Annex 3

SCHOOL ORGANISATION REVIEW

PUPIL PERFORMANCE

RESEARCH FINDINGS

PART 1

April 2006

Suffolk County Council

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This report includes summaries of all the information gathered by the research team. More detailed information, including disaggregated data year by year and information about specific subjects, can be found in the annexes listed on the next page.

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2 Children and Young People's Services Performance Report (November 2005)

3 Report to Children and Young People's Services Scrutiny Committee (November 2005)

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5 School Improvement : A Transfer Review 1996 (Summary paper presented to Education Committee)

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Annexes can be found on the Suffolk School Organisational Review website
http://www.suffolk.gov.uk/EducationAndLearning/SchoolOrganisationReview

SECTION 1: An overview of performance in Suffolk

1. The curriculum is organised and assessed within six "Stages" from the Pre-School (Foundation Stage) through four National Curriculum Key Stages to Post 16 provision. See Attainment Milestones within the National Curriculum (Annex 1) for a more detailed explanation.

2. An overview of current performance in Suffolk was published in November 2005 and reported to Scrutiny Committee. The summary information in this section has been extracted from two documents, the November 2005 Children & Young People's Services Performance Report (Annex 2) and the Report to Children & Young People's Services Scrutiny Committee (Annex 3).

Summary of Suffolk performance by Key Stage for 2005

3. The pattern of attainment in the Foundation Stage Profile (age 5) matches national expectations.

4. At Key Stage 1 (age 7) Suffolk outcomes remain above the national average for all aspects and compare well with similar local authorities.

5. Although trends over recent years are generally upwards, our Key Stage 2 results (age 11) do not compare well with similar local authorities. We are not keeping pace with their improvements and Suffolk performance is below the national average in English, mathematics and science. For mathematics in particular, our performance is a concern. In 2005 Suffolk was in the bottom quartile and ranked 119th of all authorities. Our conversion rates from Key Stage 1 to 2 are not acceptable. Schools in the two-tier system continue to outperform those in the three-tier system.

6. Key Stage 3 (age 14) outcomes are generally good. We are above the national average in English, mathematics and science. Compared to similar authorities at Level 5 and above, English and science performance places Suffolk in the top half of the group, but mathematics is towards the bottom.

7. Key Stage 4 GCSE performance (age 16) has improved steadily over a 10 year period and is higher than the national average. There is evidence of an emerging plateau of improvement at Key Stage 4, when compared to other local authorities.

8. In recent years Advanced Level performance (age 18) in Suffolk has been below the national average across all three sectors – in school sixth forms, further education colleges and for apprenticeships. The situation has gradually improved and in 2005 the average point score per school sixth form pupil exceeded the national average for the first time. In value added terms, students do not make as much progress as similar students on a national basis, given their performance at GCSE.

9. Key areas for improvement were identified as **Key Stage 2** and **Post 16**. These areas were highlighted in the 2005 Annual Performance

Assessment and the concerns are described in more detail in this report. It should be noted that within both phases there is a range of performance with some outstanding practice and some which is not serving children and young people well. Inadequate practice is addressed through our normal work with schools of concern. This report addresses issues which relate to system organisation.

10. In addition, priorities were set to improve performance for targeted groups of learners, for example boys writing and looked after children. Raising the attainment of African-Caribbean pupils continues to be a key priority.

Key Stage 2

11. Low Key Stage 2 performance is a concern for Suffolk. Investigations over a 10 year period have highlighted that attainment in the 3 tier system is a significant factor and for this reason, a comparison of the 2 and 3 tier systems makes up a significant part of this report.

12. Differences in performance between the 2 and 3 tier systems were first highlighted in mid 1990s using the Suffolk Reading Test (SRT) and GCSE outcomes. The 3 tier system has underperformed when compared to the 2 tier system for many years at Key Stage 2 and this gap is not closed as learners move through the secondary phase.

13. The 2002 Internal Report to the Director of Education (Annex 4), covering the period from 1999 to 2002 and including some information dating back to 1995, suggested that these differences were not significant enough to embark on wholesale changes to school organisation on this factor alone, but that the situation should be monitored and reconsidered in the light of further evidence. As a result, performance in 2 and 3 tier systems has been carefully observed over the last four years (2002 to 2005) and the outcomes of this work are reported in this paper. Differences in performance between the two systems at Key Stage 2 have remained remarkably constant. 2005 results for the 3 tier system place us at the bottom of our group of “statistical neighbour” local authorities and outcomes from the 2 tier system place us towards the top of this group.

14. A focus on transfer between schools became a key aspect of school improvement work in Suffolk and was thoroughly investigated in 1996. A “dip in progress” was identified when learners changed schools and a summary of the outcomes was presented to Education Committee (Annex 5). In the 3 tier system, and where there were infant and junior schools in the 2 tier system, progress was found to suffer because of the extra point of transfer. Further work to address transfer and reduce the “dip” was carried out within schools and the local authority. This led to a Beacon Council award for Suffolk in 2002 and is reported in a later section of this paper. Research evidence continues to suggest that extra transfer points have an impact on progress and that the “transfer dip” is hard to eliminate. Indeed, the DfES describes evidence showing extra points of transfer adversely affecting the performance of learners as incontrovertible.

15. Although Key Stage 4 performance in Suffolk is above the national average and has shown steady improvement for 10 years, a “slow down” has been observed since 2002 and our performance has not kept pace with national improvements. It can be argued that improved performance at Key Stage 2 will add value to performance as learners move through the secondary phase. Improving Key Stage 2 attainment is a priority as this will have an impact on outcomes for students as they move through the system to Key Stages 3, 4 and beyond.

16. There is little national or international evidence to compare attainment in the 2 and 3 tier systems. Sections 2 and 3 in this paper offer evidence unique to Suffolk where both systems operate in similar socio-economic contexts.

Post 16

17. Underachievement of young people aged 16 to 18 years is a key concern for Suffolk, both in terms of their actual attainment and their value added performance. The Ofsted 2003 Area Wide Inspection of 14-19 provision (Annex 22) highlighted this as a significant area requiring development and the Suffolk 14-19 Strategy (Annex 23), published in September 2004, includes a number of plans to support improvement in post-16 achievement.

18. The proportion of young people who continue their learning beyond the age of 16 is too low in Suffolk and has remained static in recent years, although there was an increase of just under 1% in 2005 bringing the total of 16 to 18 year olds in learning to 71%. This low level of continuation in learning is attributed to three main factors: the variable quality of progression advice available to young people and the impact of structural issues within the post 16 sector linked to the small size of some sixth forms, the lack of access to appropriate courses within a reasonable travel-to-learn distance and the variable quality of post-16 learning opportunities.

19. In recent years achievement at advanced level study overall has been below the national average both in terms of attainment and progress made by students. Average points per advanced level candidate have improved at a faster rate than the national average over the last four years and for the first time in 2005, exceeded national levels. Performance at points per entry has also improved steadily over the last three years and in 2004 and 2005 improved at a faster rate than the national average, but still remains below national levels. Suffolk needs to improve this measure by 5.1 points per entry to meet the PSA target of 83 points per entry by 2008. This is a very demanding target.

20. The value added data for points per candidate became positive for Suffolk for the first time in 2005. Despite this improvement the position remains that over half our schools have a negative score for student value added progress in terms of points per candidate. Of even greater concern, value added points per entry declined in 2005 with almost two thirds of schools continuing to have a negative score. This means that

as a group Suffolk students continue to perform less well in their advanced level study than their peers nationally.

21. Inspectors expressed concerns in the 2003 area wide inspection regarding the number of small sixth forms in Suffolk and the potential impact this was having on breadth and choice of study for young people and on their attainment. One third of school sixth forms have less than 200 pupils and are therefore below the minimum Ofsted recommended size for viability. Further analysis of the Suffolk advanced level data indicates that there is a significant correlation between sixth form size and the levels of attainment achieved by the young people attending (Annex 25). Curriculum modelling has also indicated the limitations that small sixth form size has on curriculum range and breadth (Annex 26). This potentially leads to students being unable to make the best choices for their studies and may partially account for the high drop out rates at 17 years in some school sixth forms.

22. There is considerable variability in advanced level performance between different areas of the County, however this does not generally correlate to two and three tier structures. Data indicates a much stronger link between sixth form size and student achievement. The Statistical Review for 14-19 Education and Training 2005 (Annex 24) provides up to date information regarding post-16 performance in each local area of Suffolk.

Structure of the report

23. This report focuses mainly on performance in the 2 and 3 tier systems.

- Section 2 sets the socio-economic context. It argues that the 2 systems in Suffolk are similar in make up and that early attainment is much the same. It is fair to compare them. Comparisons at each phase are offered.

- Section 3 compares the 2 systems in value added terms e.g. the progress that learners make. Information from 2 different measures provided by Ofsted and the Fischer Family Trust is considered.

- Section 4 focuses on other evidence including Ofsted inspection reports and knowledge about the impact of transfers on progress.

- Section 5 offers a summary and draws conclusions from the evidence.

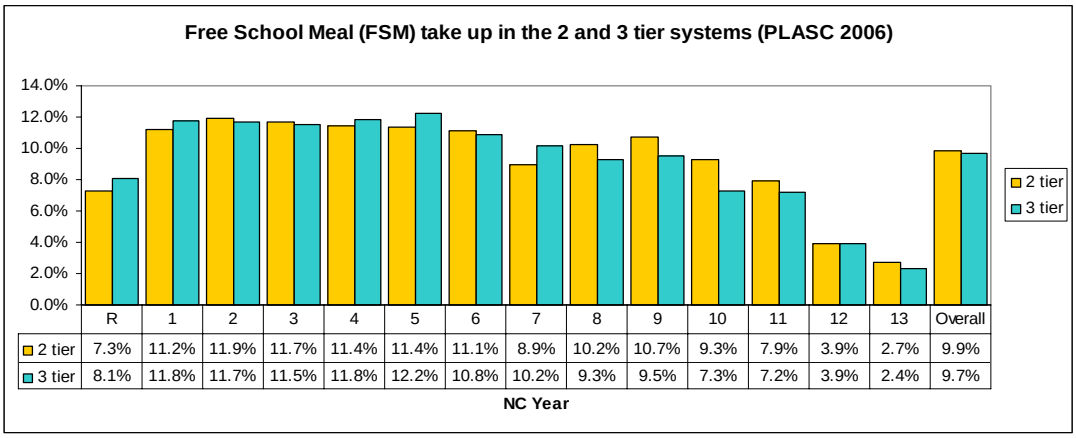
- Section 6 provides examples of action undertaken in recent years to address issues of performance in Key Stage 2 and the Post 16 phase.

SECTION 2: Comparison of attainment in the 2 and 3 tier systems

24. Suffolk is in a unique position to investigate differences in performance between the two and three tier systems. No other authority can match our context where approximately half the schools are in each system and the socioeconomic factors for 2 and 3 tier schools are broadly similar. In 2006 45% of learners were within the 2 tier system and 55% in 3 tier schools.

Socio-economic indicators

25. The proportion of learners taking up **free school meals (FSM)** has been used to give a proxy indicator of deprivation for many years. It has been used by many observers, including Ofsted, to place school performance in context. In Suffolk the percentage uptake is broadly similar in the 2 and 3 tier systems and in secondary years it would suggest a slightly higher level of deprivation in the 2 tier system. The January 2006 PLASC data reflects patterns found in previous years with no significant overall difference between the two systems.



	R	1	2	3	4	5	6	7	8	9	10	11	12	13	Overall
2 tier	7.3%	11.2%	11.9%	11.7%	11.4%	11.4%	11.1%	8.9%	10.2%	10.7%	9.3%	7.9%	3.9%	2.7%	9.9%
3 tier	8.1%	11.8%	11.7%	11.5%	11.8%	12.2%	10.8%	10.2%	9.3%	9.5%	7.3%	7.2%	3.9%	2.4%	9.7%

Chart 1

26. More recently, analysis based on the **postcodes** of individual learners has been used to map socioeconomic differences. A classification of residential neighbourhood (**Acorn –** see Annex 7**)** information linked to the January 2006 PLASC return gives a similar picture and suggests little difference in socioeconomic factors between the two systems in Suffolk.

