

**SCRUTINY OF STANDARDS OF ATTAINMENT IN KEY STAGE 3 AND
THE ATTAINMENT OF BOYS IN ALL KEY STAGES**

Report of the Director, Children, Schools and Families

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1. Purpose

- 1.1. To provide the Select Committee with the Pupil Achievement and School Standards Panel's report on its update of the scrutiny of standards of attainment in Key Stage 3 and the attainment of boys in all Key Stages.
- 1.2. This is in response to the Select Committee's recommendation of 28 March 2001 that:

“a further report would be brought to Select Committee on 17 October 2001 when the outcomes from the academic year 2000/1 will be available, to take into account the impact of [the actions that would be taken as a result of this process] and other initiatives.”

2. Summary

- 2.1. The report comprises 7 sections. The first two provide details of attainment in Key Stage 3 in Hertfordshire Schools and the attainment of boys in all key stages. Sections 3 - 5 outline the actions taken since the last report to improve performance and provide details of evidence drawn from an analysis of value-added data. The final section draws conclusions arising from new information and suggests targeted action which is required in order to raise standards overall.
- 2.2. Pupils in Hertfordshire schools attain, in general, standards which are above national norms, including at Key Stage 3. The national issue of boys' underachievement is evident in the county but is less acute than elsewhere. However, in English in particular, there is evidence that the difference between the attainment of boys and girls shows a widening gap as pupils move through key stages. Significant progress has been made, particularly in respect to making schools more aware of the issues through provision of value-added data and training to enable teachers to target action. Significant further work remains and proposed actions in the new Strategic Plan will focus efforts.

3. Conclusion

- 3.1 The Select Committee may wish to discuss issues arising from this report and consider the requests of the panel for further information in certain areas as set out in paragraph 10 of the report.

1. Background

- 1.1 On 18 October 2000, the Select Committee agreed that the Pupil Achievement and School Improvement Panel should scrutinise the issue of the achievement of boys at all key stages and the levels of achievement of all pupils at Key Stage 3.
- 1.2 This scrutiny was carried out at the meeting of the Pupil Achievement and School Improvement Panel on 14 February 2001.
- 1.3 The outcomes of this scrutiny were reported back to the Select Committee on 28 March 2001. It was then agreed that “a further report would be brought to Select Committee on 17 October 2001 when the outcomes from the academic year 2000/1 will be available, to take into account the impact of [the actions that would be taken as a result of this process] and other initiatives.”

2. Report to the Pupil Achievement and School Standards Panel

- 2.1 The report which follows, from paragraph 3 onwards, was considered by the Pupil Achievement and School Standards panel on 20 September 2001.
- 2.2 The panel’s response to the paper is detailed in paragraph 10 of this report.

3. Standards of attainment at Key Stage 3 (Appendix 1)

- 3.1. Results for 2001 are provisional but confirm conclusions drawn from evidence in previous years and are included to provide Members with information on the latest known position.
- 3.2. Since 1998, there has been an increase of between 6% and 7% in the percentage of pupils achieving level 5+ and level 6+ in mathematics and science. In English tests standards have declined by 4% at level 5+ and 6% at level 6+. There is still a debate about the validity of the English tests used in Key Stage 3.
- 3.3. In English tests, 68% of pupils attained level 5+ this year, a decline of 4% from 2000. The percentage of boys attaining level 5+ is 20% lower than that of girls (58% boys, 78% girls). The gap is widening: girls’ results have declined by 1% since 2000, boys’ by 6%. At level 6+, (25% boys, 44% girls) the gap is similar; the attainment of girls is unchanged from 2000, but boys’ attainment has fallen by 4%.
- 3.4. In mathematics tests, 74% attained level 5+; an increase of 1% since 2000. Gender differences are small (boys 73%, girls 75%), though girls’ results have increased by 2% since last year while those of boys are unchanged. At level 6+ the pattern is exactly the same: the 1% rise since 2000 is a result of an increase in the attainment of girls (boys 50%, girls 52%)
- 3.5. In science, 73% of pupils attained level 5+. This is an increase of 5% from 2000. As with mathematics, gender differences are insignificant (boys 73%, girls 74%), but boys’ results have not increased as fast as those of girls (boys up

3%, girls up 7%). At level 6+, (boys 41%, girls 43%), there is also an overall increase of 5% (boys up 3%, girls up 6%).

- 3.6. In Hertfordshire, standards in Key Stage 3 in both mathematics and science are good and show no cause for concern compared to standards achieved by boys or girls separately. In Hertfordshire, standards in English are above standards nationally but the underperformance of boys is clearly evident and a factor inhibiting progress overall.

