



Making Sense of School Performance Data

The Governors' Role in Supporting and Challenging Schools



Dear Governor

I am pleased to support this new training booklet on 'Making Sense of School Performance Data' in my role as the current Chairman of the Learn Together Partnership. The Learn Together Partnership is a collaboration of Halton, Knowsley, Liverpool, St Helens, Sefton, Warrington and Wirral's Children and Young Peoples Services. The authorities have a long history of working closely together to meet the challenge of high quality provision within the emerging children's services agenda.

This project is the result of the collaborative work of all of our seven partner local authorities and has been led by their respective governor support and training sections. The work has also been supported by the Merseyside Improvement and Efficiency Partnership through our Narrowing the Gap programme.

Our aim was to provide a useful resource to support school governors in fulfilling their role as a critical friend allowing them to provide both effective support and challenge.

An important section is the identification of the key questions that should be asked in monitoring the standards and progress of different groups of students including those likely to be more vulnerable.

We want this to be very much a working document and to be used by all of our governing bodies to review their statutory role in the setting of school targets and the monitoring of student performance.

Yours sincerely



Damian Allen

Chair of the Learn Together Partnership

**Executive Director of
Children and Family Services in Knowsley**

Our thanks go to

The Learn Together Partnership

The Merseyside Improvement and Efficiency Partnership

The Governor Training and Support Services in Halton, Knowsley,
Liverpool, Sefton, St Helens, Warrington and Wirral

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What is laid down, ordered,
factual is never enough to
embrace the whole truth: life
spills over the rim of every cup.

(Boris Pasternak 1890-1960)

Section 1

The Governors' Role

The quote from Boris Pasternak aptly summarises the complexity of trying to measure pupil, student and school performance.

Governors need to be satisfied that their schools are reaching high enough standards and exceeding national thresholds and that this demonstrates at least satisfactory and preferably better progress for all groups of pupils, given their starting points when they joined school.

Data alone is simply not enough to make the judgement but needs to be balanced by an understanding of the wider issues facing the school. In addition, an understanding of the quality of the school's provision including teaching and learning, the curriculum and care support and guidance.

Pupil performance information needs to be considered:

- in relation to the context of the school
- in the context of the national demands placed on schools

For example, the current national expectations are that:

- pupils should demonstrate good progress
- but also
- reach or exceed nationally defined thresholds, particularly in literacy and numeracy

This is to ensure pupils can access suitable employment, play an active part as citizens and crucially enjoy life to the full, drawing on and engaging in all it can offer.

In order to support and challenge effectively governors need to ask three key questions:

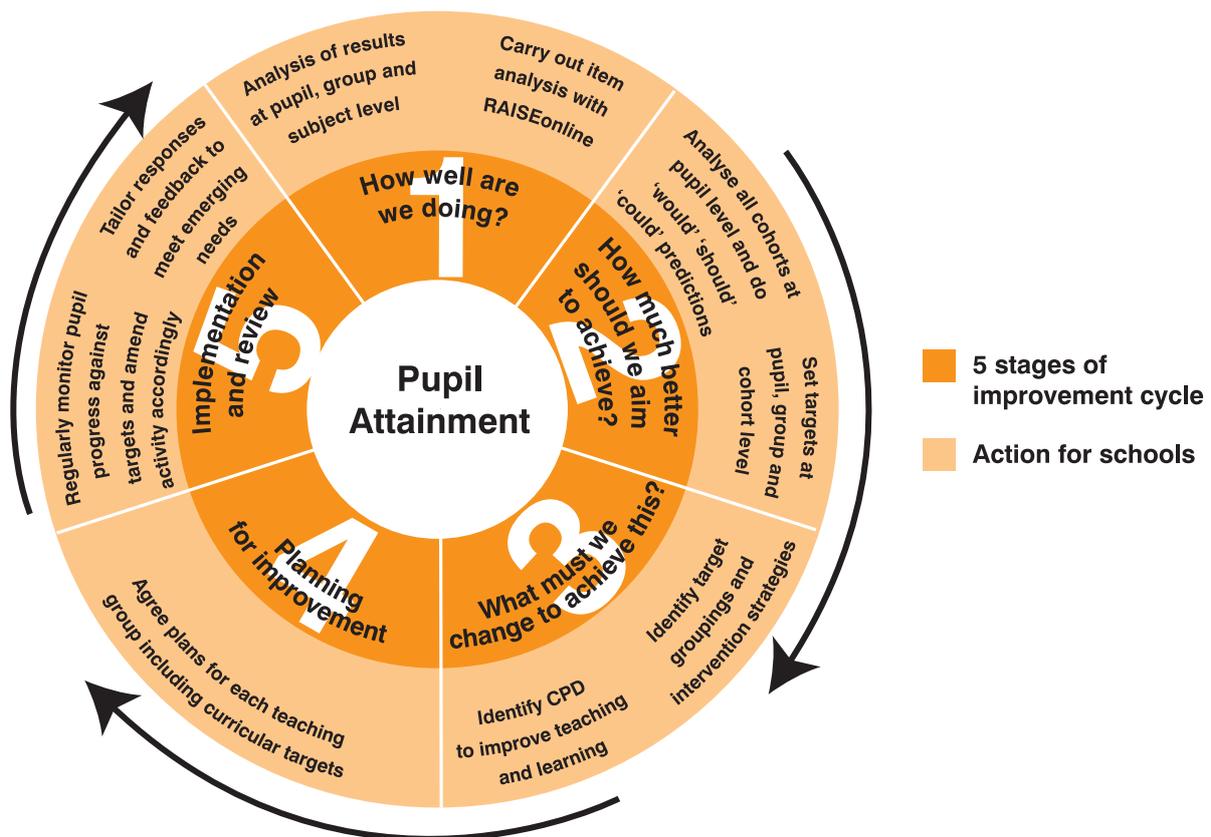
- 1 What is the context of our school and how does this compare to other schools?
- 2 What do our pupils attain in each year group and in national tests?
- 3 What progress do our pupils make given their starting points?

The school improvement cycle and target setting

Extracts from

www.standards.dfes.gov.uk/ts/publications/list/Supportingschoolselfimprovement

Looking at schools' performance data is often the starting point in the school improvement cycle, which typically looks like this:



1. How well are we doing?

Involves assembling and analysing evidence of:

- **pupil performance** - the most important indicator and
- **contributory factors** - most notably teaching, leadership and management

Knowledge about current achievement is a necessary foundation if schools are to answer the question posed at the second stage of the cycle.

2. How much better should we aim to achieve and how do we compare with similar schools?

Information on pupil performance in other similar schools, particularly those schools achieving the best results,

provides a benchmark against which schools can:

- examine the standards achieved by their own pupils
- assess what more can be achieved and
- explore why and how others are doing better

3. What must we change to achieve this?

This is where schools determine their priorities for the year ahead and set themselves realistic and challenging targets for improvement. It is important for schools to involve all staff in the target-setting process. It helps them to own the targets and to accept responsibility for achieving them. It is essential that schools' development plans set out the targeted action needed to improve the quality of learning and teaching, identify Continued Professional Development (CPD) needs and target intervention strategies for specific pupils or groups.

4. Planning for improvement and what actions will we take?

The closer development plans get to the work of children in classrooms, the greater the impact on achievement. These must be agreed for each teaching group including the curricular targets.

5. Implementation and review - Taking action and reviewing progress

If pupil achievement is to rise, implementation of the plan needs to influence classroom practice and improve the quality of teaching and learning. But schools also need to know whether implementation of their

plans is having the desired effect. To this end, it is vital that schools:

- monitor the action being taken against their plans and
- evaluate the impact of that action on pupil progress and achievement

The evidence gathered in the final stage of the cycle allows schools to ensure the plan is delivering the outcomes planned for, and to make any necessary adjustments. It also provides a valuable basis for beginning the next round of the cycle.



A note on setting targets

National comparative data is available through RAISEonline and Fischer Family Trust (FFT) which provide details of the range of outcomes pupils have achieved so far given their various starting points and circumstances.

These figures are drawn from comparing what has happened for similar pupils in past examinations and varies year on year as overall results have improved.

Schools need to be cautious in using these systems simplistically as predictors of what will be achieved or for setting targets which may act as a ceiling to pupil performance.

The reality is that pupils with similar prior attainment and circumstances reach a range of outcomes because of a number of factors including:

- the quality of teaching and learning
- the curriculum
- care and guidance provided by the school
- the aspiration challenge and support from school leaders and governors
- support from families
- the pupils' resilience and attitude to learning that is 'the life that spills over every cup'

The challenge facing your school is to attempt to remove as many barriers to learning as possible to maximise the outcomes for every pupil.

Attainment - Standards reached in national testing and demonstrated by each year group

The outcomes from the national tests, taken at the end of each Key Stage, are the key indicators of the attainment of your pupils.

However, attainment should also be measured in each year group so that you are able to check if pupils are making good progress and are on track to reach the targets set for the end of the key stage.

Schools need to be realistic about this judgement. For example, a selective school is likely to claim that standards and attainment are above average. A special school for pupils with severe learning difficulties is likely to state standards and pupils' attainment are exceptionally low.

These are only positional statements not judgements about the quality of provision, learning and progress made within the institution.

Evidence of attainment can be gained from:

- RAISEonline for current and previous years
- Fischer Family Trust data
- Ofsted report of year school inspection and any subject visits
- School Improvement Partner or National Challenge Adviser reports

- The Self Evaluation Form (SEF) and what it says about the latest standards in the school
- The school's records and data concerning pupils' current work, teacher assessed levels, the work the pupils have done in the recent past and the knowledge, skills and understanding that they are currently able to demonstrate
- Outcomes from internal benchmarked tests e.g. optional Standards and Attainment Targets (SATs) or past GCSE papers

Progress and Value added measures

Evaluating attainment is only part of the picture. Governors also need to ask if the pupils' attainment represents good progress given their starting points i.e. their levels when they joined the school.

Given that schools have different intakes of pupils, in order to make fair comparisons, results are compared to pupils in similar circumstances to balance out any advantage, or disadvantage inherent in the pupils' prior experiences.

This is known as measuring the Contextual Value Added

(CVA) made by each pupil. This individual pupil data is collated to show the value added by the school alongside the achievement and standards reached in examinations or tests.

While this enables a fairer comparison to be made between pupils and schools, there is also a drive to ensure certain thresholds are reached, irrespective of pupils' prior experiences or circumstances.

For example, the 'National Challenge' is an initiative aimed at ensuring all schools reach at least 30% 5A*-C (including

English and Maths) by 2011 irrespective of what previous performance might indicate is the likely outcome in this measure. In primary schools, pupils are expected to make two levels of progress between KS1 and the end of KS2.

Governors also need to consider if the attainment and progress made by the pupils represents good overall achievement as this is a key judgement made by the school in the SEF and Ofsted inspections.



How is the Contextual Value Added (CVA) calculated?

RAISEonline gives a number of tables which provide the CVA for:

- the whole school
- groups of pupils and
- individual pupils

Briefly the CVA is a measure of the 'distance travelled' between the end of each key stage, adjusted for the context of each pupil.

For example, the 'average pupil' leaves primary school with Level 4 in English, Maths and Science. By the time they have reached the end of Year 11, typically they will achieve GCSE results around grade C.

Because there has been a vast array of data collected over a number of years it is possible to calculate how far pupils in different contexts typically travel.

The CVA calculation is very sophisticated and takes into account:

- prior attainment in English and Mathematics
- ethnicity
- gender
- age within year group
- special educational needs
- eligibility for free school meals
- degree of deprivation in the postcode area where a pupil lives
- first language other than English
- children in care
- mobility

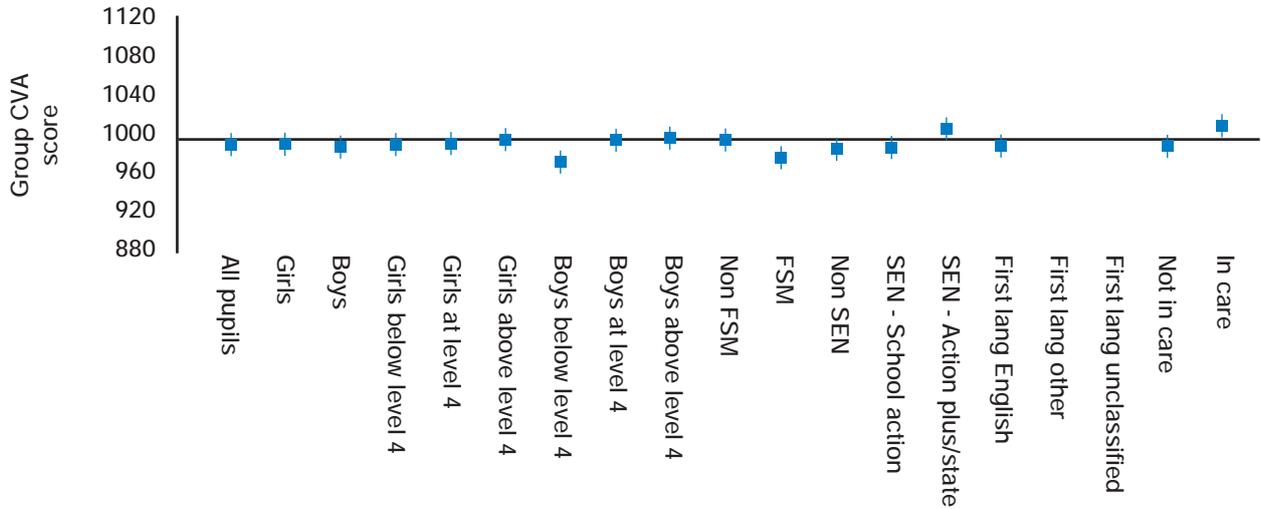
For example, pupils with higher SATs results on entry travel faster than those with low scores, girls tend to travel further than boys. Hence in both these cases, if the school has a high proportion of

girls at Level 5 on entry they will have to achieve much higher GCSE outcomes to have the same value added as a school with a high proportion of boys with low attainment on entry.