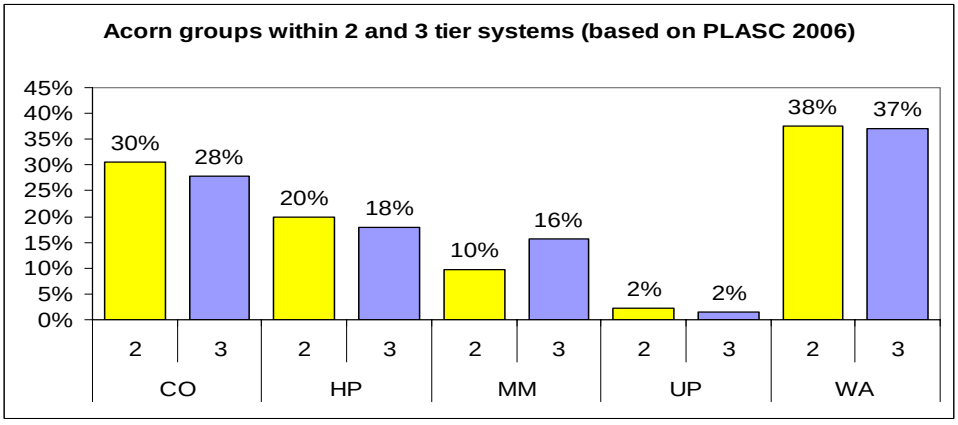


Chart 2

27. The differences in Comfortably Off (CO), Hard Pressed (HP) and Wealthy Achiever (WA) groups are small with more families at either extreme in the 2 tier system. The proportion of learners from areas of Urban Prosperity is small in Suffolk but a 6% difference in the Moderate Means group may reflect the rural catchment areas often found in the 3 tier system with more families compressed around middle incomes.

28. **Attendance** at school is closely linked with performance of learners. Over the last four years there has been no significant difference in attendance patterns between the two systems in Suffolk.

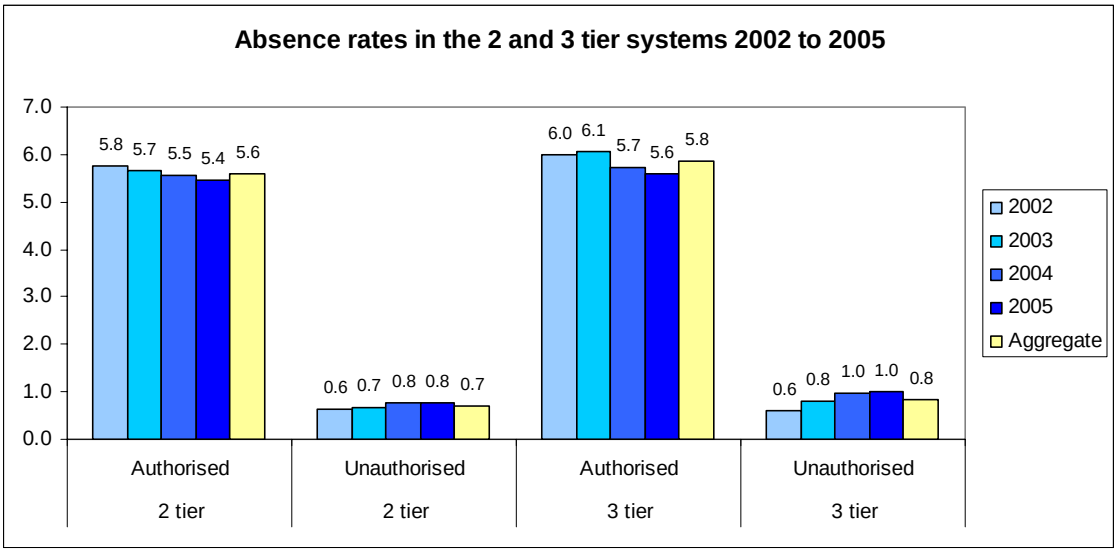


Chart 3

29. **Exclusion** from school would also highlight differences in context between the two systems and over a four year period there is no difference at all in the aggregate figures for the two systems.

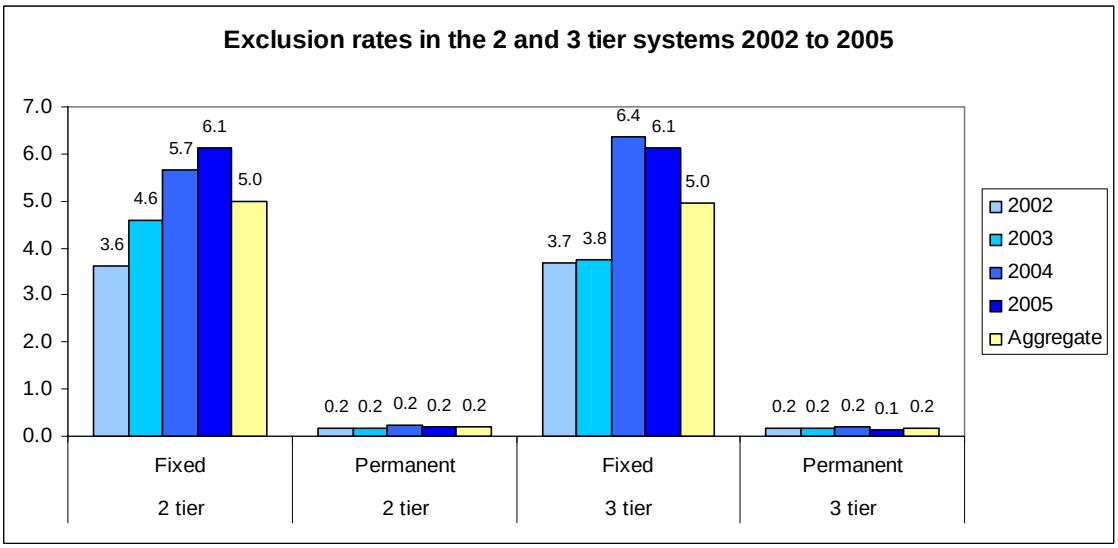


Chart 4

Summary of performance information 2002 to 2005 for each Key Stage

30. This summary draws on the outcomes for children and young people in Suffolk over a four year period – from 2002 to 2005. As each cohort consists of about 7,500 learners the data from about 30,000 learners forms the basis of the analysis for each Key Stage. In the Foundation Stage there is only data for 2004 and 2005 (about 15,000 children) and for Year 4 assessments which were collected for the first time last year, data is only available for 2005 (about 7,500 children).

The Foundation Stage (completed at age 5)

31. The Foundation Stage Profile has been securely in place for two years and is completed for each child at the end of the Foundation Stage. The Profile consists of thirteen scales with each awarding up to 9 points, making a maximum total of 117. Aggregate scores show little difference between the 2 and 3 tier systems.

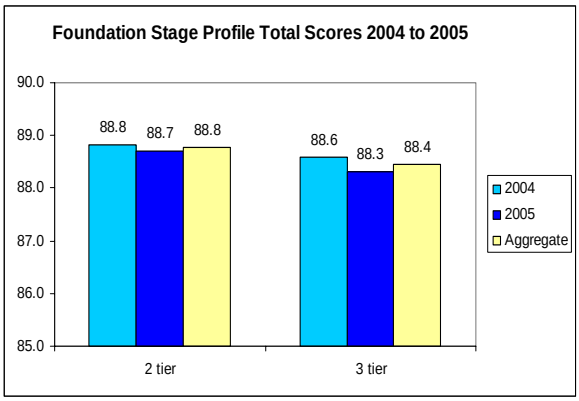


Chart 5

Key Stage 1 (completed at age 7)

32. At Key Stage 1 there is no significant difference between the 2 and 3 tier systems. Performance in the 3 tier system, particularly for English, is slightly better than that found in the 2 tier system. Performance in mathematics and science is broadly the same.

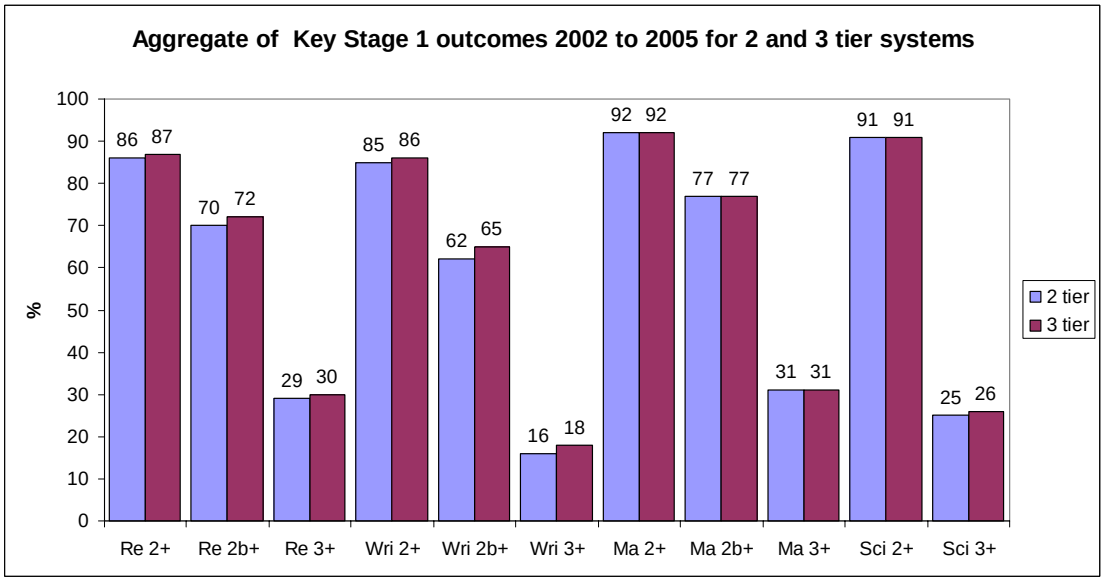
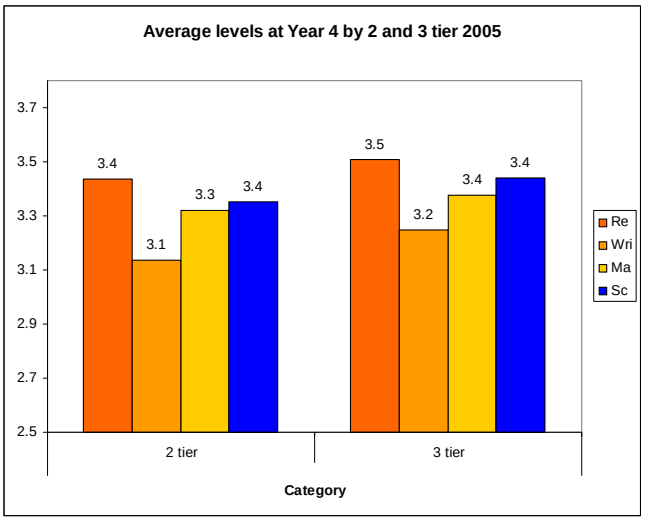


Chart 6

See Annex 8 for further KS 1 detail with analysis for each year separately

Year 4 (the mid point in Key Stage 2 – age 9)

Chart 7



(Not statutory assessment. Based on average NC levels for reading, writing, mathematics and science)

See Annex 10 for further detail of Year 4 assessment

33. For the first time in 2005, schools submitted assessments made at the end of Year 4 (age 9). This is the point of transfer from primary to middle schools in the three tier system.

34. The 2005 outcomes mirror those described above for Key Stage 1 in that there is little difference between the two systems. Attainment is slightly higher in the 3 tier system for both English and mathematics.

Key Stage 2 (completed at age 11)

35. At Key Stage 2 there are significant differences between attainment in the two systems for all statutory assessments. This pattern has been consistent for at least four years and although there have been improvements in both systems, schools in the two tier system have improved more rapidly and have kept up with similar authorities. The performance of Suffolk 3 tier schools compares very poorly with our "statistical neighbour" local authorities and would place us at the bottom of this group. **This chart marks the emergence of an important difference in attainment between the two systems.**

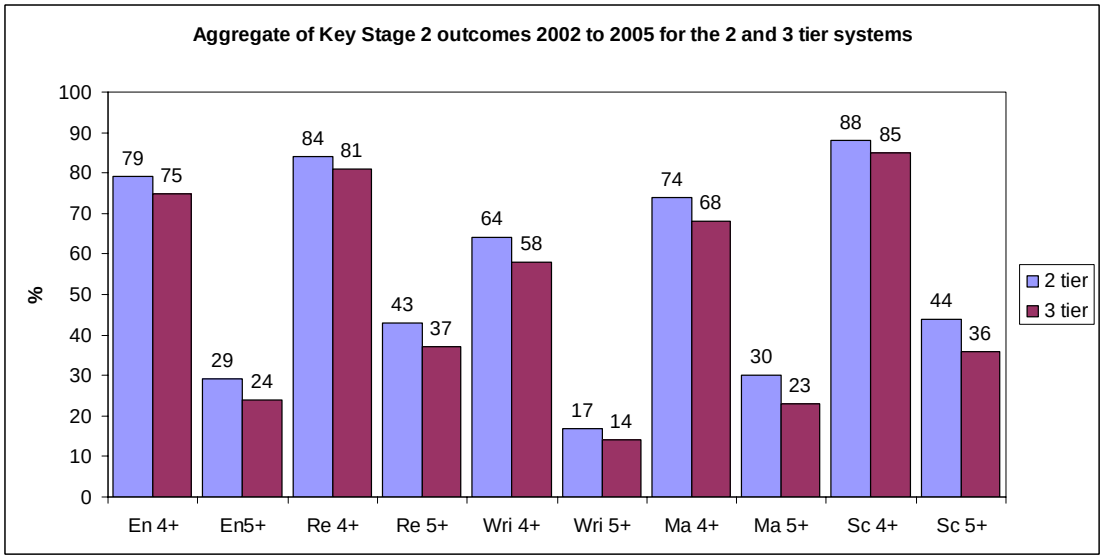


Chart 8

See Annex 9 for further KS 2 detail with analysis for each year separately

36. At Key Stage 2 the nationally expected outcome is achievement of Level 4. To give a feel for what this involves, a difference of 4% between the systems in English equates to about 175 pupils in each year group not reaching the expected level. In mathematics the difference of 6% is equivalent to 265 pupils each year and in science 3% is about 130 pupils each year.

