | :---: |
| Whole sample $(\mathrm{N}=263)$ | 52.1 | 47.9 |
| Control group $(\mathrm{N}=162)$ | 70.3 | 29.6 |
| Disadvantaged schools $(\mathrm{N}=96)$ | 18.7 | 81.3 |

Table 10c: Schools 2005 which use booster classes (Performance in English)

| $\%$ | Performing | Under-performing |
| :--- | :---: | :---: |
| Whole sample $(\mathrm{N}=302)$ | 54.0 | 46.0 |
| Control group $(\mathrm{N}=184)$ | 71.7 | 28.2 |
| Disadvantaged schools $(\mathrm{N}=106)$ | 17.9 | 82.0 |

Schools in the under-performing disadvantaged group were also more likely to use the Year 7 and Year 8 Optional tests in English and mathematics. The chi-square test revealed a statistically significant relationship between the sample groups and their use of the year 7 Optional test $\left(X^{2}=5.26, p<.05\right)$ and the year 8 Optional test ( $X^{2}=8.91, p<.01$ ) in English. The relationship between the sample groups and their use of the year $7\left(X^{2}=11.82, p<.01\right)$ and year 8 ( $X^{2}=11.86, p<.01$ ) Optional tests in mathematics also proved statistically significant.

Table 11a: Under-performing schools - use of optional tests in y7 \& y8 (English, 2005)

|  | Control Sample |  | Disadvantaged |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\mathbf{N}$ | $\%$ | $\mathbf{N}$ | $\%$ |
| Y7 Optional Test $(\mathrm{N}=128)$ | 27 | 21.1 | 59 | 46.1 |
| Y8 Optional Test $(\mathrm{N}=132)$ | 22 | 16.7 | 59 | 44.7 |

Table 11b: Under-performing schools - use of optional tests in y7 \& y8 (maths, 2005)

|  | Control Sample |  | Disadvantaged |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\mathbf{N}$ | $\mathbf{\%}$ | $\mathbf{N}$ | $\boldsymbol{\%}$ |
| Y7 Optional Test $(\mathrm{N}=132)$ | 21 | 15.9 | 62 | 47.0 |
| Y8 Optional Test $(\mathrm{N}=135)$ | 20 | 14.8 | 64 | 47.4 |

Involvement in government initiatives however produces a different result, with the control group being more prominent in receipt of specialist school status, three quarters of sample schools have specialist status (75.5\%). Three out of five disadvantaged schools (60.0\%) have specialist status compared with four out of five selective (83.3\%) and control (82.2\%) schools (see Table 12a). The chi-square test indicates a significant statistical relationship between the sample groups and whether or not they have specialist status ( $X^{2}=21.45, p<$ .01).

Table 12a: Involvement in initiatives (2005)

| $\%$ | Specialist status |  |
| :--- | :---: | :---: |
|  | Yes | No |
| Whole sample $(\mathrm{N}=375)$ | 75.5 | 24.5 |
| Selective sample $(\mathrm{N}=30)$ | 83.3 | 16.7 |
| Control group $(\mathrm{N}=230)$ | 82.2 | 17.8 |
| Disadvantaged sample $(\mathrm{N}=115)$ | 60.0 | 40.0 |

Of the under-performing schools, the difference is still more pronounced with three quarters of control schools ( $75.0 \%$ ) having specialist status compared with slightly over a half of disadvantaged schools (55.3\%) (see Table 12b). These are in fact further disadvantaged in not being able to meet the requirements to apply for specialist status in many cases. The chisquare test confirms a significant difference $\mathrm{X}^{2}=6.08, \mathrm{p}<.05$ between the control and disadvantaged groups against their having specialist status.

Table 12b: Underperforming schools 2005 (underperforming in English) which have a specialist status

|  | Specialist status |  |
| :--- | :---: | :---: |
|  | $\mathbf{N}$ | $\%$ |
| Whole sample ( $\mathrm{N}=154$ ) | 97 | 62.9 |
| Control group ( $\mathrm{N}=60$ ) | 45 | 75.0 |
| Disadvantaged sample $(\mathrm{N}=94)$ | 52 | 55.3 |

The sample was then analysed by involvement in other national initiatives. Statistically significant relationships were found between the sample groups and their involvement in certain initiatives (see Table 13). It was found that high percentages of the disadvantaged sample were engaging in healthy schools (71.7\%), excellence in cities (67.5\%), leadership incentive grant (84.6\%) and partnerships for progression (61.2\%). These programmes should impact positively on the schools involved and hopefully in time improve measurable learning outcomes. However, the diversity of these initiatives supports our theory that schools have wider areas to be addressed than the standards agenda.