CVA is presented as a block with a line through it rather than a point on the graph because in reality pupils in similar circumstances attain a range of scores. The line statistically shows the range within which the CVA is most likely to fall i.e. at least a 95% chance. The smaller the number of pupils involved then the wider this range becomes.

If the whole range is above the average line then you can be confident that the pupils are doing better than expected and vice versa. If the line crosses the average then the school's value added is in line with what is expected.

School Contextual value added for groups within the school 2008



This is a typical graph from RAISEonline. It shows most groups make broadly average progress apart from 'boys who started at school with below L4' and the 'pupils in receipt of Free School Meals (FSM)'. Both these groups made below average progress.

The school should be able to explain why this happened and what they are doing to improve outcomes for these pupils in the current year groups.

However, as suggested in the Ofsted booklet 'Using Data', it is critical to realise that CVA should not be used to predict the performance of individuals. It is solely based on the past performance of pupils with similar characteristics. Mis-using the data to predict future performance could depress expectations of groups of pupils that have performed less well in previous years.

“When setting targets, schools should strive to set equally challenging aspirations for all pupils: and not assume that pupils from particular groups will perform better or less well than others.”

Summary

As governors you should be working with the school to ensure they are able to evidence the following:

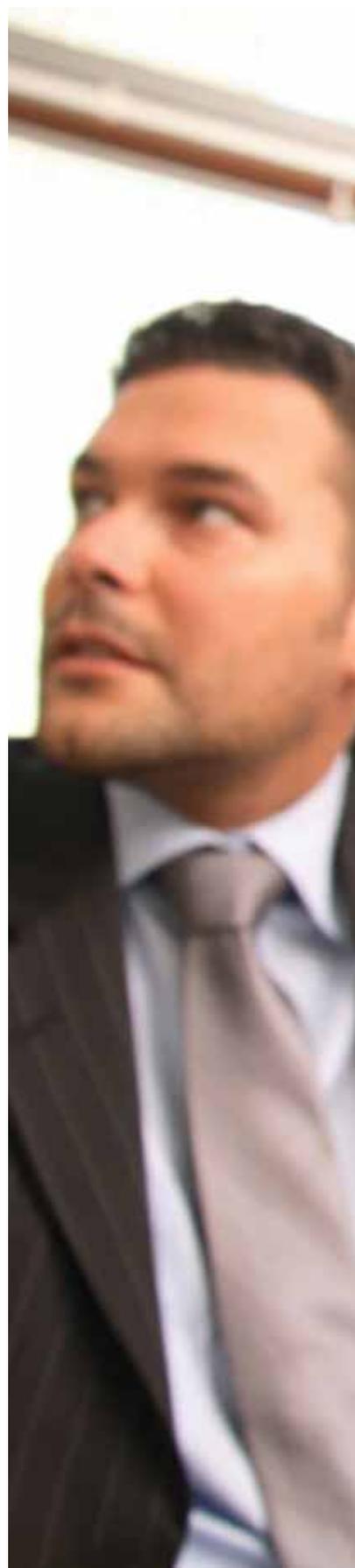
Attainment

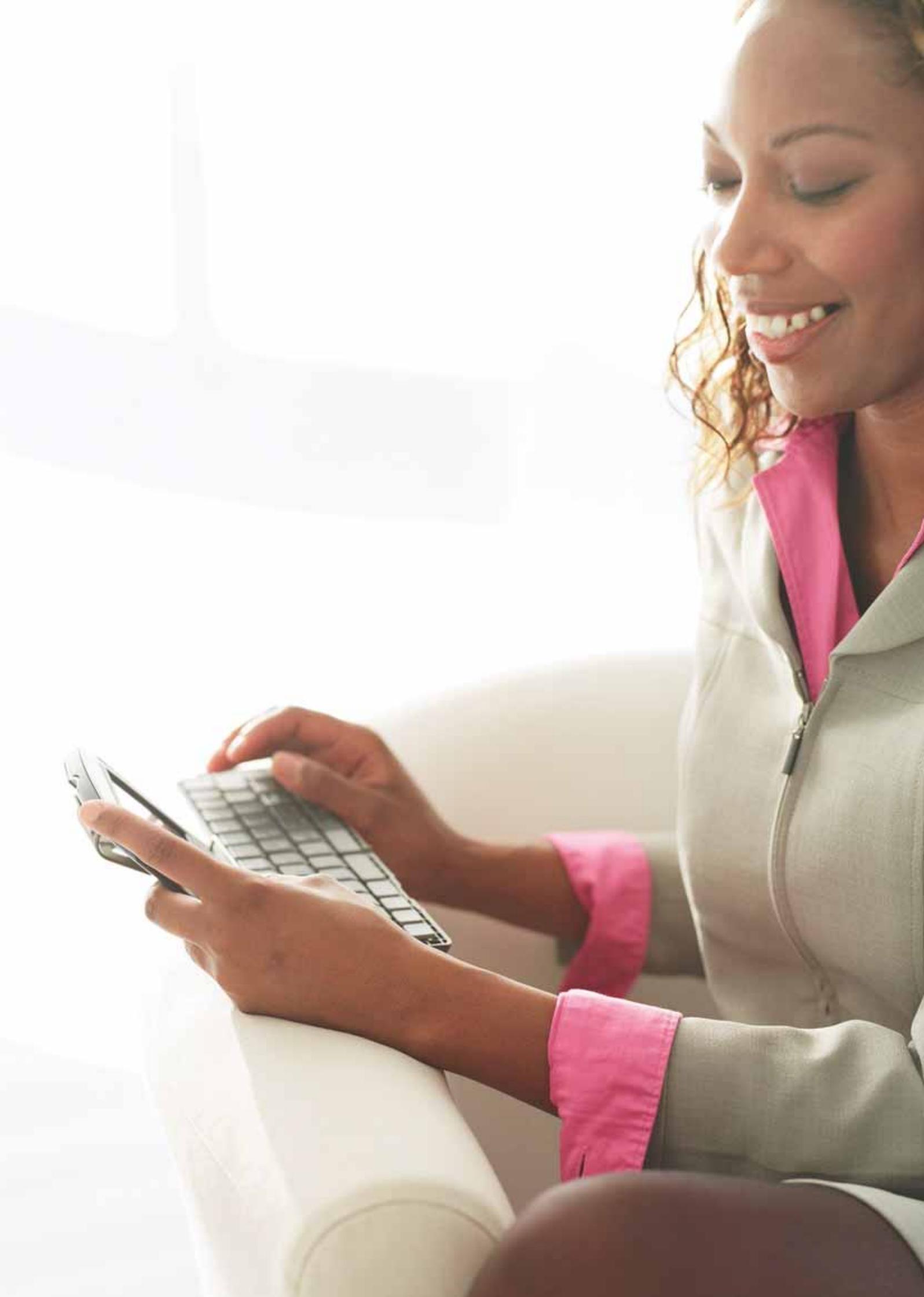
- What is the overall attainment reached by the end of each key stage?
- What are the attainment and standards reached in each year groups, class and subjects and for individual pupils compared to national average?
- How does the school's current performance compare with its previous performance? What is the trend in results over the last three years?
- Have some subjects / year groups shown a marked improvement or decline? If so, why and what strategies are in place to sustain and share good practice and bring about improvements?
- Are some individuals and groups of pupils doing better than others? If so, why and what strategies are in place to sustain and share good practice and bring about improvements?

Progress and CVA

- Are pupils making better or worse than expected rates of progress by the end of their time in school and in the intervening years?
- If so, why and what strategies are in place to sustain and share good practice and bring about improvements?
- Are some individuals and groups of pupils and some subjects making better progress than others? (e.g. looked after children, boys, girls, ethnic groups, each group of SEN pupils, Gifted and Talented pupils)
- If so, why and what strategies are in place to sustain and share good practice and bring about improvements?

Individual groups include boys, girls, looked after children, ethnic groups, pupils with learning difficulties and or disabilities including each of the Special Educational Needs (SEN) categories (school action, action plus and statements), Gifted and Talented pupils.





Section 2

Finding the answers

Where do we find comparative data?

In order to answer the questions on page 9, the school needs to keep detailed tracking systems that measure:

- where pupils are when they arrive
 - where they are at key points during each year
- as well as
- looking at exam results at the end of each key stage

Schools can then measure the progress of individuals, groups and cohorts and intervene quickly when this progress is inadequate.

To support these judgements, the end of key stage assessment data from KS1 onwards are available from Ofsted in the RAISEonline (RoL) report.

Comparative information is also made available through Fischer Family Trust. Local Authorities will often produce some summary data. Based on this information schools can compare themselves with local and national results.

These reports are published or updated at different points in the autumn term or early in the

spring term depending on the availability of validated data from the examination boards/ organisations.

Schools need to establish systems to predict likely outcomes in the RoL/FFT reports so they can address any expected weaknesses from the outset and not wait until these reports are published.

RAISEonline (RoL)

RoL is an interactive website that contains information about pupils in each school. As well as detailed individual reports, it is possible to produce a summary report. This summary is always made available to inspectors prior to the Ofsted inspection and is a key document for the inspection team.

The summary report has three main sections:

- 1 A basic summary of the context of the school including size, gender balance, minority ethnic population data, SEN and FSM data, attendance data and some other socio economic data.

- 2 Progress (CVA) data and judgements for the headline figures, groups of pupils and individual students including CVA data on English and Maths.

- 3 Attainment information that compares the last examination/test results with national averages.

NOTE In sections 2 and 3 judgements are colour coded.

- **Green if they are significantly above average** or
- **Blue if they are significantly below average.**

RAISEonline for each school is accessed through the following website:

www.raiseonline.org

The site is password protected for each school but does have freely available links to support and guidance materials. Once into the site a full summary report can be printed out for the current year and previous years. There are also interactive sections whereby a school can explore the standards reached and the value added for different subjects and different subgroups of pupils. **RoL can also be used to predict targets and possible outcomes for similar pupils or groups.**



Fischer Family Trust (FFT)

This charitable organisation produces valuable information which benchmarks standards and progress measures for school. Details on these reports are available at:

<http://www.fischertrust.org/>

FFT provide a number of values called Type A, Type B and Type D to help schools estimate what their students might achieve. These are based on considering what students have attained in past examinations.

- **Type A:** based on prior attainment (including marks where available, subject differences and teacher assessments), gender and month of birth
- **Type B:** as Type A, but adjusted for the school's context including FSM and geodemographic factors
- **Type D:** as Type B, but adjusted for the progress made by students in schools at the 25th percentile for value added (i.e. the top quarter of schools with similar contexts)

The FFT 'D' value is often suggested as the starting point for setting targets as it provides a level of challenge and aspiration based on the schools context. However, for some schools in challenging contexts, the FFT 'D' value may not be sufficient to raise the school above the expected national thresholds and the context may act as a limiting factor to the target set.

The key is to use a range of support material to set individual targets and to check that the overall outcomes in terms of national threshold and the school's aspirations are reached or exceeded.

'FFT Live' (via website) provides a number of ways of looking at students' possible outcomes given their prior attainment such as Key Stage 2 scores. Schools are now able to see, for each student, the range of grades attained by those with the same starting points.

For example students with a particular set of KS2 levels may have achieved the following profile for 5 A*-C including English and Maths at GCSE.