37. The gap between performance in the two systems for more able children at Level 5 and above is even greater. In English it is a 5% difference, in mathematics 7% and in science 8%.

Key Stage 3 (completed at age 14)

38. At Key Stage 3, the 2 tier system outperforms the 3 tier system in all core subjects except science where there is little difference.

39. For English the gap is similar to that found at Key Stage 2 suggesting that the ground has not been made up. However, the difference for mathematics is reduced suggesting that learners make better progress at the start of the secondary phase in the 3 tier system than in the 2 tier system. Despite this gain they do not completely make up the ground lost in Key Stage 2.

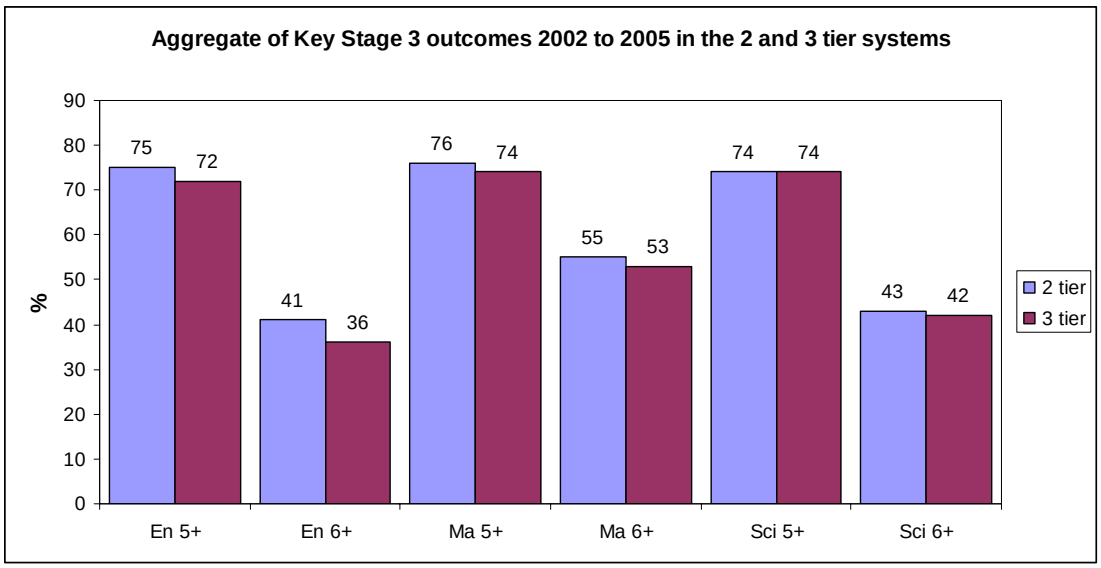


Chart 9

See Annex 11 for further KS 3 detail with analysis for each year separately

40. The difference in performance for higher attaining students (Level 6 and above) is more significant than performance at the expected level (Level 5). In English the gap between the two systems is 5%. This equates to about 220 students. In mathematics and science the gaps of 2% and 1% are reduced from those found at Key Stage 2.

Key Stage 4 (completed at age 16)

41. Assessment at Key Stage 4 is in the form of GCSE or equivalent qualifications and is commonly measured in terms of the percentage of students gaining 5 or more grades above grade C (% 5+ A* to C) and the percentage of students gaining 5 or more passes (% 5+ A* to G)

42. Over a four year period from 2002 to 2005 there was a 3% difference between the systems. This equates to about 130 students each year performing less well in the 3 tier system. Previous local authority research in 2002 (Annex 4) relates this to each student performing one grade less well in their best 7 GCSE examinations. For example a student gaining 7 B grades in the 2 tier system might gain 6 B grades and one C grade in the 3 tier system.

    This chart is important because Key Stage 4 marks the end of compulsory education.

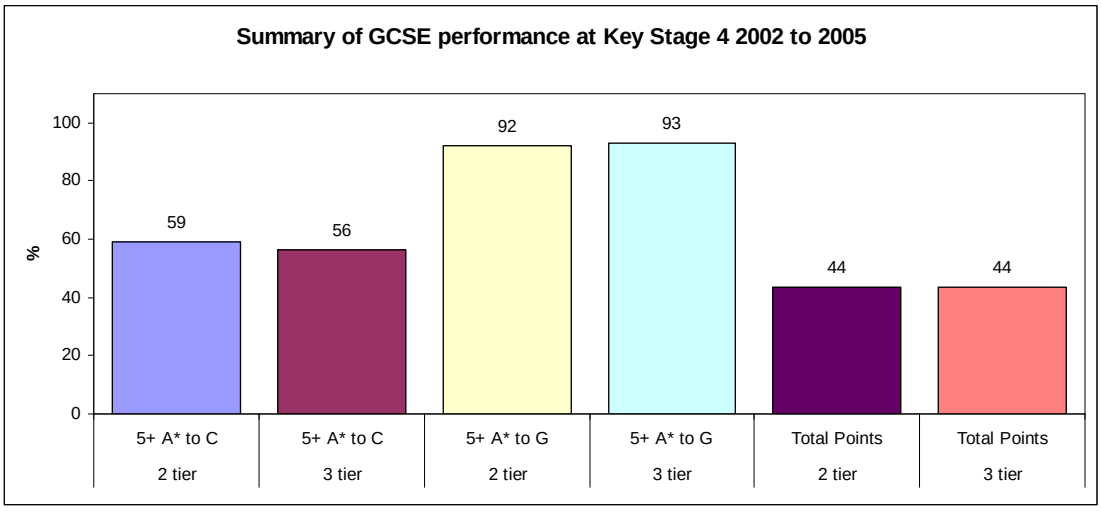


Chart 10

43. There is little difference in the percentage of students gaining a pass (A* to G grades) in the two systems. 1% more of 3 tier students achieve at least five passes when compared to the 2 tier system.

44. Key Stage 4 performance can also be measured using a point score system which takes account of the full range of qualifications available to young people. This is a more inclusive measure than A* to C grades as it recognises performance across the ability range. Over the period 2002 to 2004 there was no difference between the 2 and 3 tier systems for the total points per student.

45. It would appear that at Key Stage 4 the biggest difference between the two systems can be seen in the performance of the most able students – those achieving at least a grade C.

46. There is a clear difference of 4% over four years between performance in the 2 and 3 tier systems when English and mathematics are included in the 5 or more A* to C grades.

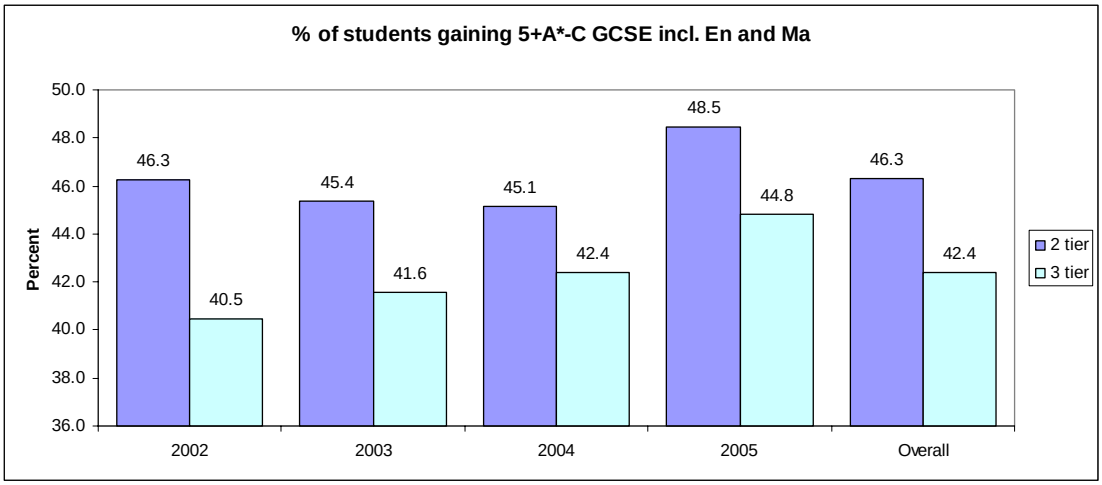


Chart 11

47. If A* to C grade passes are analysed subject by subject over the four year period from 2002 to 2005, there is no single GCSE subject with a significant number of entries where the 3 tier system matches or outperforms the 2 tier system. This suggests that the most able students, even when they study some subjects for a longer period of time in the 3 tier system, are performing significantly less well than their counterparts in the 2 tier system.

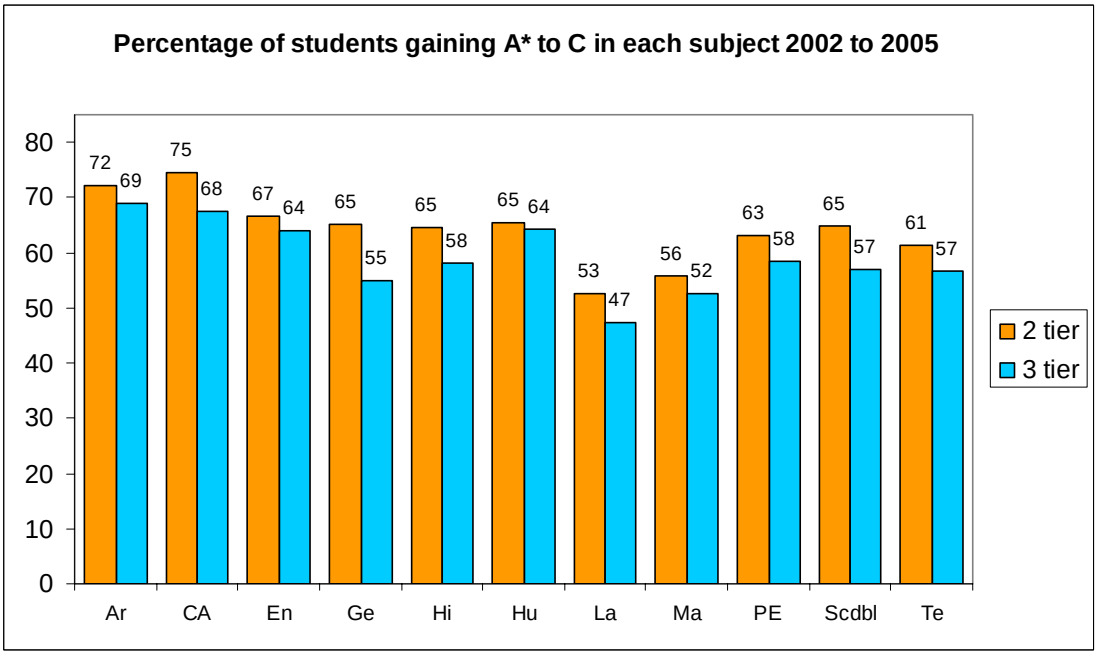


Chart 12

This chart includes all subjects where there are significant numbers of entries. Art, Creative Arts, English Language, Geography, History, Humanities, (Modern Foreign) Language, Maths, PE, Double Science Award (not taken in all schools) and Technology.

See Annex 12 for further KS 4 detail with analysis for each year separately

Performance of socioeconomic groups

48. Differences in performance between the 5 Acorn groups (introduced on page 8 and described in (Annex 7) have been analysed for Key Stages 2, 3 and 4 to see if either system benefits any particular socio-economic groups of learners. The "Urban Prosperity" group is low in numbers in Suffolk (about 2% of the total population) and data for this group should be treated with care.

