

Narrowing the Gaps: from data analysis to impact

A practical guide

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A practical guide



department for
children, schools and families

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Please check all website references carefully to see if they have changed and substitute other references where appropriate.

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Introduction and overview

Narrowing the Gaps: from data analysis to practice – a practical guide is a resource for senior and middle leaders in primary and secondary schools. It builds on the National Strategies' publication *Narrowing the Gaps: from data analysis to impact – the golden thread* and offers data workshops providing staff development materials that can be used to shape:

- whole-school training
- dedicated sessions for middle leaders
- cross-phase workshops for families of schools.

The workshops are designed to ensure that there is a secure link between formal analysis of historical data and action to accelerate the progress of children in school now. There is no need to use them all; each can be adapted to meet schools' needs and includes all the resources required.

Materials to support the analysis of Early Years (EY) outcomes and the narrowing of gaps in the Early Years, *A Guide to accessing, understanding, interrogating and using Early Years' data*, are available at [www.standards.dcsf.gov.uk/nationalstrategies](http://www.standards.dfes.gov.uk/nationalstrategies), select 'Early Years', then 'Supporting programmes and resources', then 'Leadership and management', and then 'Using data for improvement'.

Overview of workshops and supporting materials

Four workshops are available and each one takes from 60 to 120 minutes, depending on the aspects of data analysis explored. Workshops can be planned and facilitated by the school's senior leader with responsibility for data, assessment and/or narrowing the gaps, or through commissioned support through your school improvement partner (SIP).

Workshop 1 provides a cross-phase overview and focuses on developing a shared understanding of good progress and sources of data.

Workshop 2 explores effective use of school-level and pupil-level data, including use of interactive RAISEonline, to analyse **attainment** in relation to:

- average point scores (APS) and benchmark data
- pupil characteristics.

Workshop 3 explores effective use of school-level and pupil-level data, including use of interactive RAISEonline, to analyse **progress** in relation to:

- value-added data and contextual value-added data
- progression rates
- Fischer Family Trust estimates.

(Workshops 2 and 3 are each available in primary and secondary versions.)

Workshop 4 rounds off the process by applying the analysis to pupils in school now.

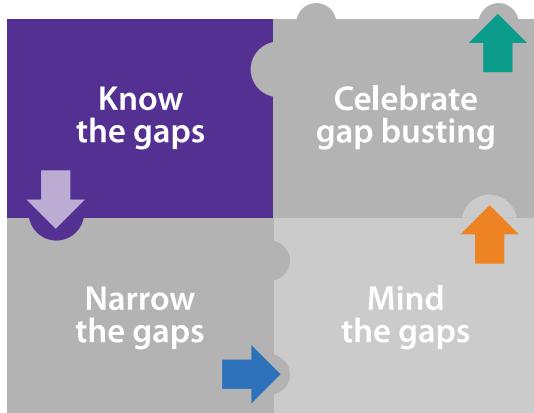
The **Resources** section provides resource sheets for each workshop. These include relevant graphs and charts, questions for discussion and space for recording issues and observations. A supporting **slide presentation** is available on the Narrowing the Gaps web area at www.standards.dcsf.gov.uk/nationalstrategies, select 'Leadership', then 'Narrowing the Gaps', then 'Know the gaps', and then 'Identifying underachieving pupils'.

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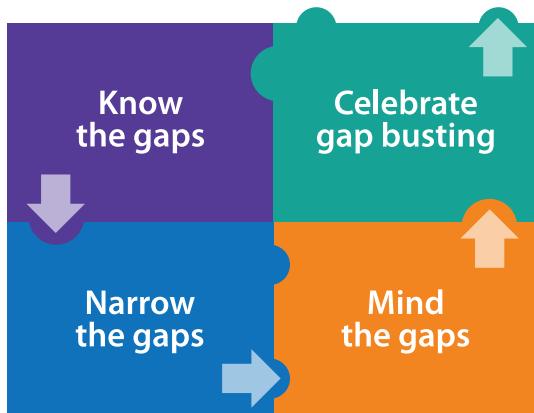
Appendix 1 on **Key skills** gives further details on using the interactive aspects of the data-analysis tools, for example, the use of drop-down subject menus, the analysis of cohort-level data by groups, and the application of filters to reports.