G	F	E	D	C	B	A	A*
1%	2%	10%	16%	35%	20%	12%	4%

Looking at these tables, available for each student in the school, governors might wish to ask:

- Does the school set a target for this student at a grade C as this is the majority figure on past performance?
- Or does the school set a higher expectation for this student as the figures show from past performance some students achieved grade B (20%) or even a grade A (12%)?



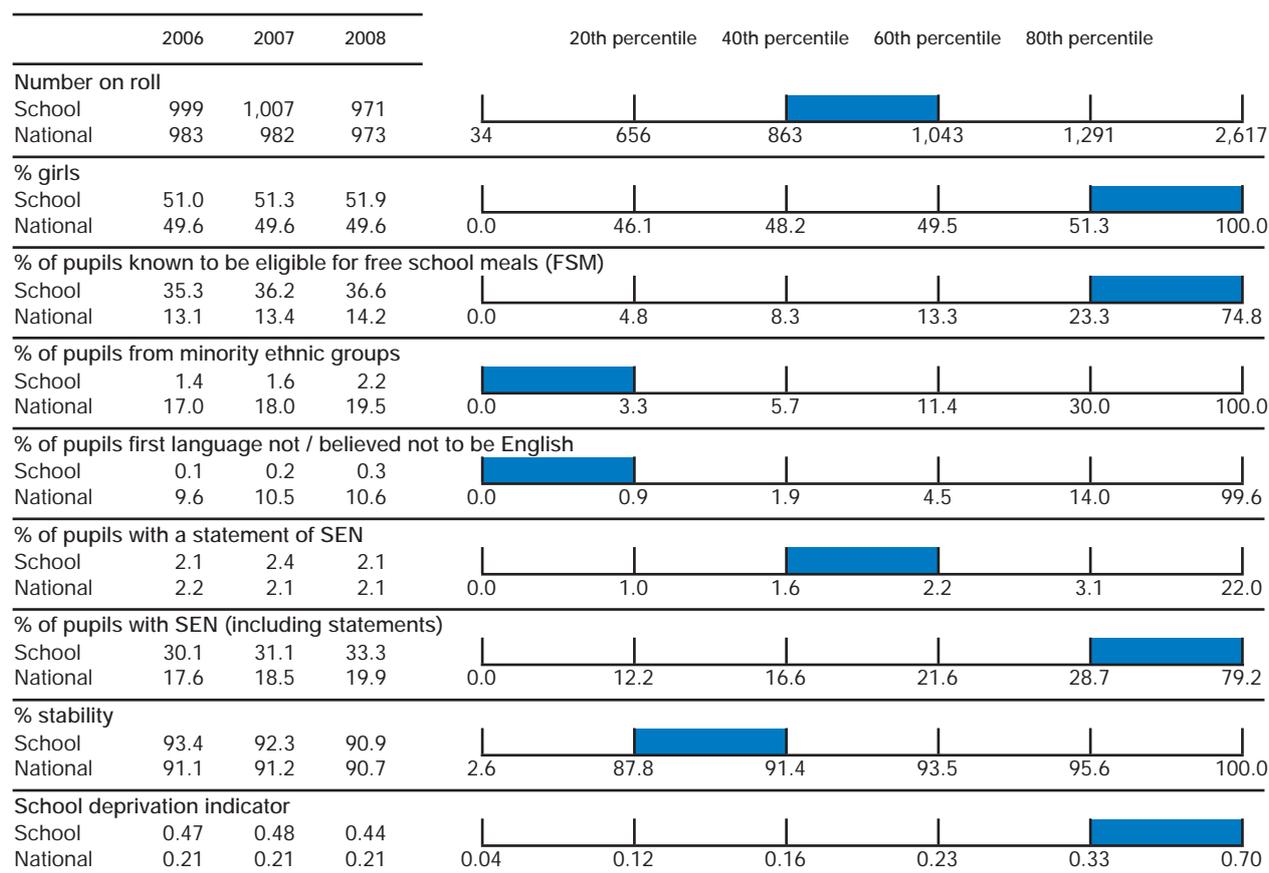
Section 3

Extracts from a Secondary School RAISEonline (RoL) report

Key Question:

What is the context of our school and how does this compare to other schools?

a. School profile



(1) Absence indicators for maintained mainstream schools are now available as a separate report

(2) The formula for calculating % of pupils first language not/believed not to be English has been changed in 2008 to exclude pupils whose first language was not recorded

Each of the five bands in each row cover 20% of the total number of secondary schools. This gives a picture of where your school fits compared to other schools.

The table shows this is an average sized school with some higher than average levels of deprivation shown by the socio-economic indicators e.g. high FSM, high SEN and high deprivation indicators.

It is important to look at the actual numbers as well as the band to see if you are close to a boundary.

b. Attainment on Entry

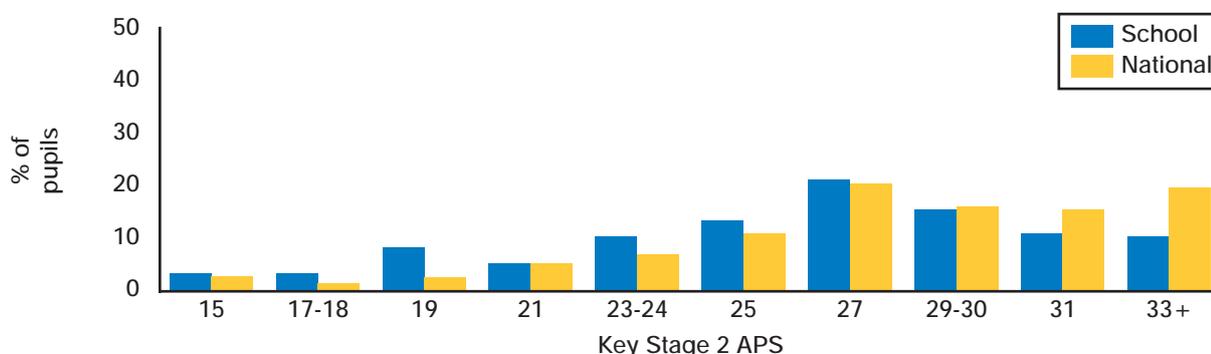
Average points score at KS2

NC Year start Sept 2007	School	National	Difference	% Coverage
Year 9	26.2	27.7	-1.5	98
Year 8	25.3	27.9	-2.6	98
Year 7	24.6	28.0	-3.3	99

This example shows that each year group has a very different profile on entry. Consequently, work needs to be targeted differently for each year group. Year 7 is just over half a level below average. (See note on APS below)

Graphs are also given for each year group which show more details of the range of pupils attainment on entry.

This shows very few Level 5 pupils and high numbers of pupils with well below average attainment on entry.



National Curriculum Levels and Average Point Scores (APS)

The National Curriculum content in each subject is broken down into a number of levels. (Levels 1 to 8). The "average child" takes approximately two years to cover the subject content for each level.

In order to measure progress between terms, years and key stages more finely, National Curriculum Levels are expressed as points.

Points for each level are calculated by multiplying the level by six and then adding three.

Points = Level \times 6 + 3

Level 3 = $3 \times 6 + 3 = 21$ points. Level 4 = $4 \times 6 + 3 = 27$ points and so on.

The 3 is added to avoid using negative numbers for pupils working below Level 1

There are 6 points between each level. Each level is approximately two years work, that is 6 terms so each point could be considered as one term's progress.

The school needs to use the information in these tables and graphs to identify the differing profiles and subsequent needs of each year group.

Also, as the APS is based on an average across all three subjects, the school needs to find out the individual subject point scores to identify what specific support is needed for Literacy and Numeracy.

In the table above, the APS on entry for Year 7 is -3.3 points below the national average. That is roughly half a level or three terms (one year) behind the average.

However the profile graph shows there is the full range of attainment and the curriculum needs to be organised to meet the needs of all these pupils not just based on the school's average.



c. Attendance

Chart 1.8

Overall absence levels compared to the national average for secondary and other schools with the same level of FSM eligibility in 2008

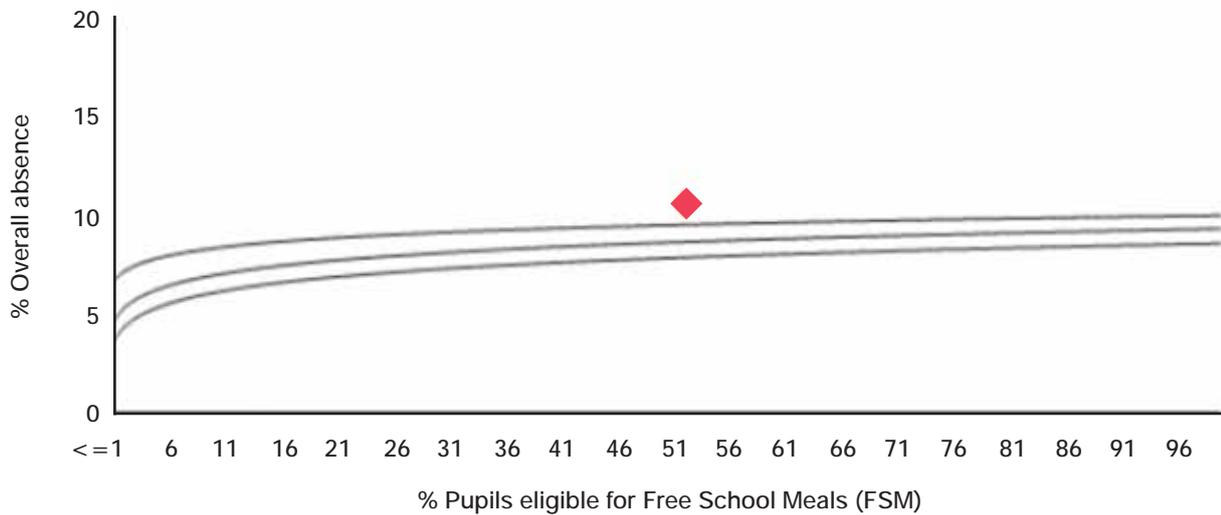
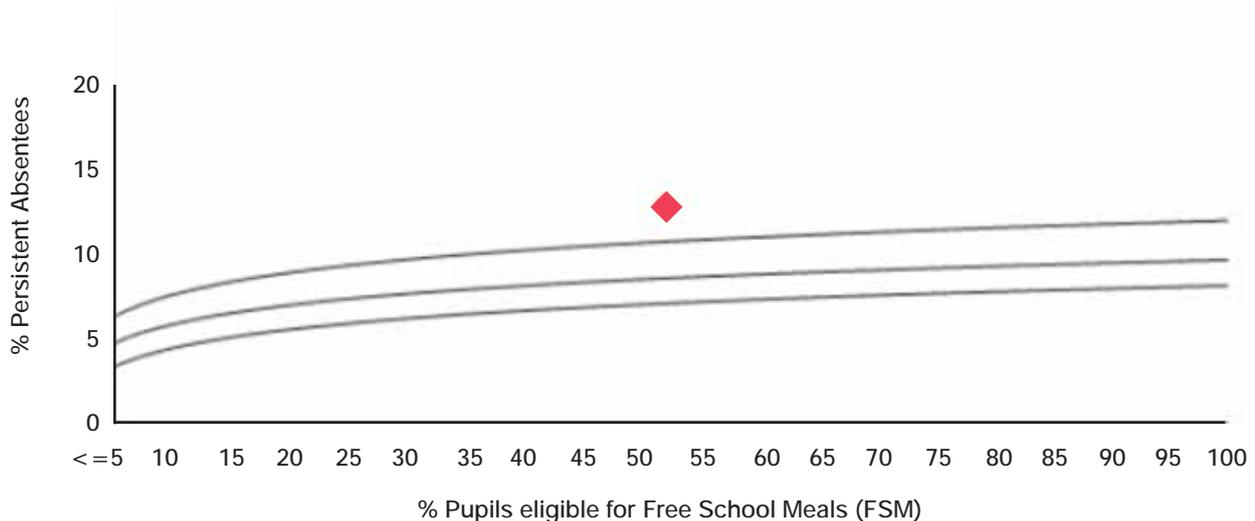


Chart 1.9

Persistent absentee levels compared to the national average for secondary and other schools with the same level of FSM eligibility in 2008



These charts show the attendance patterns for schools based on the Free School Meals (FSM) figures for all schools nationally. The middle line is the average for each FSM band and the upper and lower lines are the top and bottom quartiles. The preferred position is on or below the middle line.

In this case the school has relatively low overall attendance i.e higher than average absence figures and a high Persistent Absence (PA) rate. These are pupils who have a high number of days of absence each year. There are national targets set to reduce PA.

Attainment Key Question:

What standards are reached by our pupils and what do our pupils attain?



This information is included in the final sections of the RoL report after the tables on progress considered in the next section.