Key Stage 2 (age 11)

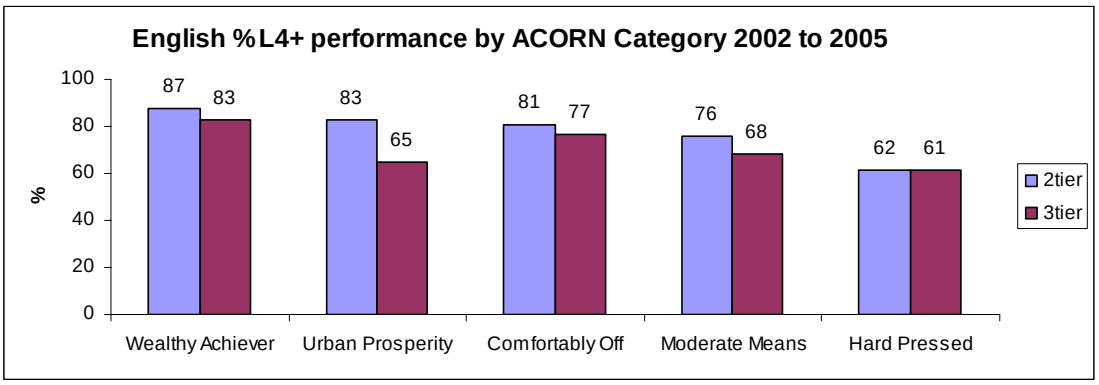


Chart 13

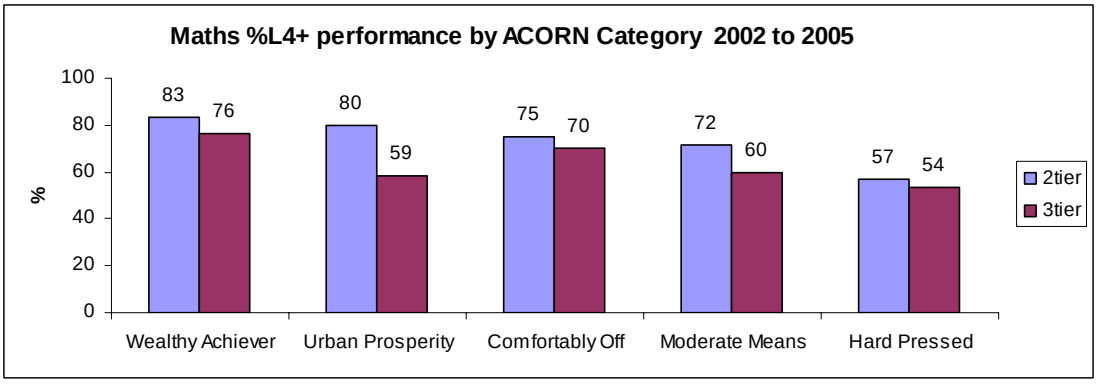


Chart 14

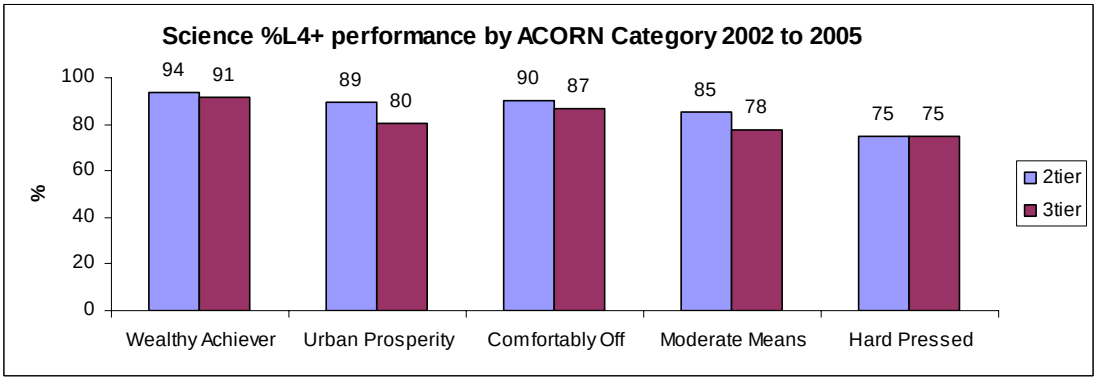


Chart 15

49. Key Stage 2 performance is lower in the 3 tier system across all groups. However, the 3 tier system seems to do better for the "hard pressed" group of learners and significantly less well for the small "urban prosperity" group of about 150 learners each year.

Key Stage 3 (age 14)

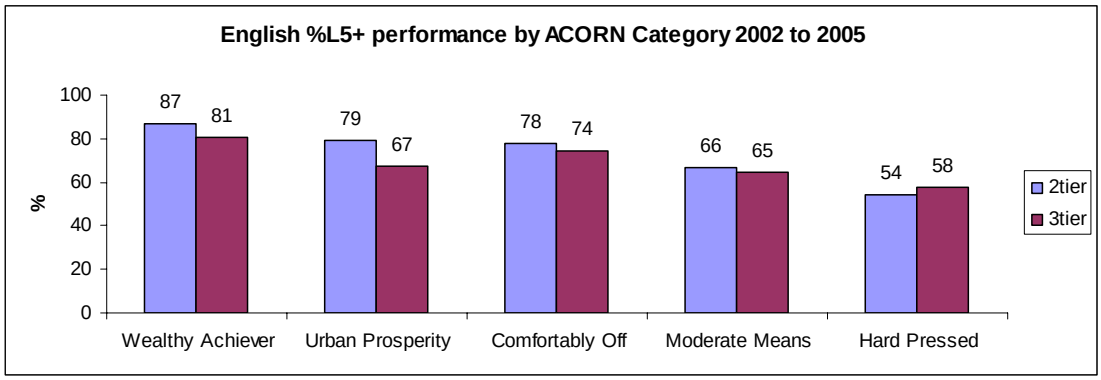


Chart 16

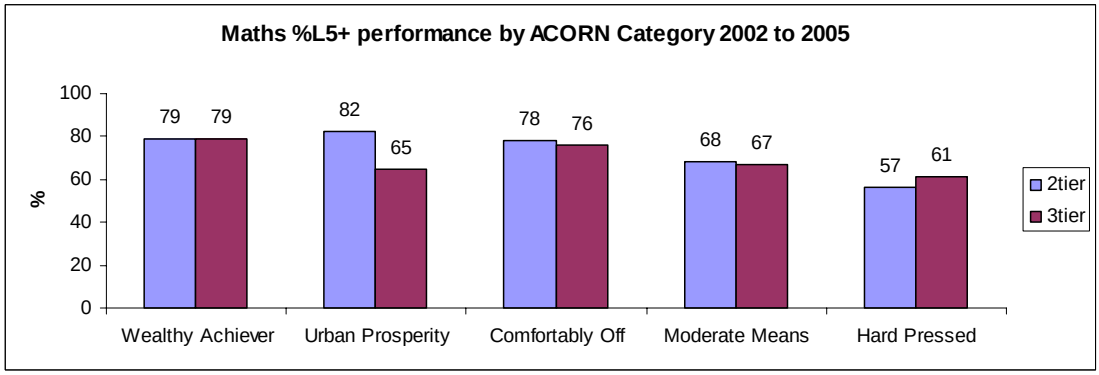


Chart 17

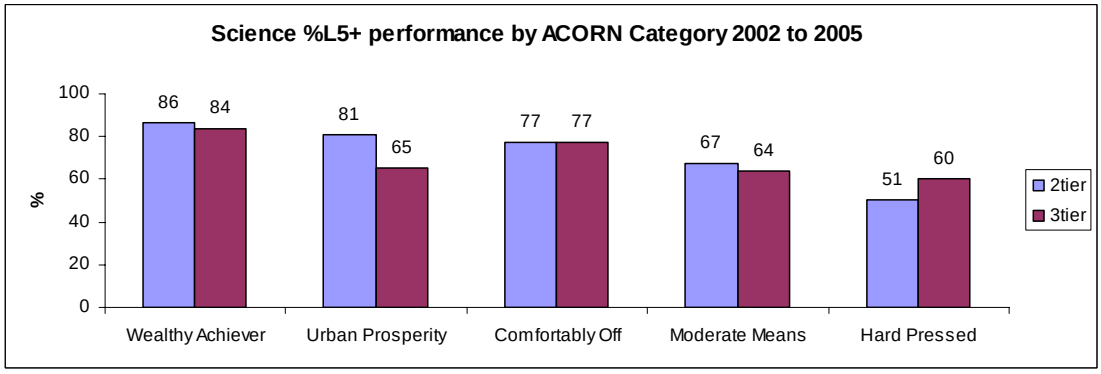


Chart 18

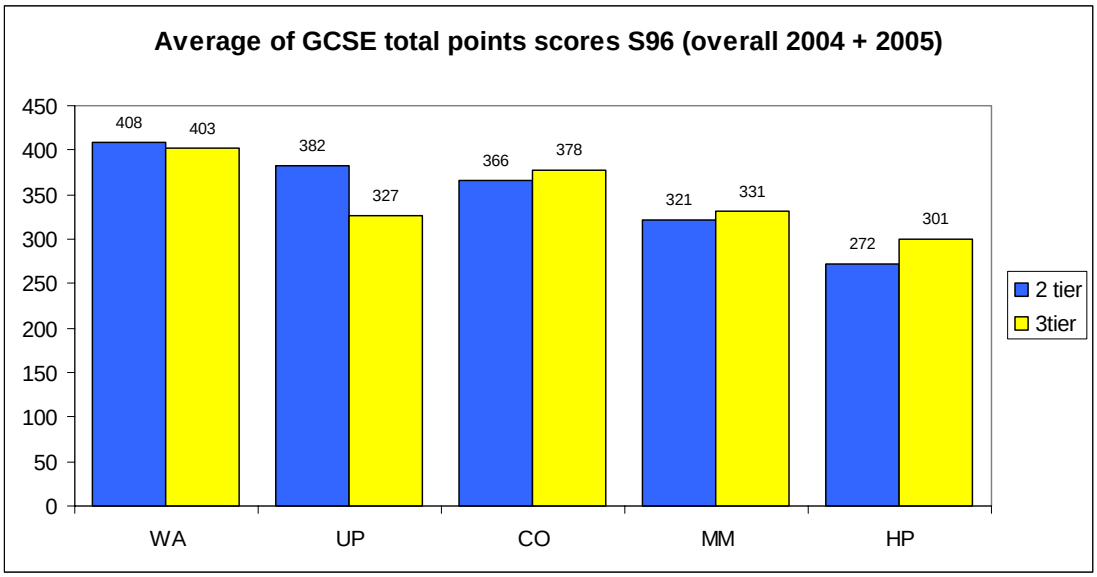
50. Students from “hard pressed” backgrounds perform significantly better in the 3 tier system at Key Stage 3. Those in the small “urban prosperity” group do better in the 2 tier system. Performance for the other three groups is broadly similar across the two systems.

51. Science performance for “hard pressed” learners is particularly high in 3 tier schools. Although on most comparisons the 2 tier system has the edge, the 3 tier system appears to serve this group well at Key Stage 3.

Key Stage 4 (age 16)

52. The pattern of higher performance for “hard pressed” students in the 3 tier system is maintained at Key Stage 4. Performance in the 2 tier system for 5 or more A* to C grades is better than in the 3 tier system with the biggest gap for the small “urban prosperity” group and a significant difference for the “wealthy achiever group.