Table 13: Involvement in initiatives K3\&4

|  | Whole sample \% | $\begin{gathered} \text { Control } \\ \text { group } \\ \% \\ \hline \end{gathered}$ | Disadvantaged sample \% | $\mathrm{X}^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
| Healthy schools ( $\mathrm{N}=199$ ) | 59.6 | 53.8 | 71.7 | 9.27** |
| Enterprise (Pathfinders) ( $\mathrm{N}=77$ ) | 23.1 | 16.6 | 36.0 | 15.79** |
| 14-19 Pathfinders ( $\mathrm{N}=64$ ) | 19.2 | 15.7 | 26.1 | 5.20* |
| Excellence in cities ( $\mathrm{N}=104$ ) | 31.1 | 13.0 | 67.5 | 102.90** |
| Leadership Incentive Grant (N=146) | 43.7 | 23.3 | 84.6 | 113.43** |
| Partnerships for Progression ( $\mathrm{N}=135$ ) | 40.4 | 30.0 | 61.2 | 29.98** |

The performance of the sample groups was then examined against each of the initiatives to ascertain their influence. Of those schools engaging with each initiative, in every case the majority of control schools perform to or above the national average ( $63 \%-74 \%$ ) and most disadvantaged schools still under-perform ( $76 \%-90 \%$ ). The chi-square measure proved significant in all cases (see Tables 13a to 13f).

Table 13a: Involvement in Healthy schools against performance in English

| \% | Performing | Under-performing |
| :--- | :---: | :---: |
| Whole sample ( $\mathrm{N}=198$ ) | 52.0 | 48.0 |
| Control group $(\mathrm{N}=119)$ | 73.9 | 26.0 |
| Disadvantaged school $(\mathrm{N}=79)$ | 18.9 | 81.0 |

$X^{2}$ (chi-square) revealed significant difference $X^{2}=57.46, p<.01$
Table 13b: Involvement in Enterprise (Pathfinders) against performance in English

| \% | Performing | Under-performing |
| :--- | :---: | :---: |
| Whole sample (N=77) | 40.3 | 59.7 |
| Control group $(\mathrm{N}=37)$ | 72.9 | 27.0 |
| Disadvantaged school $(\mathrm{N}=40)$ | 10.0 | 90.0 |

$X^{2}$ (chi-square) revealed significant difference $X^{2}=31.69, p<.01$
Table 13c: Involvement in 14-19 Pathfinders against performance in English

| \% | Performing | Under-performing |
| :--- | :---: | :---: |
| Whole sample $(\mathrm{N}=64)$ | 42.2 | 57.8 |
| Control group $(\mathrm{N}=35)$ | 68.5 | 31.4 |
| Disadvantaged school $(\mathrm{N}=29)$ | 10.3 | 89.6 |

$X^{2}$ (chi-square) revealed significant difference $X^{2}=22.04, p<.01$
Table 13d: Involvement in Excellence in the Cities against performance in English

| \% | Performing | Under-performing |
| :--- | :---: | :---: |
| Whole sample $(\mathrm{N}=104)$ | 36.5 | 63.5 |
| Control group $(\mathrm{N}=37)$ | 68.9 | 31.0 |
| Disadvantaged school $(\mathrm{N}=40)$ | 24.0 | 76.0 |

$X^{2}$ (chi-square) revealed significant difference $\mathrm{X}^{2}=18.23, \mathrm{p}<.01$
Table 13e: Involvement in Leadership Incentive Plan against performance in English

| $\%$ | Performing | Under-performing |
| :--- | :---: | :---: |
| Whole sample ( $\mathrm{N}=146$ ) | 35.6 | 64.4 |
| Control group $(\mathrm{N}=52)$ | 63.4 | 36.5 |
| Disadvantaged school $(\mathrm{N}=94)$ | 20.2 | 79.7 |

$X^{2}$ (chi-square) revealed significant difference $X^{2}=27.30, p<.01$
Table 13f: Involvement in Partnerships for Progression against performance in English

| \% | Performing | Under-performing |
| :--- | :---: | :---: |
| Whole sample $(\mathrm{N}=135)$ | 44.4 | 55.6 |
| Control group $(\mathrm{N}=67)$ | 68.6 | 31.1 |
| Disadvantaged school $(\mathrm{N}=68)$ | 20.5 | 79.4 |

$X^{2}$ (chi-square) revealed significant difference $X^{2}=31.58, p<.01$

How instrumental were the various improvement programmes utilised by the sample schools? The only measure of improvement available is the end of KS3 test result. We explored data from our matched sub-sample of 138 schools to try to answer this question. Table 14 describes the groups within the sub-sample.