4. Standards of boys' attainment in all key stages (Appendix 2)

- 4.1. In English tests girls outperform boys, with a more pronounced difference in later key stages. In Key Stage 1 there is no overall subject level. In both reading and writing 82% of boys attain level 2+, and girls 91% - a difference of 9%. At level 3+, girls are ahead by 8% in both reading and writing.
- 4.2. 2001 Key Stage 2 English results are still provisional. The difference between the attainment of boys and girls at level 4+ is 9% (boys 75%, girls 84%). Girls' results are higher than boys' in reading by 4%, but by 14% in writing: differences in 2000 were 3% and 15% respectively. At level 5+ the gap has widened in both areas from 9% to 11%.
- 4.3. In English at Key Stage 3, girls' attainment is 20% higher than boys'.
- 4.4. In mathematics in Key Stage 1, there is no significant difference at level 2+. At level 3+ boys attain higher results than girls (boys 34%, girls 28%) and boys' results have improved more than girls' since 2000.
- 4.5. This trend continues in Key Stage 2 and there is still little difference between the performance of girls and boys.
- 4.6. In science, there are no tests at Key Stage 1. In Key Stage 2, there is little gender difference at level 4+. At level 5+ though, girls marginally outperform boys. Boys' results have improved more than girls' (boys up 1% since 2000, girls down 3%). However, girls now outperform boys in Key Stage 3, as in other Key Stages.
- 4.7. Results for foundation subjects in Key Stage 3, and for Key Stage 4, are not yet available. However, there is now almost a complete data set for results overall. In Hertfordshire at Key Stage 4, some 57% of pupils attained 5+ A*-C grades compared with 43% nationally. Girls outperformed boys by 12 percentage points.
- 4.8. At A/AS level, the average points per student entered (for those taking 2 or more subjects excluding general studies) fell by 0.7 points overall in Hertfordshire this year compared with last. Analysis by gender and contextual national data is not yet available.

5. Transition from Key Stage 2 to Key Stage 3: Actions since the last report to Members

- 5.1. Transition is the key area for development recognised both nationally and locally. Actions thus far include a massive increase in the summer school programme enabling children to have the best possible start to their secondary schooling. This programme has also enabled primary and secondary teachers to work together, improving liaison and therefore continuity for pupils. Introduction of progress tests in Year 7 and optional tests in Year 8, to provide better intelligence in the early years of Key Stage 3 and the introduction of catch-up units has ensured that secondary schools focus on Key Stage 2 results in order to identify pupils who have not reached the expected standard by the end of Key Stage 2. Hertfordshire has been at the fore in advising the DfES on the introduction of a national database of Key Stage 2 results to provide all schools with information on the whole of their intake, including pupils from out of county. For some schools previously, and for the county, this was a particular problem because of incomplete data sets.
- 5.2. Guidance and training has been provided on target setting from Key Stage 2 to Key Stage 3. The Government introduced statutory target setting for Key Stage 3 in April 2001 and there are national and local targets for 2004 and LEA targets for 2003. School development advisers will be supporting the target setting process for Key Stage 3 in their target setting visits.

6. The effects of social deprivation (Appendix 3)

- 6.1. The percentage of pupils eligible for free school meals is recognised nationally as a proxy indicator of social deprivation. In Hertfordshire, results over time indicate that in terms of raw data, schools in the highest free school meal categories attained, on average, results which were below schools in the same categories nationally.
- 6.2. When value-added measures are applied to schools with high free school meals they show that the value-added in these schools is also lower than expected. A quarter of schools should be in the lower quartile and a quarter in the upper quartile. Of those schools with a higher free school meal population in Key Stage 3 in 2000, 7% of schools were in the upper quartile for English and none for mathematics or science. 43% of these schools were in the lower quartile for English, 57% for mathematics and 77% for science.
- 6.3. Action identified in the Key Stage 3 Strategy targets staffing resource to address the issue of underperformance in schools in the highest category of free school meals in order to raise attainment overall.

7. Gender differences (Appendices 4 - 14)

- 7.1. The raw data for 2000, presented to Members at a previous meeting, showed that girls achieve more highly than boys in English at Key Stage 2, particularly in writing. Girls' results in the English tests were 85% at Level 4+ (boys 76%)

and 40% at Level 5+ (boys 28%). In writing girls attained 68% at Level 4+ (boys 53%) and 20% at Level 5+ (boys 11%). Value-added analysis reinforces this picture. Progress, from the same starting point, for girls is higher than that for boys in English, particularly in writing.

- 7.2. The raw data for mathematics shows little difference between boys and girls. Value-added analysis from Key Stage 1-2 however shows that boys make more progress than girls in mathematics from all starting points.
- 7.3. In science, value-added analysis shows that lower achieving boys make more progress than girls starting from the same points, with little difference at higher levels. This suggests that boys entered Key Stage 2 with lower results than did girls.
- 7.4. In Key Stage 3 and Key Stage 4, the raw data for English showed that the attainment of boys was lower than that of girls. Value-added shows that boys make less progress than girls from the same starting point. Lower achieving boys in mathematics and science make more progress than girls from the same starting point. Higher achieving girls in science make more progress than boys.
- 7.5. When related to average point scores at A level or equivalent girls achieve slightly higher results than those from similar starting points nationally, and boys' results are in line with national value-added figures (Appendices 15 and 16).