Chart 19



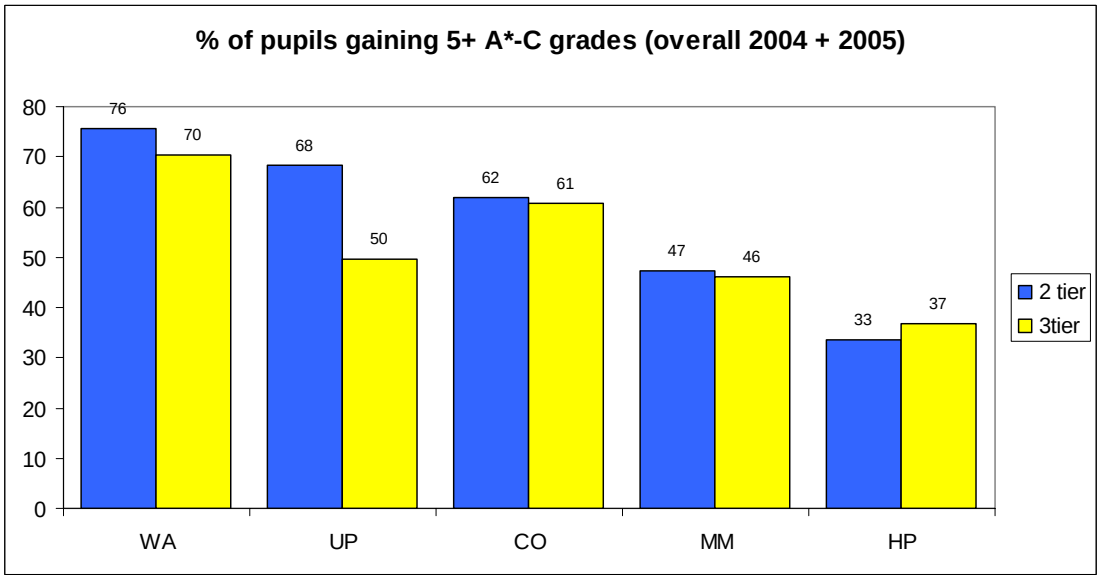


Chart 20

Post 16 attainment (completed at age 18)

53. The ratio of 45% students in the 2 tier and 55% in the 3 tier systems is maintained in sixth forms.

54. The range of qualifications available and the variety of point score systems make analysis of Post 16 attainment data difficult. However, comparisons of performance between the 2 and 3 tier systems for the Post 16 phase can be made by comparing the Section 96 point scores achieved by those students staying in schools. The general trend of differences between the 2 and 3 tier systems is maintained.

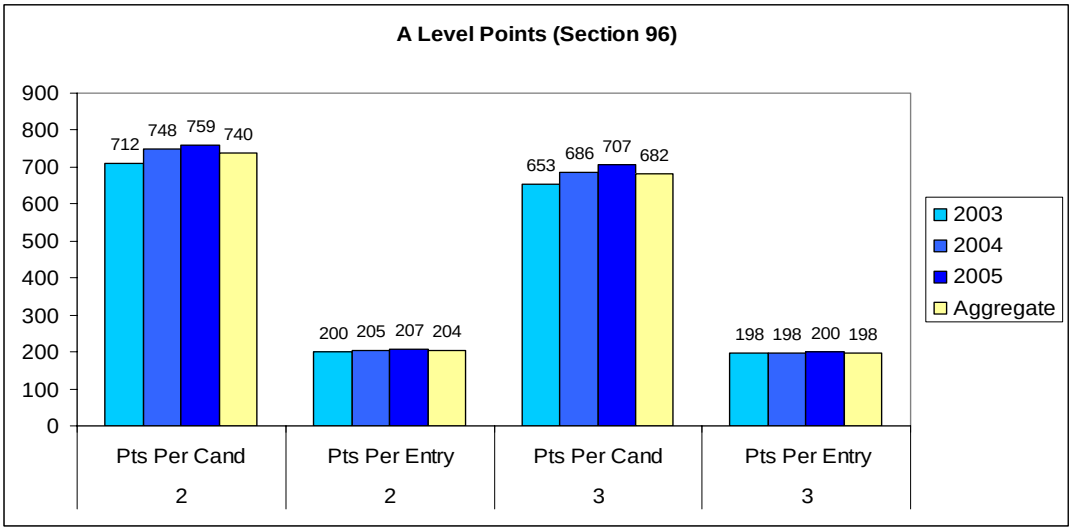


Chart 21

Section 96 points cover GCE and vocational qualifications and are shown for Average Points per Entry and Total Points per Candidate. An A level GCE A grade is worth 270 points. Each grade is worth 30 points so a B grade is 240 points, a C grade is 210, a D 180 points etc.

55. The point system was changed in 2003 to include a wider range of qualifications. This means that consistent data is only available for 3 years. Over this period the difference in points per candidate between the two systems is 58 points which equates to about 2 A Level grades difference. Total points per candidate would affect entry to higher education.

56. The difference in average points per entry is only 6 points. This suggests that students in the 2 tier system are entering a broader range of qualifications to gain a higher number of points per candidate but are achieving similar standards. A 6 point difference in points per entry is equivalent to a grade difference for one student in every 10.

Comparing Post 16 performance with the national average

57. There has been variation over a four year period and performance in both systems is below national average. In 2002 and 2003 schools in the Suffolk 3 tier system were closer to the national average than 2 tier 6th Forms. In 2004 and 2005 the position was reversed and the 2 tier system improved to be closer to the national average.

Post 16 Value Added Information

58. The methodology used for comparing value added progress in the Post 16 sector is not the same as in Section 3 and is less well developed. It relies on comparisons with national quartiles.

59. In Suffolk, we have a greater proportion of students making poor value added progress from GCSE to A Level / GNVQ than the national expectation There is a small difference between the 2 and 3 tier systems with students in the 2 tier system performing better.

60. For students making good value added progress Suffolk is in line with the national expectation and for these students there is no significant difference between the two systems.

See Annex 13 for further details of Post 16 performance

SECTION 3: Value added information

61. Value added measures can be used to demonstrate progress over time. Individual learners can be tracked and performance is measured from one assessment point to another at a later time. For example, this method can be used to show progress from Key Stage 1 to Key Stage 2 or from Key Stage 2 to Key Stage 4. Initially this type of progress measure is made for individuals with "matched data" and then aggregated to produce a picture of progress within each school.

62. Two types of value added measure are commonly used in Suffolk.

    - The first is produced by Ofsted and is published in the PANDA (Performance and Assessment Document for Schools) as well as in DfES Performance Tables.

    - The second is generated by the Fischer Family Trust.

    Both methods place value added performance in the context of the school and take account of socioeconomic factors using different methodology.

Measure 1 – Ofsted Contextual Value Added (CVA) Information

63. This information is available from Key Stage 1 to 2, Key Stage 2 to 3, Key Stage 2 to 4 and Key Stage 3 to 4 wherever there is matched data at pupil level. In the following charts for 2005, this information has been aggregated to show the performance of each school as a cross.

64. The horizontal axis shows **Relative Attainment** – each school's position relative to the national mean (zero). The vertical axis shows **Overall CVA** – the contextual value added figure for each school relative to the national mean of 100. Positions in the quadrants can be interpreted as follows:

1. Below the national average but with high value added progress	2. Above the national average and high value added progress
3. Below the national average and with low value added progress	4. Above the national average but with low value added progress

Fig 1

65. It is clearly desirable to be in quadrant 2 with high results and good progress. Schools in quadrant 1 are doing well to add value to their pupils and may often be in challenging circumstances. Schools in quadrant 3 and 4 are of concern. Quadrant 4 schools are likely to be

"coasting" with high results and poor value added progress. Quadrant 3 schools have low results and poor value added progress.

Ofsted Contextual Value Added Performance in 2005

Key Stage 1 to 2 (age 7 to 11)

Key Stage 1 to 2 in the 2 tier system

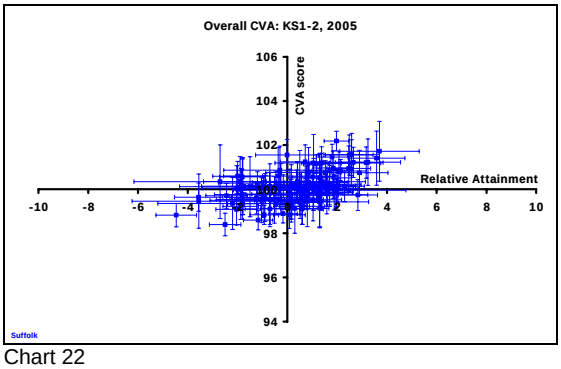


Chart 22

Key Stage 1 to 2 in the 3 tier system

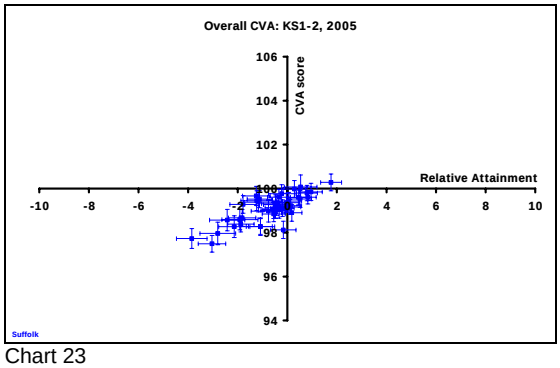


Chart 23

66. Value added progress from Key Stage 1 to 2 in the 3 tier system is clearly a concern. Learners are not converting prior attainment at age 7 to expected levels at Key Stage 2. A significant proportion of 3 tier schools are in the bottom left quadrant and few have CVA scores above the national average.

Key Stage 2 to 3 (age 11 to 14)

Key Stage 2 to 3 in the 2 tier system

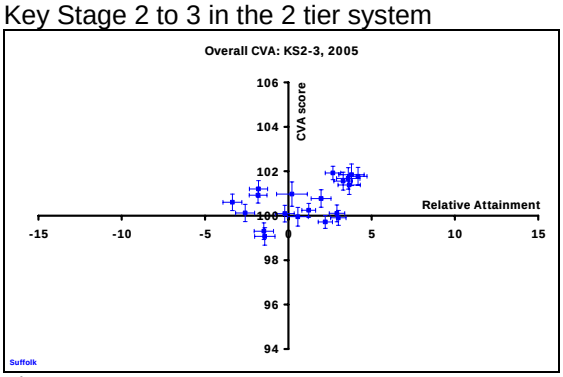


Chart 24

Key Stage 2 to 3 in the 3 tier system

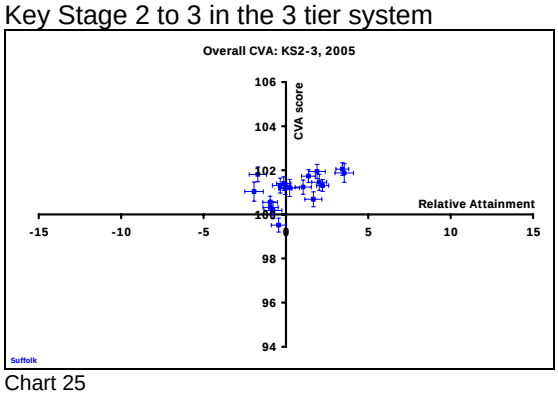


Chart 25

67. Value added progress from Key Stage 2 to 3 in the 3 tier system is good and is better than in the 2 tier system with most schools above the national average. However, it should be noted that the prior attainment levels at Key Stage 2 were lower.

Key Stage 2 to 4 (age 11 to 16)

Key Stage 2 to 4 in the 2 tier system

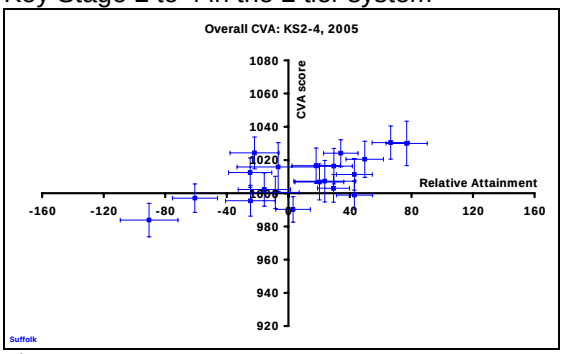


Chart 26

Key Stage 2 to 4 in the 3 tier system

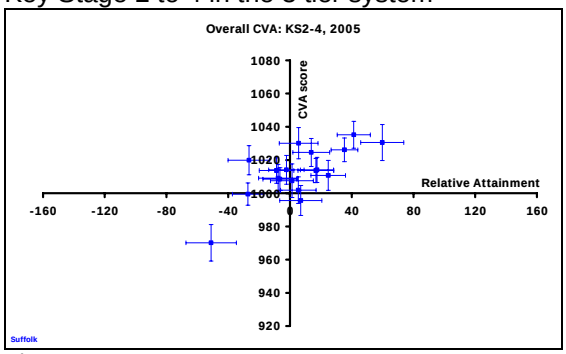


Chart 27

68. Value added progress from Key Stage 2 to 4 is broadly similar with the 3 tier system performing slightly better. Again, it should be noted that the Key Stage 2 starting point was significantly lower in 3 tier schools.