There are a number of tables and charts covering the major threshold figures:

- Capped average point score (best 8 subjects only)
- Average total point score
- Average point score English
- Average point score Maths
- Percentage 5 or more A*-C
- Percentage 5 or more A*-C (English and Maths)
- Percentage 5 or more A*-C (including Functional English and Maths)
- Percentage 5 or more A*-G
- Percentage of 1 or more A*-G
- Percentage of 1 or more A*-C in Modern Foreign Language
- Percentage of 1 or more A*-G in short course in Modern Foreign Language
- Percentage achieving 2A*-C in Science
- Tables showing English and Maths and Science conversion from Key Stage 3 results to GCSE and a breakdown of results for each subject and how well pupils did in each subject compared to their results in other subjects (residual table)

Some key pages are given overleaf.

a. Average total point score and average capped total (best 8) point scores (APS)

	Average Total Point Score				Average capped total point score (best 8 subjects)			
	Cohort	School	National	Sig	Cohort	School	National	Sig
All pupils	140	345.3	390.8	Sig-	140	270.2	307.8	Sig-

Gender								
Male	79	317.2	374.3	Sig-	79	255.3	297.1	Sig-
Female	61	381.7	407.8		61	289.6	318.9	Sig-

Free School Meals								
FSM	49	293.2	308.9		49	238.2	252.5	
Non FSM	91	373.3	402.1		91	287.5	315.5	Sig-

English as first Language								
English or believed to be English	138	346.7	393.9	Sig-	138	271.4	310.0	Sig-
Other than English or believed to be other	2	250.3	390.7		2	189.3	308.3	
Unclassified	0	-	113.4		0	-	101.0	

Special Education Needs								
No identified SEN	91	397.1	423.7		91	305.4	329.6	Sig-

SEN without a statement								
School Action	16	245.0	293.5		16	201.1	245.6	
School Action Plus	28	235.7	220.9		28	198.3	191.7	

SEN with a statement	5	337.8	213.0		5	254.3	188.1	

This page enables the school to compare how different groups have attained compared to their respective national averages. The blue indicates results are significantly below national averages but this may or may not represent underachievement. It depends on the pupils' starting points. The CVA graphs give this information (see the next section).

For example, if we look at boys and girls APS (best 8), while overall girls do appear to attain substantially higher than boys, the gap between girls and boys averages is quite close. Boys are around 42 points behind and girls around 29 points for the best 8 subjects, implying the CVA for both groups would be different.

While APS scores for FSM and non FSM are substantially different, the gap between the respective averages shows FSM pupils are broadly in line whereas non FSM are significantly below.

The shaded figures in this table are all **blue**. This means that they are significantly lower than the national averages. This may or may not be a bad outcome as it depends on the attainment on entry to the school. If this was very low then to get to 'below average' may still be good progress.

How are points calculated?

It is difficult to find averages for GCSE grades as they are given as letters. Each grade is given a point score so that average points APS can be calculated.

The table below shows how these are allocated.

The numbers were chosen so that you can measure the

progress between each key stage. For example average points in KS2 is around 27 and the average point score at KS4 is close to 40 i.e a grade C.

Grade	U	G	F	E	D	C	B	A	A*
Points	0	16	22	28	34	40	46	52	58
8 Grades	0	128	176	208	272	320	368	416	464

b. Key indicators and threshold measures

Schools are expected to reach a certain threshold in some key indicators. For example, Secondary schools are now expected to get at least 30% of pupils achieving 5A*-C including English and Maths.

This table shows the performance of groups within a school at each of the threshold measures.

In this case the table highlights some interesting differences in performance. For example, boys

and girls for 5A*-C and for FSM compared to non FSM at 5A*-C (English and Maths). Closing these gaps is a priority for schools.

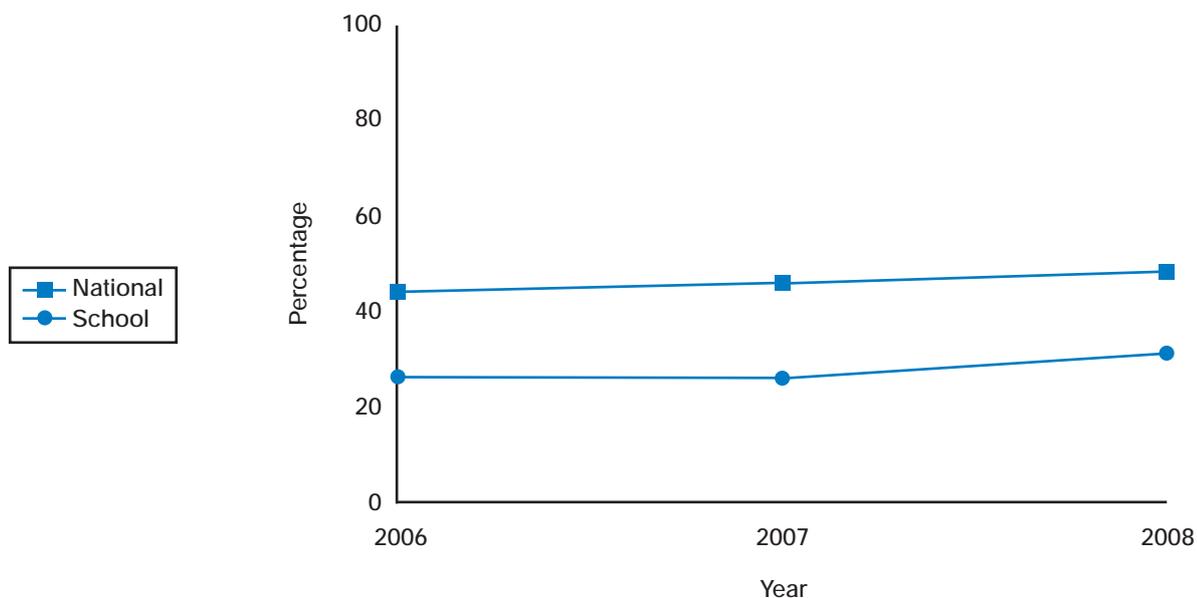
	Cohort	Percentage of pupils achieving each threshold			5+A*-G
		5+A*-C	5+A*-C (incl. Eng & Maths)	5+A*-C (incl. func Eng & Maths)	
All pupils	209	59	32	36	84
<hr/>					
Gender					
Male	112	54	32	38	81
Female	97	65	31	34	88
<hr/>					
Free School Meals					
FSM	61	43	23	25	70
Non FSM	148	66	35	41	90
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English as first Language					
English or believed to be English	209	59	32	36	84
Other than English or believed to be other	-	-	-	-	-
Unclassified	-	-	-	-	-
<hr/>					
Special Education Needs					
No identified SEN	139	70	43	47	90
SEN without a statement	68	37	9	13	72
School Action	42	43	5	12	74
School Action Plus	26	27	15	15	69
SEN with a statement	2	50	0	50	100

c. Trends over time

There are a number of graphs, one for each of the key threshold listed above. The example below is for 5A*-C (English and Maths).

Chart 3.1.11 and Table 3.1.12

Percentage of candidates achieving 5 or more A*-C (incl. English and Maths) at GCSE and equivalent



% achieving 5 or more A*-C (inc English and Maths)	2006	2007	2008
Cohort	176	206	209
School	27	26	32
National	44	46	48
Difference	-17	-20	-16
Significance	Sig-	Sig-	Sig-

This shows that the school has now moved above the national threshold of 30% for this measure, but is still significantly below the national average.

However the trend appears to be on the up. The school will need to establish an action plan to secure further improvement to avoid falling below the threshold again and to narrow the gap between the school and the national average.

d. Individual subjects

There are two tables for individual subjects.

The first table shows the results obtained in each subject and the national results for each subject.

Table 3.1.28
Attainment, Summary of full GCSE results for all pupils - 2008

Subject		Number of entries	Entry as a percentage of cohort	% A*-A	% A*-C	% A*-G	% Fail	Average Point Score
English/English Language - Single	School	196	93.8	2.0	45.4	99.5	0.5	34.7
	National	567,550	95.7	14.1	62.5	98.6	1.4	38.9
Mathematics	School	197	94.3	3.0	42.1	93.9	6.1	31.2
	National	576,456	97.2	14.7	58.0	97.8	2.2	37.5
Physical Education	School	37	17.7	21.6	81.1	100.0	0.0	42.8
	National	127,623	21.5	19.7	61.3	99.6	0.4	40.4

(Average point score 40 points = Grade C 34 points = Grade D)

In this example, Physical Education (PE) was better than the national average at a grade C+ on average. English was closer to a grade D overall and Maths just below a grade D. The number of pupils achieving the higher grades A/A* were very low. This may be a reflection of the attainment on entry or that these departments are not focussing sufficiently on extending the able/gifted and talented students.

The second table compares the relative performance of each subject. This is a measure of how well pupils do in each subject compared to their other subjects.

Table 3.1.30
Attainment, Relative Performance Indicators for full GCSEs, all pupils - 2008

Subject	Entries	School Average	Average in All Other Subjects	School Difference	National Difference	Relative Performance Indicator
English/English Language - Single	133	30.4	30.7	-0.3	1.4	-1.7
French	6	41.0	40.4	0.5	-3.4	3.9
Home Economics	60	34.7	31.4	3.3	0.4	2.9
Humanities	13	40.2	39.1	1.1	-3.4	4.5
Mathematics	135	31.6	30.2	1.4	-0.1	1.5

In this example, the table shows that relatively speaking, pupils did better in Maths and Home Economics (HE) than they did in their other subjects and worse in English. In the case of HE it could be that the more able students took that option or that exam preparation is particularly good in Maths and HE. Staffing absences or unsatisfactory teaching and exam preparation may have led to the relative underperformance in English. Note however, both English and Maths average points are below the national average, so both need to focus on raising overall performance.

Progress Key Question:

What is the quality of pupils' learning and what progress do our pupils make given their starting points and their context?

a. Whole school CVA

Table 2.1.1
Contextual Value Added Key Stage 2 to 4 - Overall and Subjects

This section provides the overall and subject contextual value added (CVA) scores for the school relative to the national mean of 1000. Significance tests have been performed on the data using a 95% confidence interval,

and where the school value differs significantly from the corresponding national value, sig+ or sig- is shown. Where a school figure is significantly above or below that of the previous year an up or down

arrow is displayed to the right of the figure. Note that students for whom prior attainment could not be matched are excluded from all value added analyses.

		2006	2007	2008
All subjects	Cohort for CVA	156	155	136
	CVA School score	1,003.9 ↑	1,031.6 ↑	1,021.2
	95% confidence interval +/-	9.9	9.7	10.0
	Significance		Sig +	Sig +
	Percentile rank	43	4	10
	Coverage	96%	99%	97%

English / English Language	Cohort for CVA	153	155	136
	CVA School score	1,000.8 ↑	1,000.9	999.5
	95% confidence interval +/-	1.0	1.2	1.3
	Significance			
	Percentile rank	35	34	64
	Coverage	94%	99%	97%

Mathematics	Cohort for CVA	156	155	136
	CVA School score	999.5 ↑	1,000.5	1,001.8
	95% confidence interval +/-	1.1	1.2	1.3
	Significance			Sig+
	Percentile rank	61	39	22
	Coverage	96%	99%	97%

This table shows the position over time.

An arrow up means there was a significant improvement on the previous year e.g. whole school CVA improved significantly in both 2006 and 2007.

Sig+ or Sig- mean the CVA is significantly above or below what could be expected for this group of pupils, e.g. Maths CVA in 2008 and the whole school CVA in both 2007 and 2008.

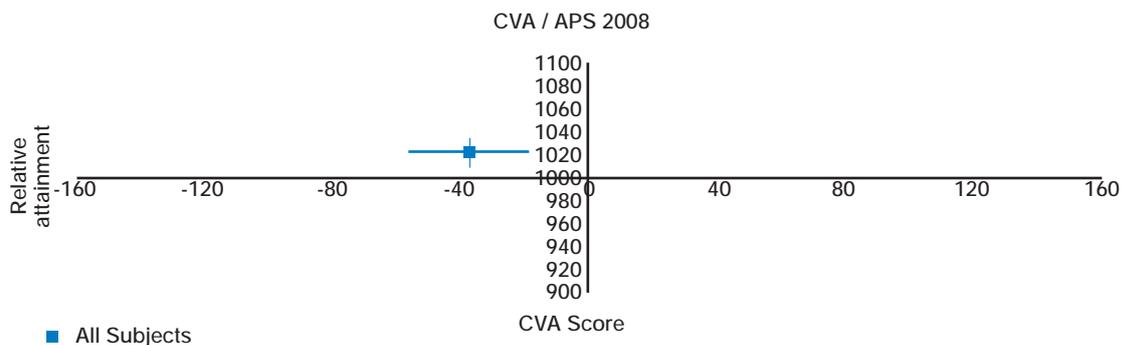
No shading shows the CVA is broadly in line with what should be expected.