Table 14: Sub-sample groups

|  | Frequency | Valid <br> Percent |
| :--- | ---: | ---: |
| Selective sample | 8 | 5.8 |
| Control group | 97 | 70.3 |
| Disadvantaged sample | 33 | 23.9 |
| Total | $\mathbf{1 3 8}$ | $\mathbf{1 0 0 . 0}$ |

For each of the three years of data provided by the sub-sample (2002-3, 2003-4 \& 2004-5) we first identified those schools that performed or under-performed against the national average in the previous year (eg 2002), then plotted the percentage of each group that used catch-up programmes or booster classes in the current year (eg 2003). Charts 3a and 3b show that the under-performing schools were more likely to use these improvement measures and that their use increased over the three years (catch-up $70 \%-74 \%-84 \%$, booster 74\%-91\%-92\%).

Chart 3a: Performing/under-performing schools - use of catch-up programmes the following year


Chart 3b: Performing/under-performing schools - use of booster classes the following year


The next question was, of those schools using catch-up programmes and booster classes what percentage reported an improvement? Our analysis showed that in each year a larger percentage of under-performing schools had improved their performance (see Charts 4 a and $4 b)$.

Chart 4a: Improved performance following use of catch-up programmes


Chart 4b: Improved performance following use of booster classes


We then explored the under-performing schools by our sample groupings of control and disadvantaged schools. Charts 5 a and 5 b illustrate that the disadvantaged group were less likely to record an improvement following the use of catch-up programmes and booster classes than the control group. This caused us to question how effective these improvement measures are for the typical child from a highly deprived area. It seems that schools are using catch-up programmes and booster classes (which, unlike Optional tests, are free) to show compliance with government agency demands, but perhaps they are not really effective for medium to long term school improvement within the schools' social and cultural contexts. There are parallels with the findings of the NLS and NNS External Evaluation report which 'expressed doubts about whether increases in test scores actually represented comparable increases in pupil learning' (Earl et al, 2003).

Chart 5a: Under-performing schools improved performance following use of catch-up programmes


Chart 5b: Under-performing schools improved performance following use of catch-up programmes


## Conclusion

In the prevailing test-dominated climate of 'judgement by results', some of the 'failing' schools are obviously utilising certain strategies to varying degrees of success in order to improve their results and to enable a 'catching up' phase to take place; booster classes and catch-up programmes seem to be more effective improvement mechanisms. Indeed David Bell, until recently Head of Ofsted, is obviously a big fan of 'catch-up' lessons and predicts that 'Catch-up lessons for pupils struggling at the start of secondary school must become a huge priority' resulting in 'huge improvements' in GCSE results (Bell,2005). The teaching to the test approach of implementing Progress and Optional tests also seems to impact upon improved test performance at KS3. However concerns have to be expressed about the concentration on the short term remediation effects of these strategies rather than focussing on the core improvement issues facing many schools in disadvantaged contexts. There has been no real movement to enable equity in assessment; even the introduction of Assessment for Learning in the Key Stage 3 Strategy seems to be resulting in a tick list of techniques to be followed by teachers (and teacher-trainees) without changing the paradigms of the roles of the teacher and the pupil in the learning process.

This may partly explain why many schools in the 'disadvantaged' group are not restrategising their teaching times to enable the 'catching up' (Gray, 2004) phase to take place. In our analysis of national test performance outcomes, the 'disadvantaged' schools are seen to be underachieving (refer back to Tables 13 and 14) so why are they not taking the most obvious remedial action by targeting the 'measured' subjects for additional teaching time? Have these schools already 'disconnected' (Bell, 2003) to such an extent that they have decided that there is no point in playing 'catch up'? The evidence demonstrated in this paper shows that some improvement mechanisms are being used and are being effective in some, but not all of the disadvantaged schools. Despite using these specific initiatives certain schools are still not 'catching up'. Is the range of 'real' social and cultural problems so great that 'league table' performance and status is not a priority? Are schools addressing issues they identify as significant in their schools? (Earl et al,2003) Is the inevitable conclusion to be drawn from these data that the 'single frame of reference' standards agenda is therefore not viewed as relevant to an increasing percentage of the nation's schools? Are they 'at best indifferent to yet another set of contradictory initiatives arriving from outside to which they through a combination of coercion and consent will be forced to find new coping strategies and ways of securing their self-identity' (Brehony, 2005, p.41, Jeffrey, 2002)

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