Key Stage 3 to 4 (age 14 to 16)

Key Stage 3 to 4 in 2 tier system

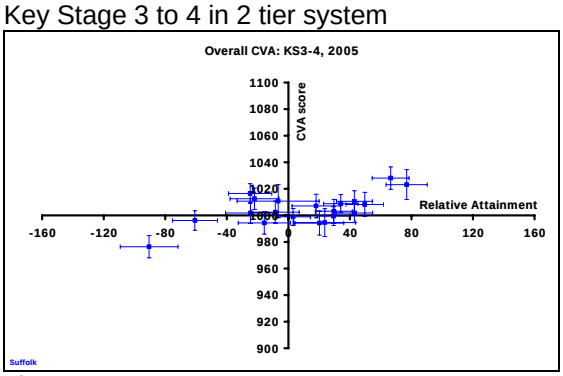


Chart 28

Key Stage 3 to 4 in the 3 tier system

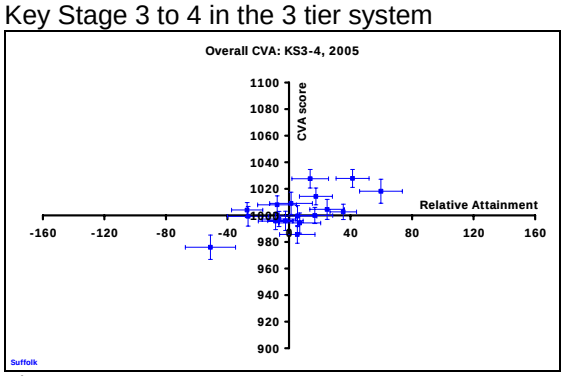


Chart 29

69. There is little difference between the value added performance in the 2 and 3 tier systems from Key Stage 3 to 4.

General conclusions from Ofsted CVA data

70. Value added progress in Suffolk schools as measured by Ofsted is poor from Key Stage 1 to 2 (age 7 to 11). Although there are a significant number of underperforming schools in the 2 tier system, the overall performance in the 3 tier system is in quadrant 3 - below the national average and with low value added progress. This is a concern.

71. Value added progress in Key Stages 3 and 4 is much better and follows a similar pattern in the two systems. Schools in the 3 tier system perform better than those in the 2 tier system but the starting point is lower so overall attainment does not catch up.

72. Key Stage 3 and 4 plots show strengths in both the 2 and 3 tier systems in Suffolk with very few schools in the weaker quadrants.

These value added plots were similar in nature for 2003 and 2004. See appropriate Annex for further detail of the 3 year pattern.

Annex 14 for Key Stage 1 to 2

Annex 15 for Key Stage 2 to 3

Annex 16 for Key Stage 2 to 4

Annex 17 for Key Stage 3 to 4

Measure 2 - Fischer Family Trust Value Added Information

73. The Fischer Family Trust (FFT) is an independent organisation and works in partnership with all local authorities in England and Wales to promote school improvement through use of performance information. The Trust is in a unique position in that it has access to national data for research purposes and has high credibility amongst practitioners. The work reported in this section was commissioned especially for this review. FFT provided the data and analysis and interpretations were made by Suffolk advisers.

74. There are 3 main "routes" for learners in Suffolk.

- The 2 tier system. From primary to secondary school with a single point of transfer.
- The 2 tier system with an extra point of transfer at age 7 from infant to junior school (there are few schools in this group).
- The 3 tier system with transfer at age 9 from first to middle and then at age 13 from middle to upper school.

75. Analysis of Key Stage 1 FFT contextual information over the last three years found no difference between the 2 and 3 tier systems. This would suggest that value added differences from Key Stage 1 to 3 are not a consequence of differences in attainment between primary and first schools. This supports contextual evidence collected in Suffolk and indicates that pupils start from a level base.

76. 2005 provided the first opportunity we have had to use "matched data" from Key Stage 1 to Key Stage 3 and the analysis is based on individual pupil progress for the 2005 Year 9 cohort from attainment data collected when they were in Year 2. It shows progress over a 7 year period and covers the 2 transfer points in the 3 tier system and 1 transfer point in the 2 tier system.

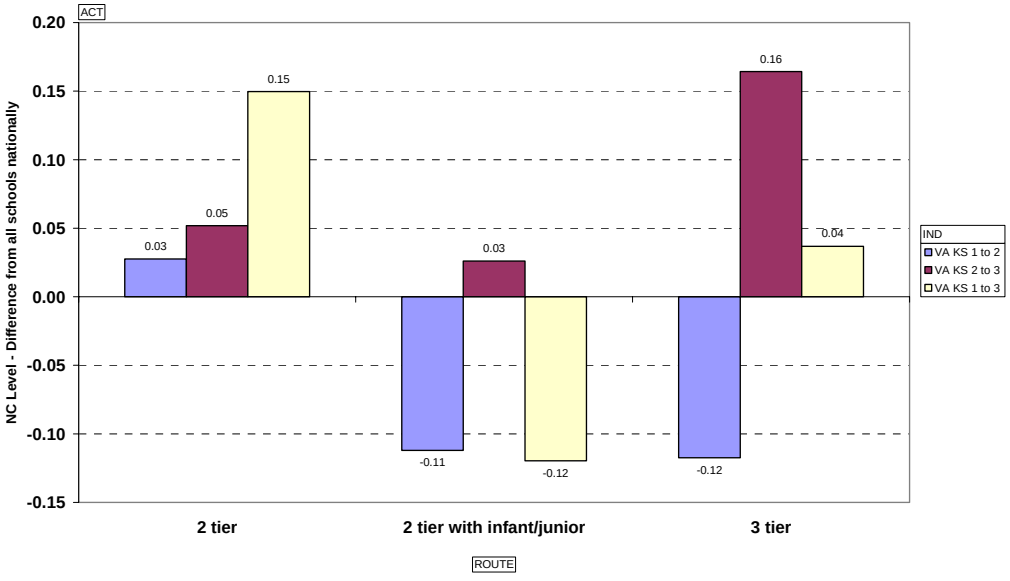


Chart 30

77. The chart above summarises value added performance across these 3 routes. The horizontal zero line represents all schools nationally and the vertical axis shows decimal points of a National Curriculum level.

78. In the 2 tier system, value added progress from **Key Stage 1 to 2** (blue) is better than schools nationally. Where there is a point of transfer with infant and junior schools and within the 3 tier system it is significantly below the national picture by over 0.1 of a National Curriculum Level in both cases.

79. Starting from a low base at age 11, students in the 3 tier system make very good value added progress from **Key Stage 2 to 3** (maroon) when compared with schools in the 2 tier system and with schools nationally. They go a significant way to catching up.

80. Although the gap between 2 and 3 tier performance is closed during Key Stage 3, students never make up all the lost ground. **Key Stage 1 to 3** (yellow) performance overall is significantly better by 0.11 of a Level in the 2 tier system. This equates to just over 2.5 months difference in progress – about 1 term over the 7 years from age 7 to 14.

Comparisons of Suffolk schools with similar "route" schools nationally

81. The zero line in this chart represents schools in similar situations nationally. It should be noted that 3 tier schools generally perform less well than two tier schools across England so this chart cannot be used to compare the 2 and 3 tier systems as the zero line means something different for each route.

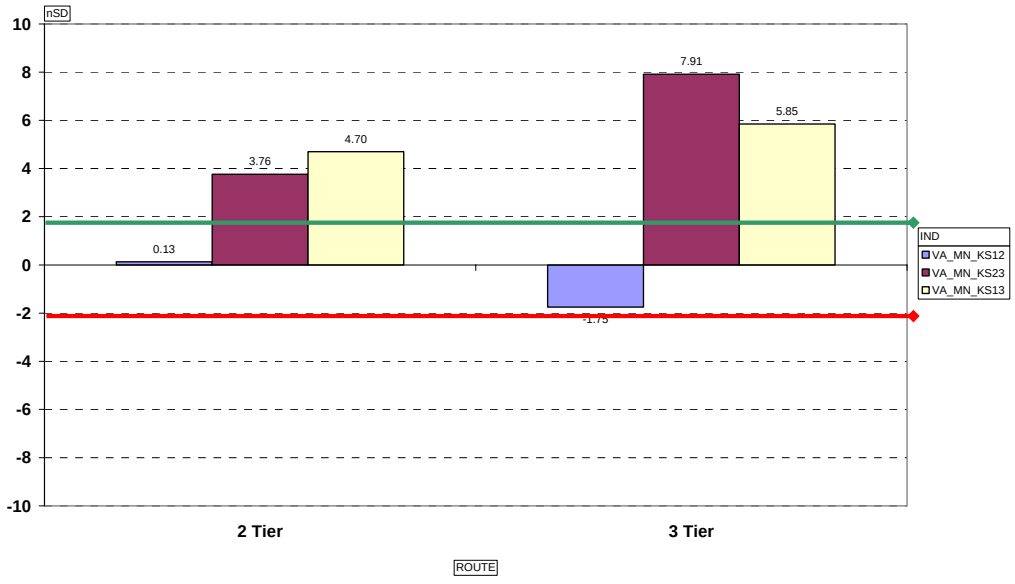


Chart 31

82. The vertical axis represents "Standard Deviations" – a statistical measure of significance. A bar which is more than 2 Standard Deviations above or below the zero line indicates a significant difference. This chart is based the mean value of the three core subjects.

83. Pupils in Suffolk 2 tier schools make similar progress from Key Stage 1 (age 7) to Key Stage 2 (age 8) to that found in all other 2 tier schools nationally. Progress from Key Stage 2 to 3 (age 11 to 14) and from Key Stage 1 to 3 (age 7 to 14) is significantly better than that found in other similar schools where the route has only one point of transfer.

84. Pupils in the 3 tier system in Suffolk make less progress than those assessed at the end of key Stage 2 in middle schools elsewhere. Our value added progress from Key Stage 1 to 2 (age 7 to 11) is below the zero line. However, value added progress from Key Stage 2 to 3 (age 11 to 14) and within the system overall with 2 transfer points from Key Stage 1 to 3 (age 7 to 14) is significantly better than that found in 3 tier systems in all similar schools nationally.

Further information and FFT value added comparisons for English, mathematics and science can be found in Annex 18.

SECTION 4: Other Evidence

Ofsted inspection reports

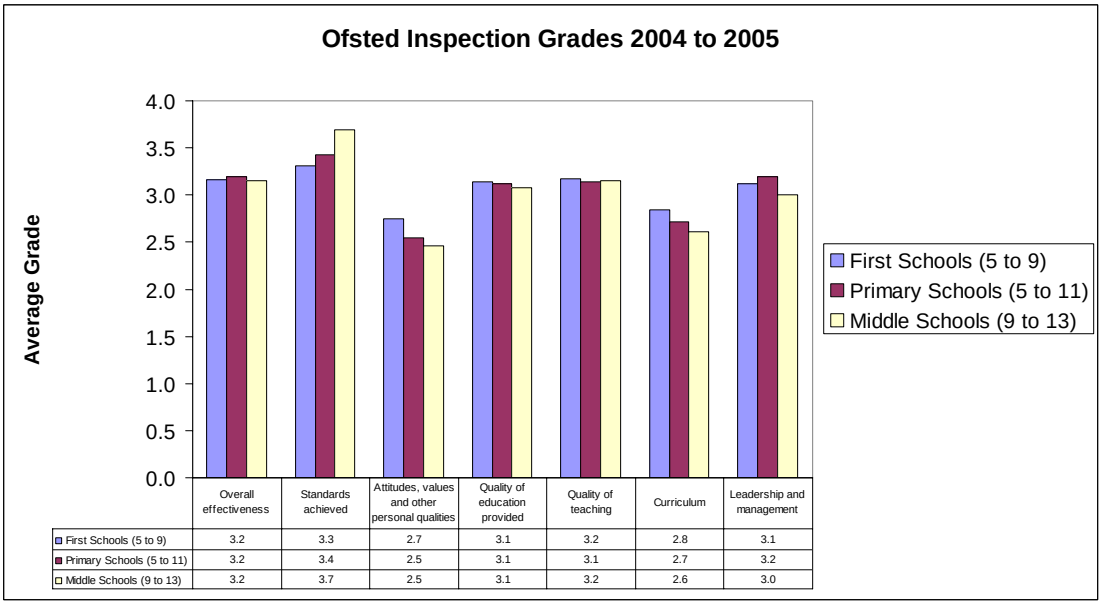
85. In the period from April 2003 to July 2005 there were 121 inspections of Suffolk schools. In this time no schools were deemed to require special measures, 5 had serious weaknesses identified and 1 primary school was graded very highly for overall effectiveness. This compares well with the national situation. All inspections in this period used the same inspection framework.

Table 1	Number inspected	Number with overall effectiveness grade 1	Number with Serious Weaknesses	Number requiring Special Measures
Infant	1	0	0	0
First	51	0	2	0
Junior	2	0	0	0
Primary	42	1	3	0
Middle	13	0	0	0
Secondary (2 tier)	4	0	0	0
Secondary (3 tier)	8	0	0	0
TOTAL	121	1	5	0

86. Reports for first schools (age 5 to 8), primary schools (age 5 to 11) and middle schools (age 9 to 12) were analysed against the following key judgements.