In this case Maths is improving whereas English appears in decline.

b. Combined Attainment and CVA graphs

A second view is given in the next diagram which shows how far the school's point score was from the average and what the CVA was for this group. The place to be is in the top right where standards/ attainment are above average as is CVA. Alternatively the top left shows CVA is at least above average if results are below. Below the horizontal line shows underachievement.

Chart 2.1.2



For this school the Capped Average Point Score is 40 points, just under a grade for each subject below average. However, this represented good progress given the context for these pupils and their attainment on entry to the school as the CVA was well above the national average at 1020.

Chart 2.1.5

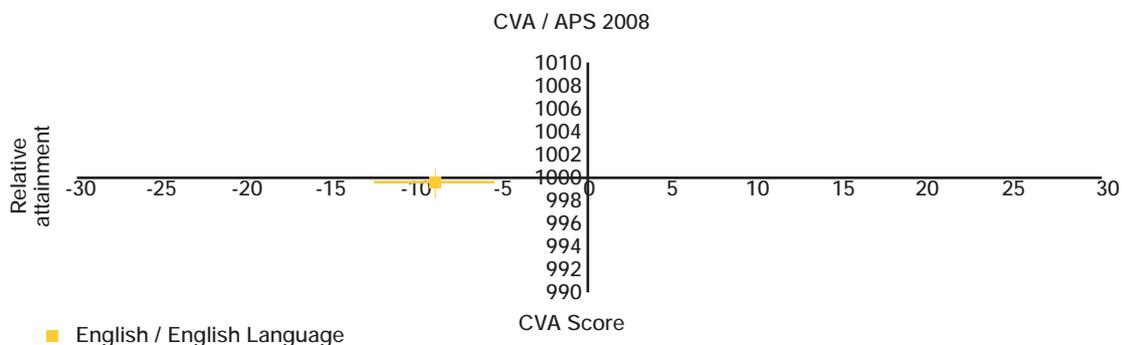
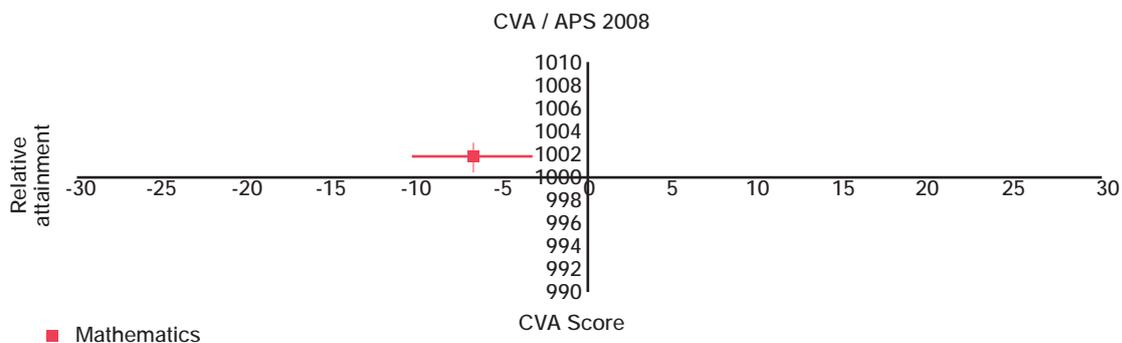


Chart 2.1.6



In these graphs both subjects attainment are below the national average, to the left of the vertical line but Maths value added is significantly above average whereas English is average.

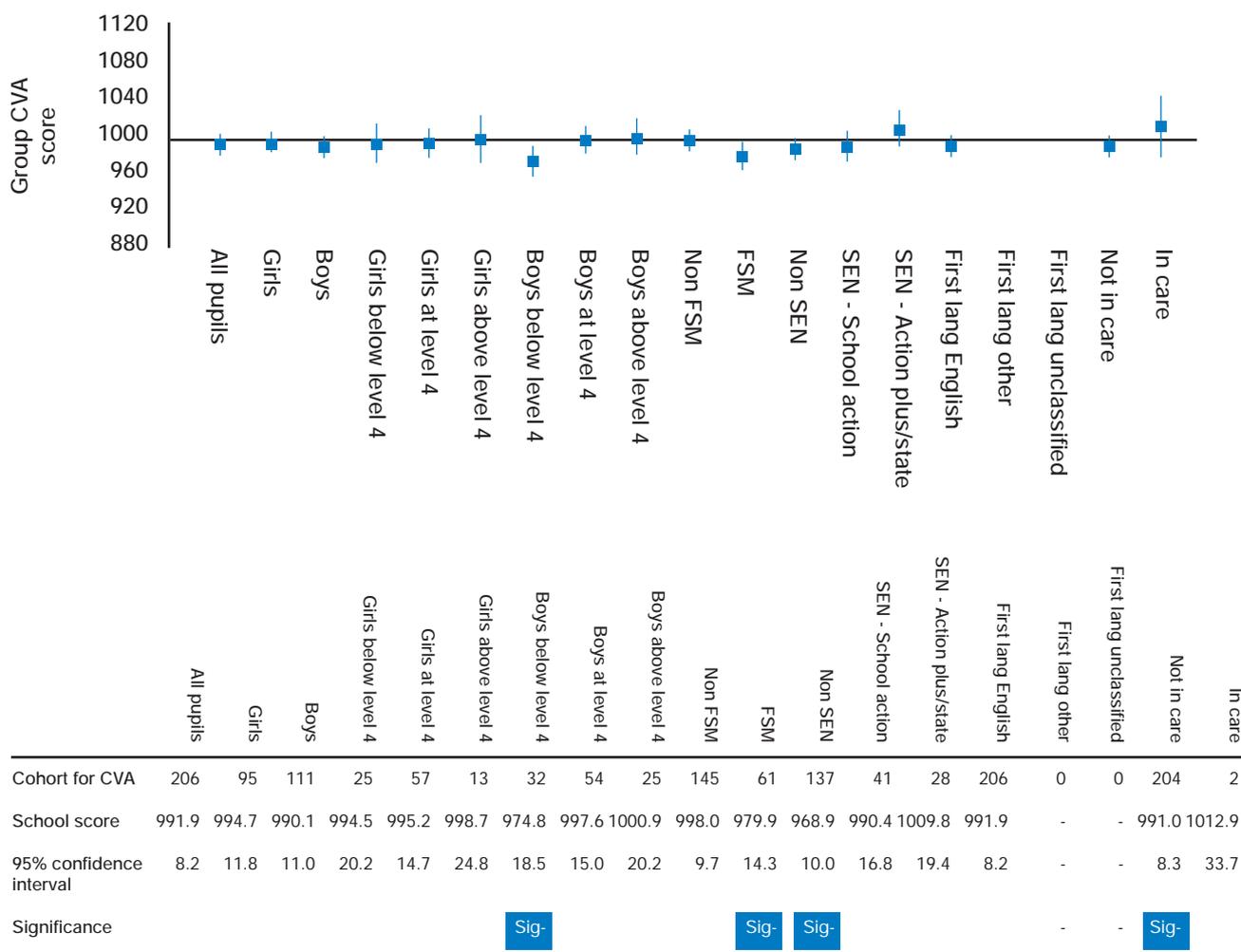
c. Individual Groups

The CVA for individual groups in the school is also given. This is a very important graph as it indicates possible underachievement for groups

and shows where the school needs to sharpen its focus to raise standards and improve progress. The chart breaks down the attainment on entry for boys

and girls into 3 bands: pupils below level 4, at level 4 and above level 4.

School contextual value added for groups within the school 2008



In the example above:

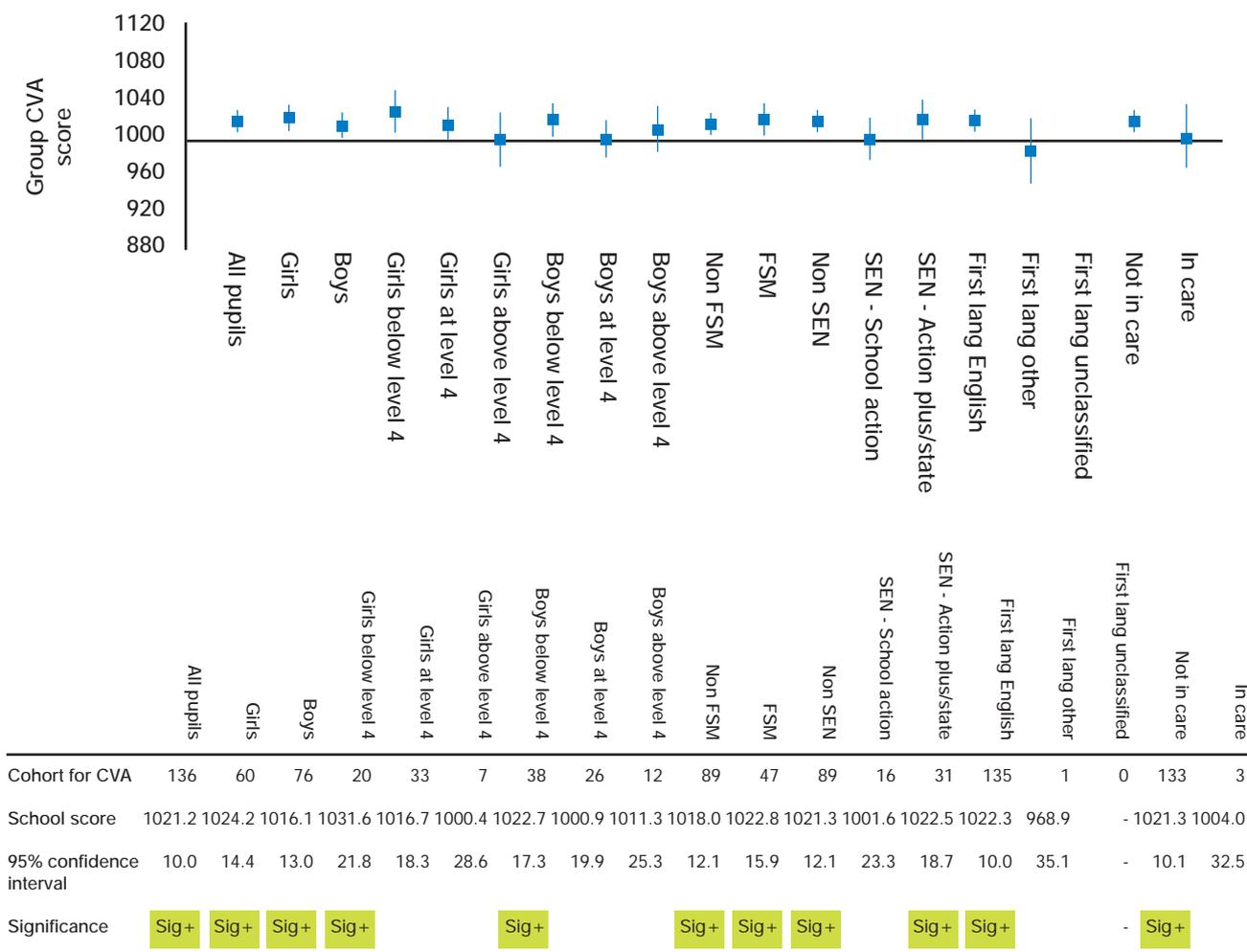
- Girls CVA is broadly average, as is the CVA for the three girls' attainment groups
- Boys' overall CVA is below average because the boys with less than L4 on entry had a CVA which was significantly below average
- FSM pupils did not make as much progress as expected

Governors need be confident that the school has good tracking systems in place so it is able to check if these issues apply to any of the current year groups and that strategies are in place to address these issues if needed.

In the example below, most groups made good progress. In this case the school needs to consider if this good progress is being sustained in the current year groups and consider what action needs to be taken to improve attainment for the girls who enter with above level 4, for boys at level 4 and above and for school action pupils.