Know the gaps



These resources, and other materials available on the Narrowing the Gaps web area, are designed to support schools as they set about accelerating pupils' progress where they have fallen – or are likely to fall – behind. The main focus is on pupils entitled to free school meals (FSM pupils). These encompass the full spectrum of needs and backgrounds in the school community, including white and minority ethnic pupils, children in care, gifted and talented children and those with special educational needs (SEN).

The Narrowing the Gaps strategy, based on good practice in schools, focuses on four key elements of addressing underperformance of particular groups of pupils.



Know the gaps (good data analysis that leads to action and impact)

Narrow the gaps (planning for progression, effective pedagogy, personalised intervention)

Mind the gaps (systematic assessment and tracking)

Celebrate gap busting (acknowledge and build on successes)

These materials are intended to help teachers and senior leaders to know the gaps – to be clear about where the attainment gaps and differences in progression rates lie – in order to focus action for improvement.

Using data to identify gaps

Analysis of historic data, including trends over time, is important in ensuring that school leadership teams, subject and year-group leaders and practitioners know where strengths and areas for development exist in terms of:

- the gap between the performance of cohorts, groups and individuals, compared with national standards
- the gap between the performance of cohorts, groups and individuals against predictive models that provide forward estimates based on the historic performance of similar cohorts, groups or individuals
- in-school subject variability
- the impact of interventions designed to improve the progression of cohorts, groups or individuals, and to narrow gaps in attainment.

Two important analysis tools that are used widely by schools are RAISEonline (www.raiseonline.org) and Fischer Family Trust (www.fftlive.org).

RAISEonline (Reporting and Analysis for Improvement through School Self-Evaluation) has replaced the Ofsted Performance and Assessment (PANDA) report and the DfES Pupil Achievement Tracker (PAT). It supports schools in:

- exploring their performance data in depth, down to individual pupil level, as part of the self-evaluation process
- saving and updating data to take account of the latest attainment and tracking information.

Features include:

- reports and analysis covering the attainment and progress of pupils in Key Stages 1, 2 and 4, with interactive features allowing exploration of hypotheses about pupils' performance
- contextual information about the school, including comparisons to schools nationally
- question-level analysis, allowing schools to investigate the performance of pupils in specific curriculum areas
- target setting, supporting schools in the process of monitoring, challenging and supporting pupils' performance
- data management facility, providing the ability to import and edit pupil-level data and create school-defined fields and teaching groups.

In workshops 2 and 3 the data that are available in the full RAISEonline report are explored, showing how data can be enriched and more sharply focused, using the interactive options that are available when working online.

Fischer Family Trust (FFT) provides schools and local authorities (LAs) with a range of online reports to support self-evaluation. The workshop sessions explore some primary and secondary phase reports that are used extensively by schools, and the options available online to refine the analysis.

The aim of FFT is to help schools make effective use of value-added test and teacher assessment (TA) data to raise individual pupils' attainment. Analyses are based upon matched pupil data and provide a range of estimates of likely attainment. There are two models for FFT estimates:

- the **prior attainment model** (model PA)
- the **socio-economic model** (model SE)

Using Model PA gives one type of estimate:

- Type A, based upon pupils' prior attainment, gender and age.

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Using Model SE gives three types of estimate:

- Type B, based upon pupils' prior attainment, gender, age and school context
- Type C, based on Type B and then taking into account the improvement needed for national or locally negotiated local authority targets
- Type D, based on Type B and then adjusting to ensure it is consistent with the 'top 25%' of schools (value-added).