- The overall effectiveness
- Overall standards achieved
- Attitudes, values and other personal qualities
- The quality of education provided
- The quality of teaching
- Curriculum
- Leadership and management

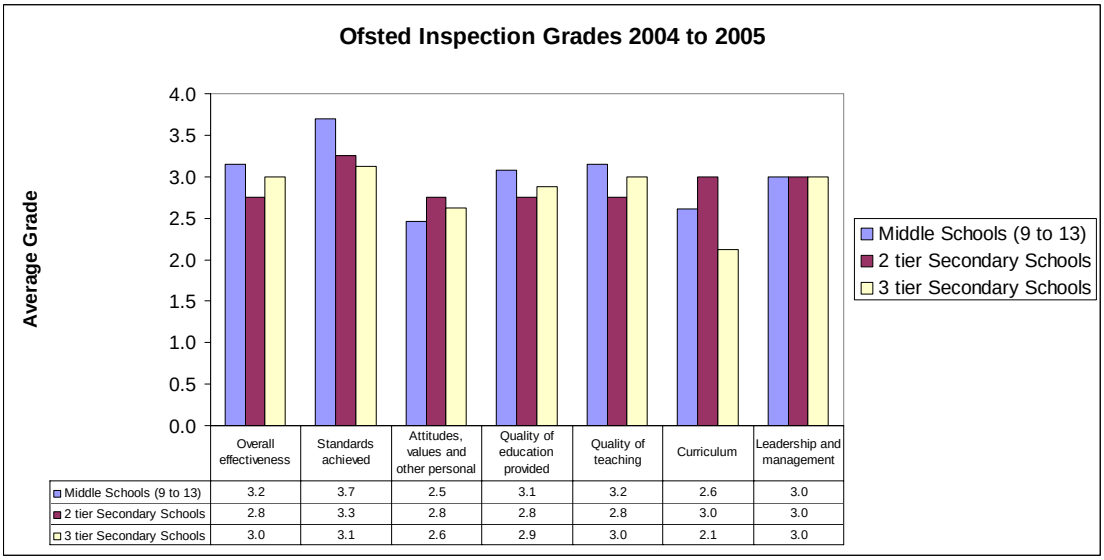
Inspectors make judgements on a scale: excellent (grade 1); very good (2); good (3); satisfactory (4); unsatisfactory (5); poor (6); very poor (7).



	Overall effectiveness	Standards achieved	Attitudes, values and other personal qualities	Quality of education provided	Quality of teaching	Curriculum	Leadership and management
First Schools (5 to 9)	3.2	3.3	2.7	3.1	3.2	2.8	3.1
Primary Schools (5 to 11)	3.2	3.4	2.5	3.1	3.1	2.7	3.2
Middle Schools (9 to 13)	3.2	3.7	2.5	3.1	3.2	2.6	3.0

Chart 32

87. Middle schools are deemed secondary by Ofsted and are inspected by secondary teams although half their pupils are in the primary phase. For this reason, middle school data is included in both charts.



	Overall effectiveness	Standards achieved	Attitudes, values and other personal	Quality of education provided	Quality of teaching	Curriculum	Leadership and management
Middle Schools (9 to 13)	3.2	3.7	2.5	3.1	3.2	2.6	3.0
2 tier Secondary Schools	2.8	3.3	2.8	2.8	2.8	3.0	3.0
3 tier Secondary Schools	3.0	3.1	2.6	2.9	3.0	2.1	3.0

Chart 33

88. There is little difference between the grades for overall effectiveness between the 2 and 3 tier systems.

89. The lowest average grades for standards achieved are found in middle schools when compared to either the primary or secondary phases.

90. Grades for attitudes, values and other personal qualities are similar across the 2 and 3 tier systems and there is little difference between the grades for the quality of education provided and the quality of teaching.

91. Curriculum provision was found to be very good and significantly better in 3 tier secondary schools but little difference was recorded between the 2 and 3 tier systems in the primary phase.

92. Leadership and management are judged to be consistently good across all types of school.

Suffolk Reading Test

93. It is not possible to replicate the value added work from 2002 (Annex 4 Internal paper to Director of Education) as the Reading Test changed significantly in 2004. Equivalent value added matches are not available. However, improved National Curriculum, Ofsted and Fischer Family Trust data is now available as reflected in the body of this report. The Reading Test has been used for many years to indicate potential performance and to help schools set future targets.

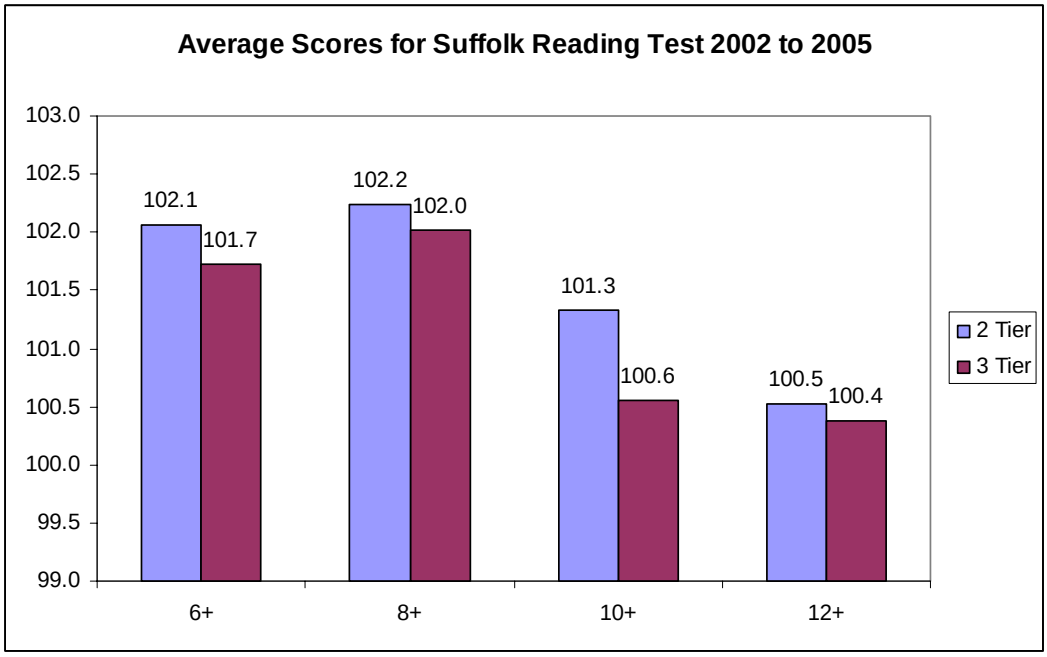


Chart 34

94. All learners in Suffolk take the Reading Test in Year 2 (age 6+), Year 4 (age 8+), Year 6 (age 10+) and Year 8 (age 12+). Differences between the two systems are small but the biggest difference can be seen at 10+ and this supports other evidence that the gap between the two systems opens up in Years 5 and 6.

95. The Reading Test, together with GCSE outcomes, highlighted a “dip” on transfer between schools in the mid 1990s and this evidence led to a review of transfer in 1996.

School size and performance

96. There is little evidence that school size in the primary phase is directly linked to attainment outcomes. In Suffolk, it is not possible to make direct comparisons between smaller schools (less than 120 pupils) and larger schools as the socioeconomic contexts are different. However, small schools generally perform well (Annex 19).

97. Spielhofer (2002) analysed the impact of school size on pupil outcomes at Key Stage 2 taking prior attainment and various contextual factors into account. No significant effects of school size were found for any of the outcomes measured (Key Stage 2 English, mathematics and science).

Transfer

98. The 1996 Suffolk investigation into what happens when pupils transfer to their next school at ages 9, 11 and 13 (Annex 6) was carried out in response to evidence that there was a dip in progress when children and young people moved schools. This investigation was reported to Education Committee (Annex 5).

99. Although Suffolk schools were good at the pastoral aspects of transfer, it was found that most were only partially successful in building on each learners prior attainment and in some schools progress was set back by a year or more.

100. As a result of this report work to improve continuity when transfers occur was given a high priority in the Suffolk Education Development Plan and schools received extensive support. This work led to recognition of Suffolk as a Beacon Council and is fully reported on the SLAMnet website. Our action to support transfer continues to the present day through a partnership with the Gatsby Trust.

101. Schools adopted many features which were known to support progression on transfer and a second Transfer Review, in 2001, (Annex 20) carried out five years later suggested that in schools where there was planned action to support transfer and significant collaboration between schools, there was an improvement in continuity. The most successful strategies involved teachers working in each others classrooms across schools.

102. At this time, the attainment and progress differences between the 2 and 3 tier systems were not considered significant enough to warrant the re-structuring of education in Suffolk, with all the negative effects that that would have on the learning of several cohorts of pupils. It was felt that these differences in progress could be overcome through effective transfer processes and the training of teachers to handle the continuity of learning issues.

103. This has proved difficult to sustain and despite considerable efforts from the local authority and from schools, the gap between the 2 and 3 tier systems has remained constant since 2002.

104. There is significant research evidence to suggest that the “hiatus in progress” when children and young people has an effect on their commitment to learning and progress. The DfES commissioned Galton, Gray and Rudduck (1999) (Annex 21) to produce a research brief and this study found that transfers between schools lead to dip in achievement and a decline in motivation in some subjects. This sustains the argument that two transfers create a greater strain on pupils and their achievement than one transfer.

105. There is little direct national research evidence on the effectiveness of middle schools (3 tier system) in comparison to middle years in primary and secondary schools (2 tier system) in relation to attainment so indirect evidence about points of transfer is important and should be taken into account

106. Evidence from the United States found that pupils in middle schools could be disadvantaged (Alspaugh 1998). This study compared test results in transfer between year 5 and 6 and 8 and 9. The study found that:

- Between years 5 and 6, pupils in the middle school system showed achievement losses in the tests compared to pupils in 2 tier systems.

- Between years 8 and 9, students in 2 and 3 tier systems experienced achievement losses. However, the students attending middle schools experienced a greater achievement loss in the transition to high school than did the students making the transition from elementary directly to high school.

- Schools with two transfers had higher dropout rates than schools with only one transfer. However, the increased drop out rates might have been related to achievement losses and the double transfer.

107. These findings need to be treated with caution, as the analysis did not control for the different socio-economic settings in which some schools operated and the influence this might have had on the test scores in these areas.

108. Although not directly related to the system of school organisation, other evidence from Ofsted and the DfES acknowledges difficulties in progression on transfer and supports the argument that fewer points of transfer will lead to improved progress for learners.

Other Local Authorities

109. Over the ten years between 1992 and 2002, a number of larger local authorities reorganised all their middle school provision. Only Northumberland and Bedfordshire have more middle schools than we have in Suffolk and both authorities are currently reviewing future provision. Pupil performance is a key factor for both councils but, as in Suffolk, it is not the only consideration.

110. The pattern of attainment in Bedfordshire is different to that found in Suffolk. Performance at Key Stage 1 (age 7) is above the national average but at Key Stage 4 (age 16) GCSE outcomes are significantly below the national average Although performance is broadly in line with national averages at age 11 and 14, attainment is generally below that found in similar local authorities. Bedfordshire County Council is currently considering whether a change in school organisation which would reduce the number of transfers involved would be likely to support raising attainment for children and young people.

111. In Northumberland, the review also considered pupil attainment. Results at Key Stage 1 are in the top 5% of the country but other Key Stages and for A Level are in the average range when compared to

national data. There is concern that pupils do not realise their full potential as they progress through the system. This concern has been reinforced by Ofsted value added data.

112. 5 local authorities changed significant numbers of schools from 3 to 2 tier in this period. Doncaster (33), Sheffield (31), Buckinghamshire (60), Hampshire (73) and Warwickshire (55). These authorities generally appear to be making improvements more quickly than Suffolk at Key Stage 2 (total % pupils gaining level 4+ in English, mathematics and science) and at GCSE level (% 5+ A* to C grades).