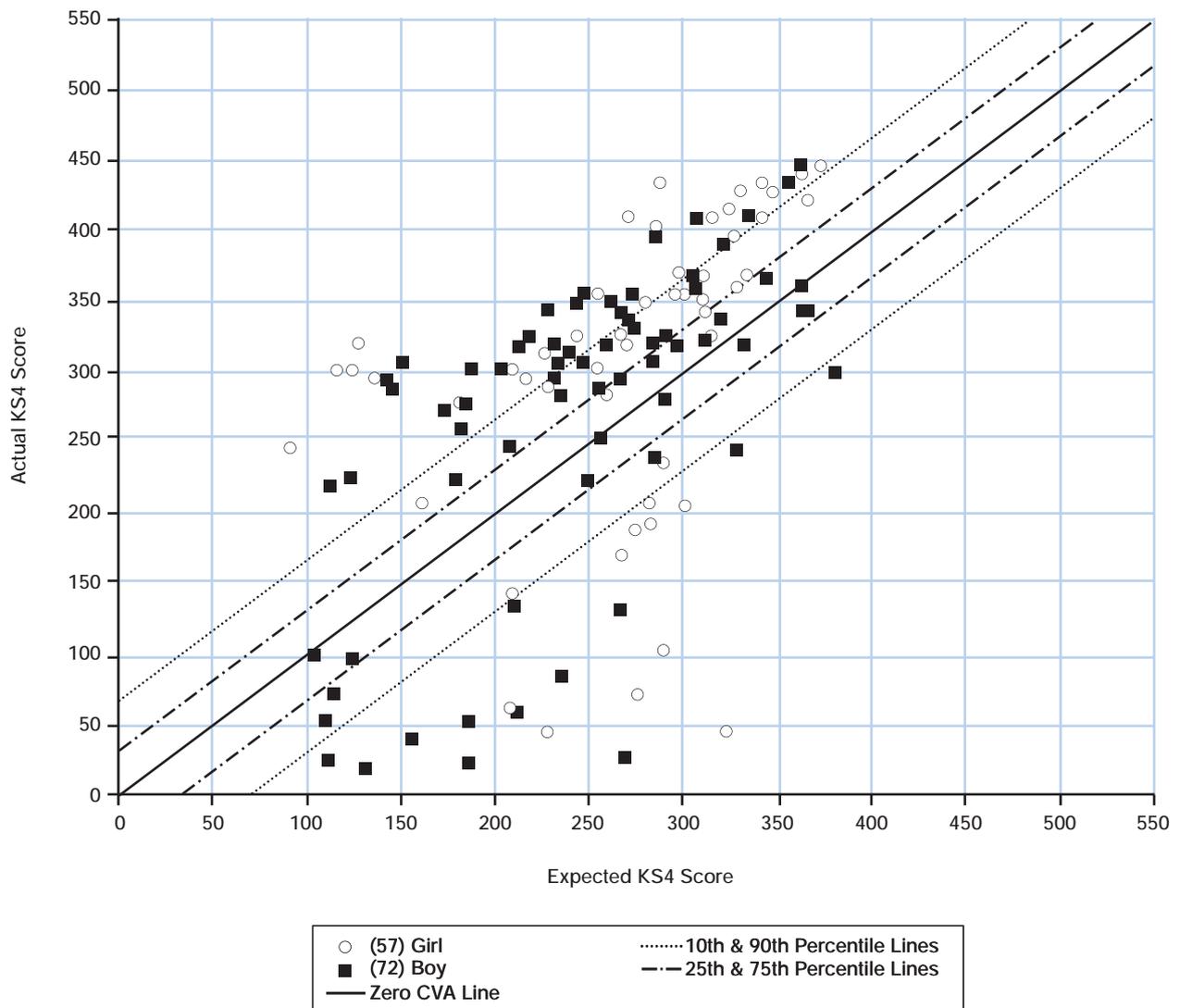
School contextual value added for groups within the school 2008



d. Individual pupils

Table 2.1.12
Contextual Value Added Key Stage 2 to 4 - Overall, predicted versus actual for pupils 2008

2008 Key Stage 2 to 4 APS contextual value added line, showing spread of pupils by gender. The analysis is based upon comparing the predicted outcome with the actual outcome of each pupil.



The individual pupil graph gives a more detailed breakdown of the CVA for each pupil based on their best eight results.

The graph shows what pupils should have got based on their KS2 scores and their individual characteristics i.e. compared to similar pupils across the nation.

The middle line is where all pupils should fall if they attain exactly what is expected. The dotted lines above the middle line show the top quarter and top 10%. Those below the middle line show the bottom quarter or bottom 10%.

In this example there are considerable numbers of pupils above the middle line and many in the top 10% for CVA. However this is partially offset by a number of boys and girls who did not achieve as well as expected with around 24 in the bottom 10% for CVA.

The story for these pupils is often complex - as the Pasternack quote implies, but the school should be developing strategies to ensure similar pupils in the current cohorts are taught well, develop the resilience to learn, attend school and achieve GCSE or GCSE equivalent outcomes.

Summary

RAISEonline report and interactive website provides:

Contextual data

Important to see how your school is different from the average school - what makes your school special.

Attainment data

This shows you how well your past students were doing in passing exams, reaching thresholds and how well subjects and groups of students were doing compared to the national average.

However this does not tell the whole story as the school could be above average in all these measures, but pupils could still be making unsatisfactory progress if they entered school with high levels of attainment from the primary school. Similarly below average attainment does not always mean low value added.

Progress measures (CVA)

This enables you to see if pupils are making satisfactory or better progress given their attainment on entry to the school.

Similarly this is not the whole story. CVA expected outcomes are not intended to limit targets but to set the school's past outcomes in the national context.

As is evident from the table on page 28, many students exceed expectations and some by a considerable margin while others did not.

The real challenge is to try to get all pupils to exceed their basic expectations as indicated by the CVA table.





Section 4

Extracts from a Primary School RAISEonline (RoL) report

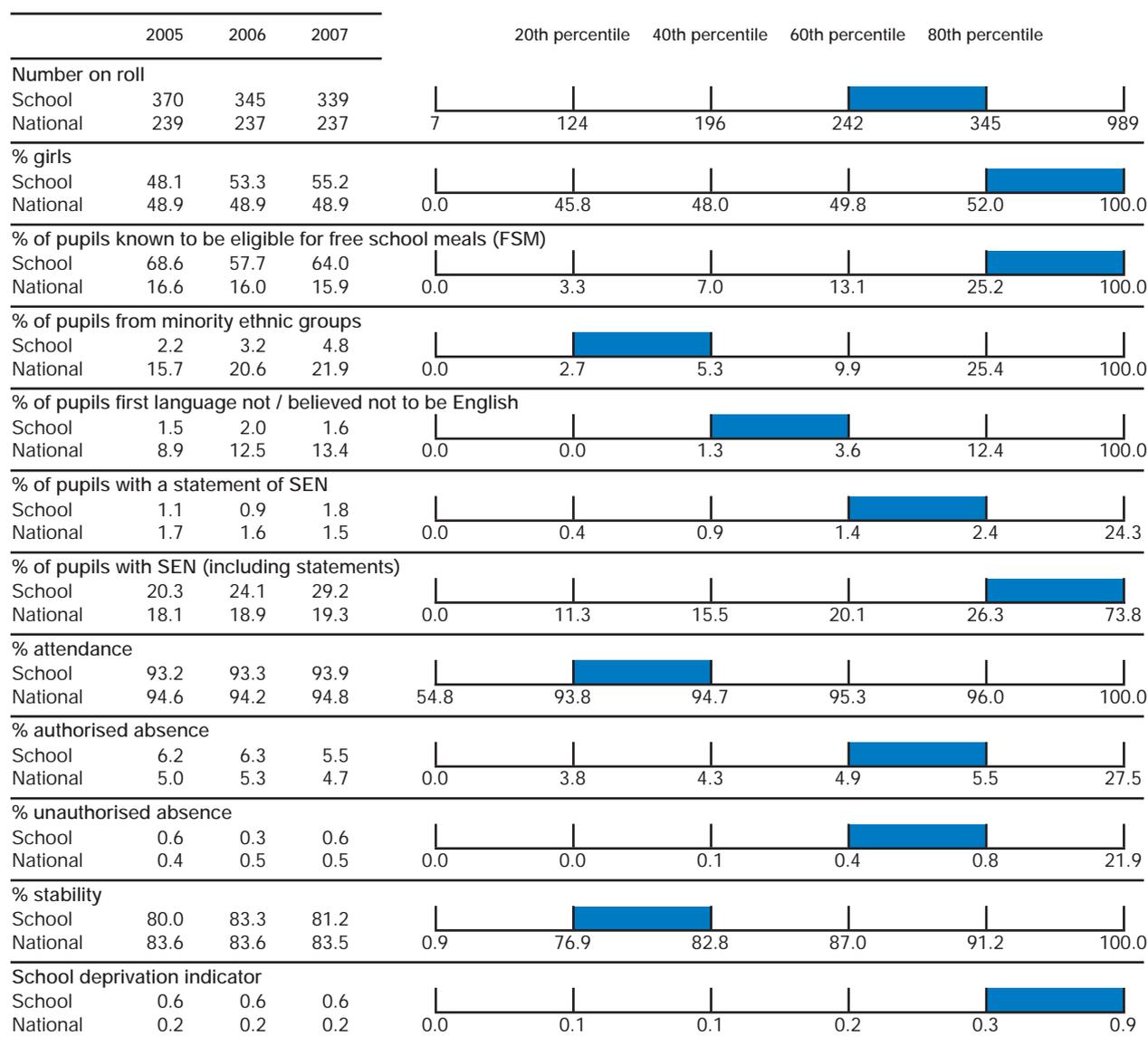
The primary RoL is similar in layout to the secondary report with the same 3 sections.

- 1 A summary of the context of the school including, size, gender balance, minority ethnic population data, SEN and FSM data, attendance data and some other socio-economic data.
- 2 Progress (CVA) data and judgements for the headline figures, groups of pupils and individual; students including CVA data on English and Maths. In Primary schools this is measured by the 'distance travelled' from Key Stage 1 teacher assessed sub levels to outcomes in the Year 6 SATs measured by the progress made from KS1 and KS2 SATs.
- 3 Standards information that compares the last examination/test results with national averages.

Key Question:

What is the context of our school and how does this compare to other schools?

a. School profile



PLEASE NOTE: The formula for calculating % of pupils from minority ethnic groups was changed in 2005 to exclude pupils whose ethnicity was not recorded.

This shows the school is larger than the average Primary school, has more girls than boys, and has much higher than average levels of deprivation for example very high free school meals 64% compared to 15%, deprivation index of 0.6 compared to 0.2. These measures put the school in the top 20% of schools in each of these categories. (5 bands each worth 20% of the total number of Primary schools.)

Table 1.2
Basic characteristics by National Curriculum year group

The table below shows some key indicators for the school broken down by National Curriculum year group. This table includes all pupils listed in the School

Census, and therefore values presented below may differ from published figures. 'Looked After Children' shows the number of children who have been in care

for any period during the time they have been at the school, broken down by National Curriculum year groups.

NC Year Group	Number on roll	% Boy/Girl	% Free School Meals	% Minority Ethnic Group	% 1st Language not English	% Special Education Needs	Looked after Children
Pre-Compulsory	89	40.4 / 59.6	68.5	11.2	5.6	15.7	0
Year 1	42	33.3 / 66.7	61.9	9.5	4.8	31.0	2
Year 2	38	65.8 / 34.2	73.7	5.3	5.3	31.6	1
Year 3	37	37.8 / 62.2	62.2	0.0	0.0	35.1	2
Year 4	51	41.2 / 58.8	60.8	9.8	2.0	43.1	3
Year 5	32	53.1 / 46.9	59.4	3.1	0.0	37.5	2
Year 6	50	50.0 / 50.0	58.0	2.0	0.0	26.0	3

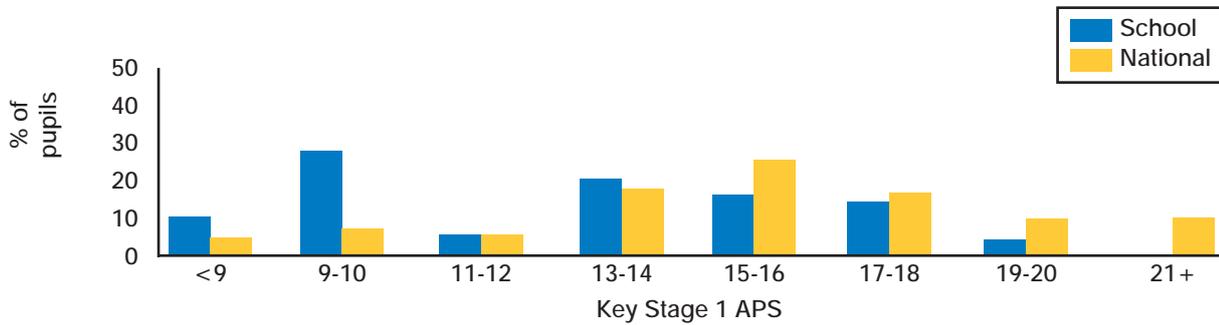
This table shows some striking differences between each year group which could potentially have significant impact on standards and progress. It also makes measuring trends overtime more difficult at whole school level. For example, boys v girls in Years 2 and 3 and much higher SEN in Year 4.