8. Other factors

- 8.1. Members sought an investigation into the relationship between poor attendance of pupils and the relative weakness of their attainment in Key Stage 3. Data on attendance is not currently held by CSF at pupil level and it would not be valid to match data at school level. Advances in the way in which CSF now records attendance will enable data to be matched at pupil level in 2002 and members will receive a further report on the correlation between these factors when the data becomes available.

9. Conclusions arising from new information since the last report

- 9.1. There is evidence of a developing gap in the performance of boys relative to girls in English. In Key Stage 1, the percentage of boys attaining level 2+ is 9% lower than that of girls. In Key Stage 2 there is a 15% gap in writing and in Key Stage 3 the difference between boys and girls is 20 percentage points. Gender differences in other core subjects do not have statistical significance.
- 9.2. The issue of underperformance by boys may be fully addressed by proposed action identified in the 2002/3 Strategic Plan in sections dealing with raising achievement of underachieving groups, including boys. An extensive training programme for teachers of English has already been put in place. All schools

are currently carrying out subject audits to identify development objectives and revising schemes of work to meet a new framework. The initial focus of this work is Year 7 with action planned over several terms targeted at Years 8 and 9. The teaching assistants' programme has been extended to the secondary sector and an intensive four-day training programme has been organised. Cross-curricular literacy will be a priority throughout the year and a training day will involve every teacher in Hertfordshire. The Year 7 catch-up programme will be targeted at pupils who have not yet reached level 4 and intensive support will be provided. Year 9 booster materials are planned for introduction to all schools. Literacy objectives are to be incorporated into the schemes of work for all subjects in Key Stage 3. 24 schools have been identified for intensive support by literacy consultants and this work will continue throughout this academic year. In combination, these measures will contribute to raising standards of attainment in English so that standards attained by boys approach those achieved by girls.

9.3. The scrutiny debate has thus far highlighted the truism that the improvements we require to raise the standards of attainment of boys are the improvements that will raise attainment generally; they comprise the essence of good teaching and learning. Nevertheless, acknowledging the particular needs of boys as an underperforming group, a series of specific actions need to be supported and, if successful, disseminated. The following additional range of strategies for raising the achievement of underperforming groups has been identified in order that Members may decide the most appropriate combination to be supported in Hertfordshire:

- Having a strong and effective anti-bullying policy;
- Acting promptly to counter any symptoms of 'macho' culture by, for instance, targeting key students at risk of disassociating themselves from school values; providing them with mentors; dedicating time, positive attention, praise and encouragement to them;
- Ensuring that all staff have appropriate techniques in class management (e.g. assertive discipline) to deal with disruption;
- Ensuring that disciplinary and behavioural policies are clear, consistent, support learning and involve families;
- Appointing effective teachers and providing them with support to promote consistent and effective discipline;
- Implementing teaching strategies which support differentiated learning, so that students are challenged by appropriate tasks; and boys' and girls' different learning styles are catered for;
- Applying data analysis to set individual student targets, negotiated in meetings between teachers, and students and parents. Clear short-term targets are especially important for boys;
- Using single-sex assemblies to explain statistics on boys' attainment and challenging them to 'buck the trend'. Single-sex girls' assemblies can also promote girls' achievement and raise their expectations;
- Forging closer links with parents and carers in the quest for raising standards;
- Using more co-ordinated approaches to the work of external agencies (health, police etc) with a continued focus on achievement;

- Increased opportunity for out-of-school learning.

10. The response from the Pupil Achievement and School Standards Panel

- 10.1 The panel has scrutinised the issue of achievement with specific focus on Key Stage 3 and Boys over recent months. It is clear that achievement of pupils in Hertfordshire schools is generally good and compares favourably with pupils nationally. However there is no room for complacency. Improvement at Key Stage 3 is needed.
- 10.2 The panel has considered the implementation of the Key Stage 3 Strategy and other factors. A number of further options have been considered and will be reviewed by the panel in the coming period.
- 10.3 In addition, there continues to be a worrying gap between the performance of boys and girls generally. The panel has considered a variety of approaches and again intends to monitor their impact. In addition the panel will during future meetings hold further meetings with teachers and advisers to look in further depth at specific strategies including the targeted use of single sex groups.
- 10.4 The panel also wishes to look in more detail at the component parts and skill areas of “English”. Other matters considered worthy of further scrutiny include the gender profile of English teachers in our secondary schools and the targeting of resources to schools in the highest category of free school meals in the light of the research this far.
- 10.5 Finally the panel wishes to scrutinise achievement at A/AS level at a future meeting.