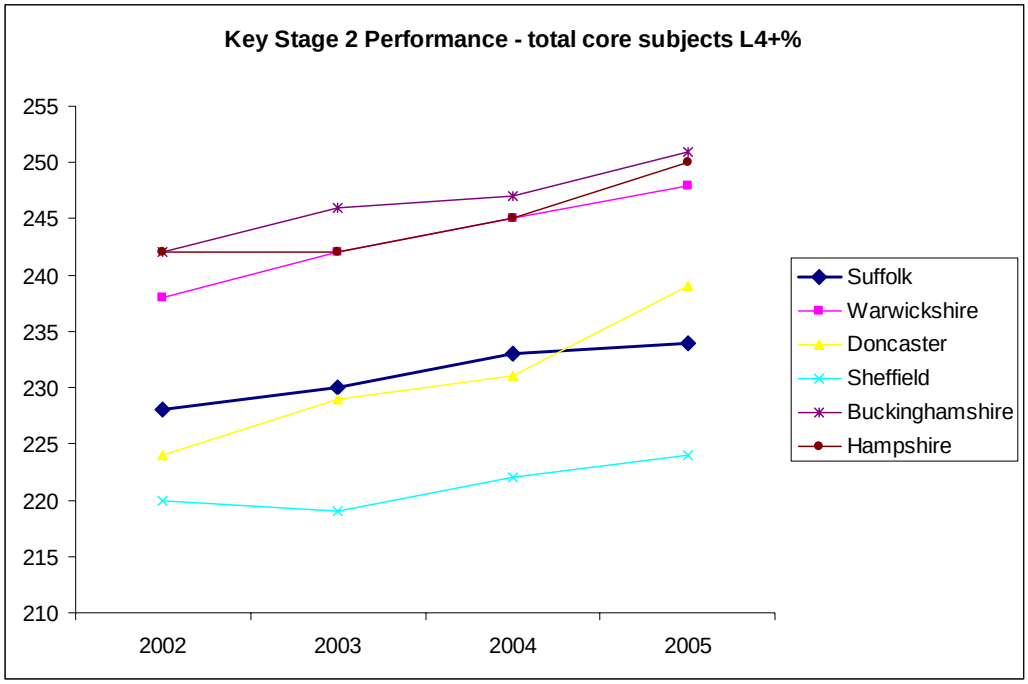


Chart 35

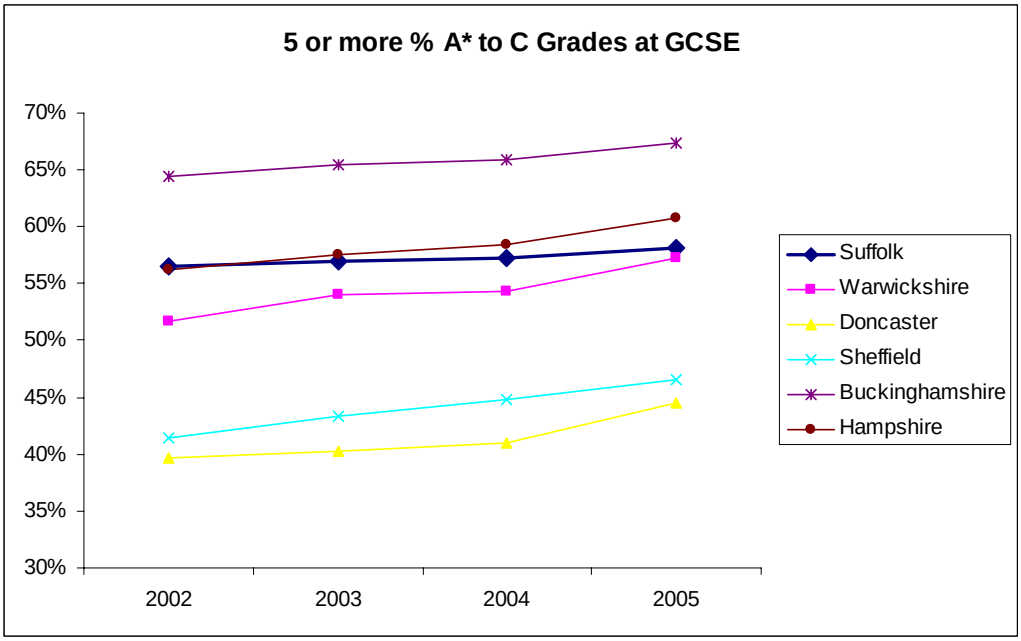


Chart 36

SECTION 5: Summary of the main issues arising from the evidence

113. This report should be read in the context of many positive outcomes for children and young people. Attainment overall in Suffolk is good and compares well nationally. However, there are concerns at Key Stage 2 and in the Post 16 phase.

114. The socio-economic make up of the 2 and 3 tier systems in Suffolk are very similar in nature and therefore direct comparisons are valid. 55% of learners are in the 3 tier system and 45% in 2 tier schools.

115. Early outcomes in compulsory schooling (age 5 to 8) are similar in both systems and suggest that learners start with the same prior attainment.

116. A significant performance gap across all core subjects opens up by the end of Key Stage 2 (age 11). The 2 tier system outperforms the 3 tier system in all aspects of English, mathematics and science at the end of the primary phase.

117. The gap between the 2 and 3 tier systems is reduced in the secondary phase. At Key Stage 3 (age 14) there is still a significant gap for English and this affects Key Stage 4 performance in qualifications that rely on effective literacy skills.

118. At Key Stage 4 (age 16) there are significant differences for higher performing students attaining A* to C grades. The 2 tier system outperforms the 3 tier system at A* to C grades in all subjects. Performance considered across the whole ability range is similar in the 2 systems.

119. In the Post 16 phase the 2 tier system does better in the total point score per student by the equivalent of 2 grades. This is significant for entry to higher education.

120. Value added measures from Ofsted and the Fischer Family Trust support this evidence and suggest that children in the 3 tier system make significantly less progress in Key Stage 2 (from age 7 to 11).

121. At Key Stage 3 (age 11 to 14) value added progress in the 3 tier system is good and is better than for young people in 2 tier schools. However, when measured from 7 to 14 (Key Stage 1 to 3) the 2 tier system is significantly better. The difference equates to about a term, just over 2.5 months progress overall.

122. Children in the 3 tier system in Suffolk perform better than those in other 3 tier schools nationally based on progress from Key Stage 1 (age 7) to Key Stage 3 (age 13). However progress in Key Stage 2 (age 7 to11) is not as good as in other 3 tier schools.

123. Children and young people within the 3 tier system perform less well at Key Stage 2 and, although they make good progress in the secondary phase, they never completely make up the lost ground.

124. There is no doubt that if Key Stage 2 standards were raised and good value added progress in the secondary phase was maintained, Suffolk 3 tier schools would be performing significantly above the national average and in line with our aspirations as a local authority.

125. Ofsted inspection evidence is similar for schools in the 2 and 3 tier systems but standards achieved by middle schools are graded lower than those found in other schools.

126. There is little difference between the standards achieved by different socio-economic groups in the two systems. The three tier system appears to do better for learners from “hard pressed” families.

127. There is substantial evidence to suggest that progress “dips” when learners transfer from one school to another. Fewer points of transfer result in improved progress and higher standards of attainment.

128. An increasing number of local authorities with 3 tier organisation and infant / junior schools have analysed their performance and concluded that removing a transfer point will improve outcomes and life chances for children and young people. There is little evidence available yet to show the impact of these changes.

SECTION 6: Local Authority Intervention

129. Improving attainment at Key Stage 2 and in sixth forms has been a key focus of work in Suffolk under the Education Development Plan (1999 to 2004) and more recently the Single Education Plan (2004 to 2009).

130. The authority provides a comprehensive range of data to help schools target school development plans effectively and evaluate the impact of their work. This data is also used to identify underperforming schools and subject areas so that appropriate challenge and support can be put in place. In the few instances where performance is significantly below expected levels, the authority follows its procedures for schools of concern.

Key Stage 2

A range of strategies have been put in place through local authority including:

131. Extended support for underperforming schools and subjects in both the 2 and 3 tier systems is provided through the National Primary Strategy and link advisers. Where schools are identified to be of concern, more intensive interventions are put in place with an appropriate action plan and external support.

132. Where specific needs are identified, targeted training is provided through the National Primary Strategy and the Advisory Service CPD programme. These programmes are evaluated each year and the majority show an impact on attainment.

133. Development work to support transfer between Suffolk schools has been recognised nationally and there is evidence that, where clusters of schools have made this a priority, it has had an impact. The Primary Strategy team built on this work through cluster activity focussed on continuity of learning. For example in developing approaches to calculation and writing. Joint teacher work across schools with a focus on children's work is the most effective strategy but this is proving hard to sustain.

134. Through regular visits to schools, link advisers work with senior leadership teams to identify strengths and weaknesses in provision. Where Key Stage 2 attainment is a weakness it is identified as a key issue in school development plans with high priority.

135. In 2003, a small project team compared practice in Year 5 and 6 in middle schools with that found in similar year groups in 5 to 11 primary schools. Effective practice in both systems was identified and shared with headteachers. This included reflections on curriculum organisation and planning, subject leadership, use of attainment data to track progress, the role of classroom assistants and reinforcement of literacy and numeracy across the curriculum. A follow up study focussing on Year 3 and 4 in first schools (age 5 to 9) and 5 to 11 primary schools found little difference between the teaching methodology, organisation and practice.

136. The 2003 study suggested that there was a difference between class teaching approaches found more commonly in 5 to 11 primary schools and subject specialist organisation found in middle schools. A 2004 research project was set up to compare the relative merits of subject specialist and whole class teaching in Year 5 within middle schools. It proved difficult to find middle schools with a class teaching organisation but the study suggested areas of effective practice. This was shared with headteachers and an increasing number are considering a move to pupils being taught by the same teacher for a number of subjects.

137. The Best Value Review of School Improvement (2003) was used to look at the work of school improvement teams elsewhere in the country. Field visits to Worcestershire and Northumberland (both authorities with a 3 tier system) resulted in changes of approach for English and mathematics. Recommendations included a move to focus advisory support on local groups of schools (pyramids), development of primary and secondary support teams, improved use of classroom practitioners and changes to practice for monitoring our work with schools and evaluating impact.

138. A Key Stage 2 Improvement Group of headteachers was set up in 2004 with the task of steering and developing work to address underperformance in the 3 tier system.

139. Every effort is made to “join up” Primary and Secondary Strategy work with middle schools so that it is presented coherently.

140. Where possible support for 25 Primary Networks by link adviser and National Strategy consultants has encouraged work focussed on developing continuity in learning across pyramids – in particular at Key Stage 2.

141. Advice and support for joint marking by Year 4 and Year 5 teachers of work has been provided. A number of pyramids have used this approach successfully to share understanding of the levels that pupils are working at.

142. The Primary Strategy Leadership Programme has helped primary and middle schools to identify areas in need of improvement and to develop the capacity to address them.

143. The authority has provided a range of support and training for classroom assistants focused on literacy and numeracy across schools in Key Stage 2. This will be enhanced in 2006 and targeted on schools where mathematics results are low.

144. We have been encouraged by the DfES to set LPSA targets for Key Stage 2 performance within the 3 tier system. A 3 year project plan has been put in place to track the performance of individual children from Year 4 in 2005 to Year 6 in 2008. Where children are “off track” teachers will be given appropriate support so that they can help the children catch up.

145. A recent Governing Body Report focussing on attainment in 2005 has highlighted Key Stage 2 attainment as a priority area for improvement.

Post 16

146. The Suffolk 14-19 Strategy includes a significant range of actions focused at raising attainment in school sixth forms, in particular in section three of the strategy.

147. Following the outcome of the 14-19 Area Wide Inspection there has been an extensive campaign to communicate the current challenges regarding post-16 attainment in Suffolk to all providers. Historically this sector had received less attention than the statutory school years and many education professionals were unaware of the pressing need to focus upon and improve performance.

148. Awareness raising strategies were combined with improved information regarding post-16 attainment at institution, locality and county level to ensure that all colleagues involved in post-16 education were aware of current performance and understood priorities for improvement work.

149. A team of Post 16 Improvement Advisers was appointed in January 2005 to lead the work in supporting post-16 improvement in schools, colleges and training providers. The main areas of their work have been:

- Establishing a post –16 review and self evaluation process for all school sixth forms linked to target setting and monitoring of achievement at subject level.
- Offering specific targeted support for the weakest performing sixth forms (one third of sixth forms in Suffolk).
- Establishing an individual post-16 datasheet for each post-16 provider with details regarding subject level performance.
- Training and support for middle managers and personal tutors working with post-16 students.
- Support for the introduction of new sixth form courses at foundation and intermediate level to increase breadth and choice.

150. Work is also in progress to enhance information and guidance for young people regarding progression options. Further work currently being planned includes:

- A programme of mentoring for subject leaders and heads of sixth form.
- Introduction of a new “Flight Paths” Tool to enhance individual student performance monitoring for all schools.

151. It is expected that these strategies will continue to have a positive impact on the attainment of young people in schools sixth forms where performance is already close to the Suffolk average, however in areas of the county with particularly poor performance it is likely that a more

significant structural solution will be required to achieve the substantial increases in attainment sought. This issue will be explored more fully in the 14-19 presentation to the Policy Development Panel (PDP) on March 29th 2006.

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for an electronic copy of this paper and associated annexes
http://www.suffolk.gov.uk/EducationAndLearning/SchoolOrganisationReview