Consequently the school should be providing different levels of support to match pupils' needs in each year and also have effective tracking systems in place for measuring standards and progress in each year for each class and for individual pupils.

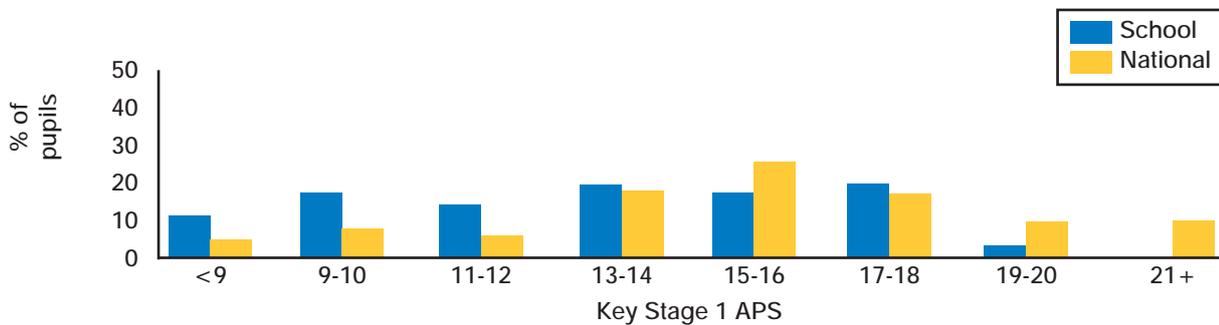


b. Attainment on Entry, i.e. at end of KS1

Year 4 in September 2006



Year 3 in September 2006



Average points score at KS1

NC Year starting Sept 2006	School	National	Difference	% Coverage
Year 6	11.9	15.5	-3.6	96
Year 5	12.5	15.4	-2.8	100
Year 4	12.8	15.4	-2.6	96
Year 3	13.0	15.2	-2.2	97

Again this extract shows the different profiles in year groups and the need for tailored support.



Attainment Key Question: What standards are reached by our pupils, what do our pupils attain?

a. A Note on Point scores, levels and thresholds

The 'average child' is expected to attain:

- Level 2b (15 points) by the end of Year 2
- Level 3b (21 points) by the end of Year 4
- Level 4b (27 points) by the end of Year 6

Level	2c	2b (End of Year 2)	2a	3c	3b (End of Year 4)	3a	4c	4b (End of Year 6)	4a	5c	5b	5a
Points	13	15	17	19	21	23	25	27	29	31	33	35

It can be seen from the table that going up one level adds 6 extra points and it roughly takes 2 years to cover a whole level. So 1 point could be seen as 1 term's study.

There are thresholds which schools are expected to reach, for example:

- all pupils should at least make two levels of progress in their junior years (Years 3 to 6)
- this means that on Level 2b pupils on KS 1 should reach at least level 4b by end of KS 2
- Level 3 pupils at end of KS1 reach level 5 by end of KS 2
- Pupils with higher levels are expected to progress much faster than this in order to reach level 5 at the end of KS2

Governors need to work with their schools to ensure they are able to track pupils' attainments in years 3-6 to ensure this rate of progress is being achieved.



b. Examples of RoL tables

i) Key Stage 1

Chart 3.1.8 and Table 3.1.9

Attainment, Average Points Score at Key Stage 1 - Overall and by subject by pupil groups 2007

This report provides analysis of Key Stage 1 pupils average point scores in 2007 for reading, writing and mathematics.

	All NC Core Subjects			Reading			Writing			Mathematics		
	School		National	School		National	School		National	School		National
	Cohort	APS	APS	Cohort	APS	APS	Cohort	APS	APS	Cohort	APS	APS
All Pupils	39	12.4	15.2	39	12.1	15.6	39	10.8	14.2	39	14.2	15.8

Gender												
Male	25	11.2	14.7	25	11.0	15.0	25	9.3	13.5	25	13.4	15.8
Female	14	14.5	15.7	14	14.2	16.3	14	13.6	15.1	14	15.8	15.8

Free School Meals												
FSM	28	13.2	13.2	28	13.3	13.3	28	11.7	12.1	28	14.6	14.0
Non FSM	11	10.2	15.7	11	9.0	16.1	11	8.4	14.7	11	13.2	16.2



This table shows some interesting differences between groups and subjects and where the school may need to focus work to bring about improvements.

For example:

- Girls were much closer to national averages than boys in all measures and were actually in line in Maths
- FSM pupils achieved in line with the national average and better in Maths compared to non FSM
- Non FSM pupils were well below the national average of 15.7 in all core subjects at 10.2
- The greatest weakness appeared to be reading with a score of 9.0 compared to 16.1 nationally for non FSM pupils
- Similarly, writing was 8.4 compared to 14.7 nationally. Non FSM Maths however was only 3 points behind

The school would need to investigate the particular circumstances for these pupils and produce an action plan to raise literacy levels in reading and writing particularly for non FSM pupils.

ii) Key Stage 2

A similar table is produced for KS2 pupils.

Chart 3.2.8 and Table 3.2.9

Attainment, Average Points Score at Key Stage 2 - Overall and by subject by pupil groups 2007

This report provides analysis of Key Stage 2 pupils average point scores in 2007 for English, Mathematics and Science.

	All NC Core Subjects			English			Mathematics			Science		
	School		National	School		National	School		National	School		National
	Cohort	APS	APS	Cohort	APS	APS	Cohort	APS	APS	Cohort	APS	APS
All Pupils	50	25.5	28.0	50	23.6	27.6	50	25.0	27.3	50	27.9	29.0
<hr/>												
Gender												
Male	25	25.6	27.9	25	23.2	27.0	25	25.6	27.6	25	28.2	29.0
Female	25	25.4	28.1	25	24.1	28.3	25	24.5	27.0	25	27.5	29.0
<hr/>												
Free School Meals												
FSM	29	24.9	25.7	29	22.9	25.2	29	24.5	25.0	29	27.4	27.0
Non FSM	21	26.4	28.4	21	24.8	28.1	21	25.8	27.8	21	28.5	29.4
<hr/>												
Special Education Needs												
No identified SEN	37	26.4	29.2	37	24.8	29.0	37	26.2	28.6	37	28.3	30.0
SEN without a statement	11	22.5	24.2	11	19.8	23.2	11	21.0	23.3	11	26.5	26.0
School Action	8	22.8	24.7	8	21.0	24.0	8	21.0	23.8	8	26.3	26.4
School Action Plus	3	21.8	23.1	3	15.0	21.8	3	21.0	22.3	3	27.0	25.2
SEN with a statement	2	25.0	21.0	2	21.0	19.8	2	27.0	20.2	2	27.0	22.8

For this cohort:

- The difference between FSM and non FSM is also evident
- Overall FSM pupils are 0.8 behind the national average whereas non FSM are 2 points behind. This could be stated as two terms behind the national average. This appears to be an issue across the school
- Similarly, English shows the biggest differences for groups of students when compared to Maths and Science
- Boys are 3.8 and girls 4.2 points behind their respective averages in the English SATs. (Note the national gap between boys and girls in English)
- SEN pupils without a statement fare less well in English than in Maths 3.4 behind compared to 2.3

Again, improving overall literacy levels is a key issue for the school in order to narrow the gap between the school and national averages.

While there are concerns in this school over reaching threshold measures, this may not represent overall underachievement and low CVA.



Progress Key Question:

What is the quality of pupils' learning and what progress do our pupils make given their starting points and their context?

a. Whole School measures

Progress measures for KS1 to KS2

Table 2.1.1
Contextual Value Added Key Stage 1 to 2 - Overall and subjects

		2005	2006	2007
All subjects	Cohort for CVA	50	45	47
	CVA School score	99.3	99.9	100.5
	95% confidence interval +/-	0.6	0.6	0.6
	Significance	Sig-		
	Percentile rank	77	57	27
	Coverage	98%	100%	94%

English	Cohort for CVA	50	44	46
	CVA School score	98.5 ↓	99.4 ↑	99.3
	95% confidence interval +/-	0.6	0.6	0.6
	Significance	Sig-		Sig-
	Percentile rank	92	74	77
	Coverage	98%	98%	92%

Mathematics	Cohort for CVA	50	45	47
	CVA School score	100.0	100.3	100.4
	95% confidence interval +/-	0.7	0.8	0.7
	Significance			
	Percentile rank	48	40	33
	Coverage	98%	100%	94%

Science	Cohort for CVA	50	44	47
	CVA School score	99.4	100.0	101.7 ↑
	95% confidence interval +/-	0.7	0.7	0.7
	Significance			Sig+
	Percentile rank	72	51	6
	Coverage	98%	98%	94%

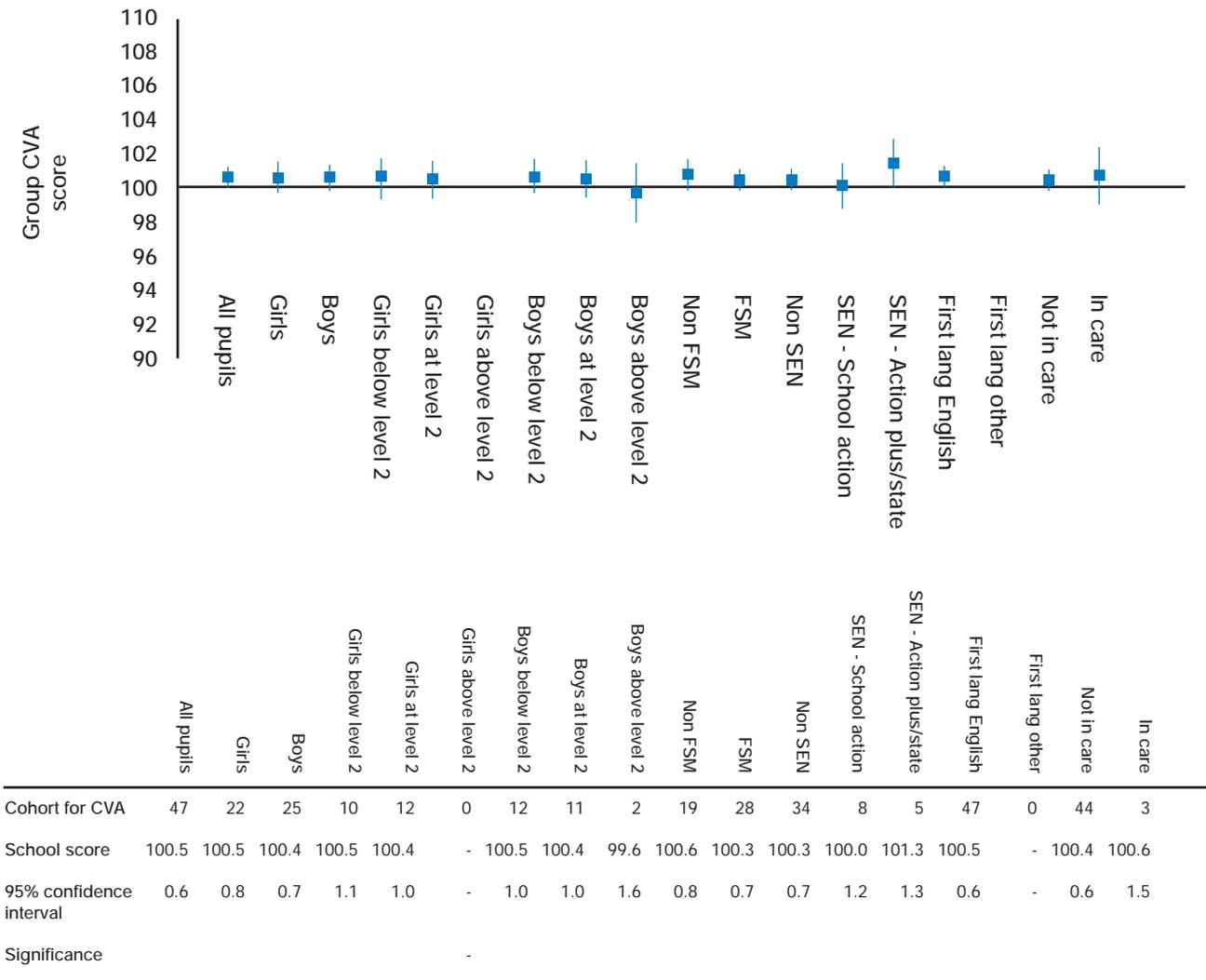
This shows an overall improving picture as the school's ranking has gone from 77 to 27 with a CVA 99.3 and significantly below average (colour coded blue) to broadly average at 100.5.

However English has now been below average (coloured blue) for CVA for two of the three years, so is a real cause for concern.

b. Groups of pupils

Chart 2.1.15 and Table 2.1.16
Contextual Value Added Key Stage 1 to 2 - Overall by pupil groups

School contextual value added for groups within the school 2007



- While standards are below national averages this appears to indicate broadly satisfactory progress for each cohort of students
- The majority of boxes are above the line but in each case the lower 'whisker' crosses the line so there is no statistical evidence to claim better than satisfactory progress
- However the two boys above level 2 appear to have a CVA just below average
- This is a key area to investigate to see if it is a weakness in the level of challenge and curriculum offered to able pupils in the current year groups

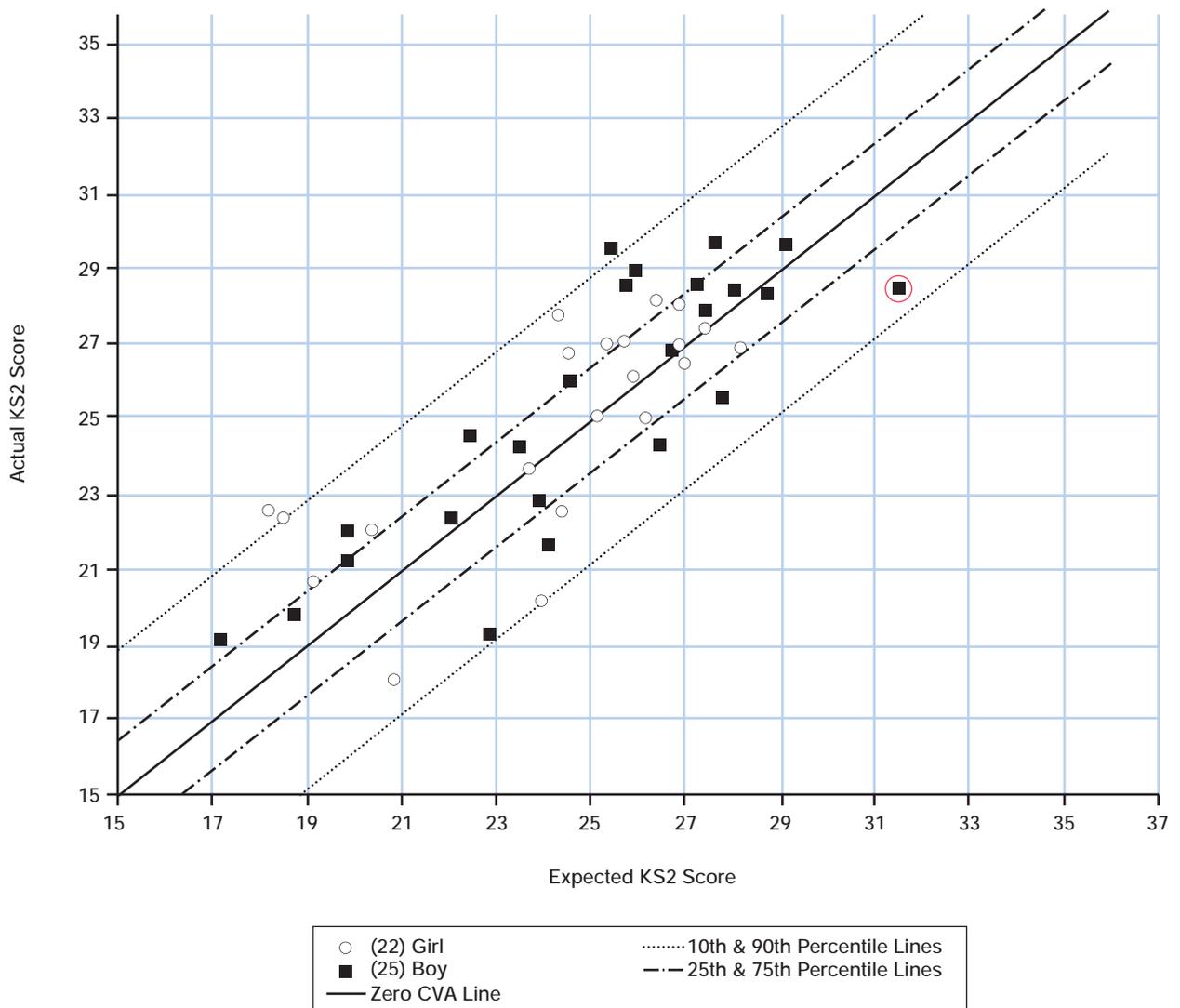


c. Individual pupils

Chart 2.1.19

Contextual Value Added Key Stage 1 to 2 - Overall predicted versus act for pupils 2007

2007 Key Stage 1 to 2 PS contextual value added line, showing spread of pupils by gender. The analysis is based on comparing the predicted outcome with the actual outcome of each pupil.



- This table shows why boys above L2 in KS1 shown in the previous section have made below average progress
- There are a few boys (black squares) who are in the bottom 25% for value added - between the dotted lines - and one boy in particular was expected to get 32 points (Level 5) but only scored around 28 points (Level 4)

Again the governors need to:

- work with the school to identify causes for these apparent under achievements
- check that systems are in place to monitor the progress of current pupils and
- identify actions to bring about any required improvements

Summary

RAISEonline report and interactive website provides:

Contextual data

It is important to see how your school is different from the average school - what makes your school special.

Attainment/Standards data

This shows you how well you are doing in passing exams, reaching thresholds and how well subjects and groups of students are doing compared to the national average.

However this does not tell the whole story as the school could be above average in all measures but pupils could still be making unsatisfactory progress if pupils entered school with high levels of attainment from the previous key stage. Similarly low attainment does not always mean low value added as can be seen in the examples quoted.

Progress measures (CVA)

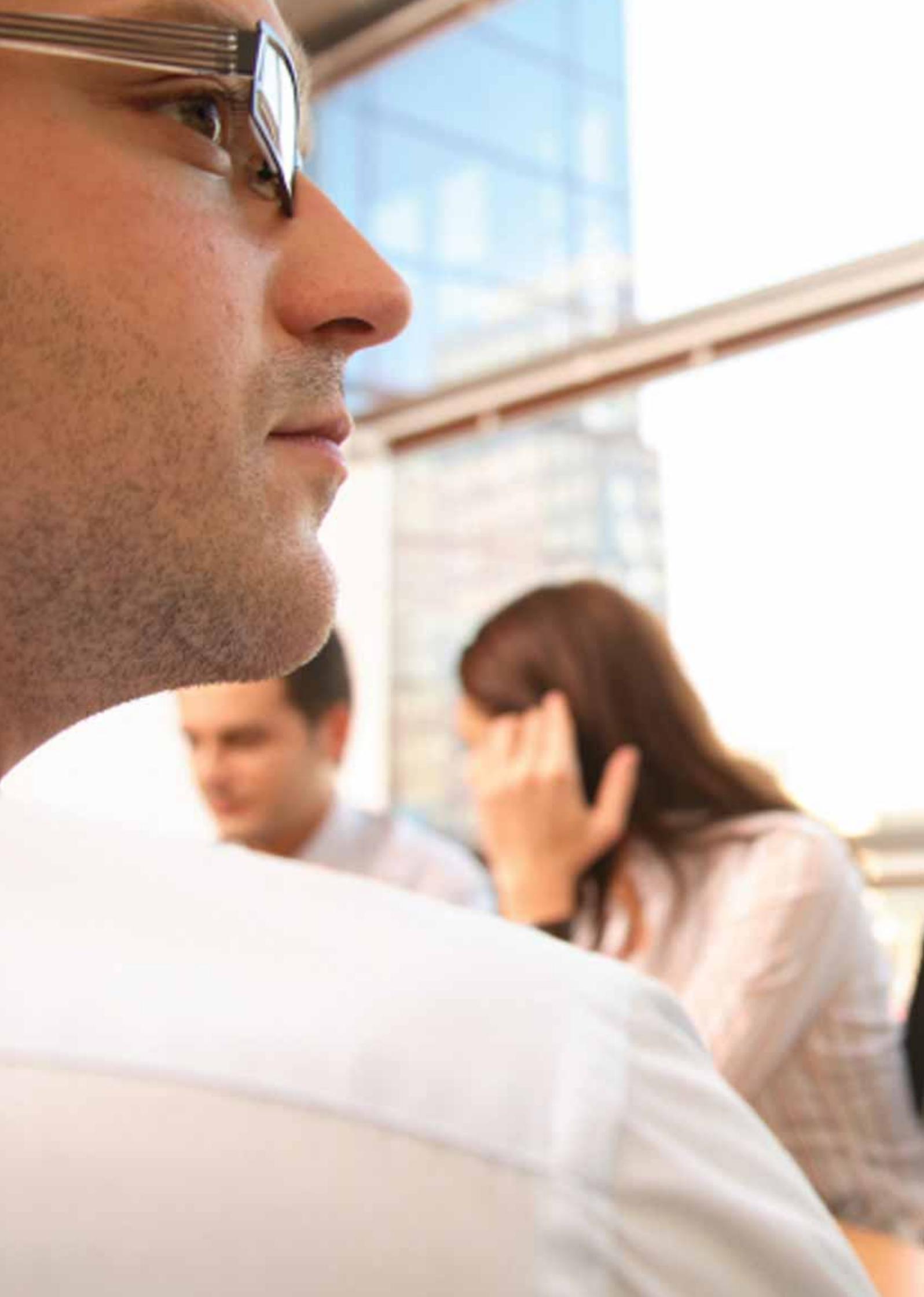
This enables you to see if pupils are making satisfactory or better progress given their attainment on entry to Key Stage 2.

Similarly, this is not the whole story. CVA expected outcomes are not intended to limit targets but to set the school's past outcomes in the national context.

As is evident from the individual pupil chart on page 40, many pupils exceed expectations and some by a considerable margin while others did not.

The challenge is to try to get all pupils to exceed their basic expectations as indicated by the CVA chart.





Useful Resources

Key documents and Links

Ofsted

The following documents can be found on the Ofsted website and should be used to support schools and governors in completing the schools SEF and making judgements about achievement, attainment and progress.

<http://www.ofsted.gov.uk/Ofsted-home/Forms-and-guidance>

National strategies website has a very wide range of resources covering all sectors.

www.nationalstrategiescpd.org.uk/

Guidance for inspectors on the use of school performance data using the RAISEonline report during section 5 guidance
Ofsted

Using data, improving schools
Ofsted Reference No: 070260
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Evaluation schedule of judgements for schools inspected under section five of the Education Act 2005, from September 2009

Date: 16 June 2009

Reference Number: 090098

Publisher: Ofsted

Summary

The evaluation schedule shown sets out the judgements that inspectors will make and report on from September 2009.

Conducting the inspection: guidance for inspectors of schools from September 2009

Date: 16 June 2009

Reference Number: 090097

Publisher: Ofsted

Summary

This guidance is designed to assist inspectors of schools in their work. It indicates the main activities that need to be undertaken from the time the inspection is called until the publication of the report. Schools can use the guidance to see how inspections will be conducted and may find it helpful when carrying out their self-evaluation. Inspections are carried out in accordance with the [Framework for the inspection of schools in England from September 2009](#).

Glossary

Achievement

An overall assessment of pupils' success in achieving challenging targets, including qualifications and learning goals with trends over time and any significant variations between groups of learners.

APS - Average Point Score

The average points achieved in SATs or GCSE exams.

CVA - Contextual Value Added

A measure of the progress made by pupils which takes into account a range of academic and social indicators.

FFT - Fischer Family Trust

An independent, non-profit organisation which is mainly involved in undertaking and supporting projects addressing the development of education in the UK.

GCSE General Certificate of Secondary Education

The main examination for pupils at the end of compulsory education (end of Year 11).

KS - Key Stage

Under the National Curriculum, the years of compulsory education (ages 5-16) are divided into four key stages (KS 1-4). KS 1 begins at the start of the year after a child becomes 5. There is also a Foundation Stage which lasts from when children reach the age of three until the start of KS 1.

OFSTED (Office for Standards in Education)

The government office, responsible for arranging the inspection of schools and local education authorities. They also publish documents.

Progress

An assessment of pupils' progress relative to their prior attainment and potential, with any significant variation between groups of learners.

RoL - RAISEonline

An interactive website containing information about pupils in each school. The site is password protected.

SATs

Standards of Attainment and Tests taken at end of key stages 1 and 2.

SEN - Special Educational Needs

Learning difficulties for which special educational provision has to be made. Many include children with physical disabilities or emotional and behavioural disorders and gifted children. Governors have a duty to help identify and provide for such pupils.

SEF - Self Evaluation Framework

The judgements made by the school about its own performance

Standards/Attainment

An evaluation of the standard of pupils' work in relation to their learning goals and examination outcomes.