Many schools use FFT Live pupil estimate reports to inform the target-setting process, and to provide data for school tracking systems. It is important to understand that these estimates are not predictions or targets, and that they are based on what has happened in previous years. If attainment gaps are going to narrow, groups that have historically underperformed need to improve their rate of progress more rapidly than for their peers, and therefore greater ambition and challenge needs to be injected when setting end-of-year and end-of-key-stage targets.

Data workshops

Workshop 1: Narrowing gaps – setting the scene (60 minutes)

Participants

- Senior, key stage, year or subject leaders in primary schools
- Senior leadership team, middle leaders, core subject teams in secondary schools
- Members of cross-phase development groups, Narrowing the Gaps (NtG) or FSM leads

Objectives

- To review the school's current use of data in relation to underperforming pupils or groups entitled to free school meals (FSM)
- To reach a shared understanding of what good progress means
- To agree next steps in development

Resources

- Slide presentation *Workshop 1: Narrowing gaps – setting the scene* (00912-2009PPT-EN-01) (optional – available to download from the National Strategies website www.standards.dfes.gov.uk/nationalstrategies, select 'Leadership', then 'Narrowing the Gaps', then 'Know the gaps', and then 'Identifying underachieving pupils')

Introduction (5 minutes)

Introduce the workshop with **slide 1**, which sets out the objectives.

Explain that this is the first of four available workshops. This workshop sets out an overview, rationale and key review questions; later workshops give practical guidance on data analysis and use of interactive RAISEonline resources to generate school-level, subject-level and pupil-level level analysis.

At the outset, ensure that participants are clear about **historic or retrospective data**, relating to pupils who have completed a key stage, and **tracking data**, relating to current performance drawn from teachers' assessment and Assessing Pupils' Progress (APP).

Activity 1: The place of data analysis (15 minutes)

Slide 2 sets out questions, designed to clear the ground by asking delegates to reflect on why historic analysis of data is important and its practical impact on the work of the school at present. This starter activity would be best undertaken by participants in pairs or groups of three.

- How can retrospective analysis of historic data help in raising the attainment of FSM pupils and other underachieving groups?
- Make a list of examples in your school of where analysis of FSM data has made a difference to what senior leaders, teachers and departments have done.

Take feedback (using flipcharts or sticky notes) and use **slides 3 and 4** to summarise or extend key points.

Activity 2: Good progress**(20 minutes)**

Link this with the previous activity by emphasising that data analysis is only useful when it leads to identification of target groups and specific pupils, and action to accelerate progress. To gauge a trajectory for *accelerated* progress, schools need to be clear at the outset about what they mean by *good* progress.

Slide 5 introduces this topic. Ask participants to work in small, mixed-constituency groups, to discuss then feed back on this question.

- How much progress do we expect pupils to make:
 - from Early Years (EY) to the end of KS2?
 - from KS2 to KS4?

Key points to draw out are that the pupils' starting point, or prior attainment, should be taken into account but that no ceiling should be put on to the progress a pupil is able to make. The progress of groups of pupils that have underperformed historically needs to be accelerated significantly if attainment gaps are to be narrowed.

Use **slides 6 and 7** to show national expectations, drawn from the target-setting guidance for 2010.

In secondary schools, invite further comments on **slide 8**, which sets out national data on progression rates (secondary only). You may wish to draw on the following commentary, to add to discussion.

The national data shows that about a quarter of pupils make four levels of progress from Key Stage 2 to Key Stage 4, but a significant percentage make progress of only two levels or less. It would not be sensible to make assumptions about which pupils might fall into these extreme categories. There will be some able pupils who have 'switched off' during Key Stages 3 and 4 and who make two levels or less, and some pupils on the SEN register, with English as an additional language (EAL) or from disadvantaged backgrounds, who make four levels of progress, but possibly from a very low starting point. In some cases, accelerated progress is still not sufficient to enable the pupil to reach the grade C threshold at Key Stage 4.

Activity 3: Review questions**(15 minutes)**

Slides 9 and 10 now pose some sharp questions over where the school is in its use of data.

- What analysis have we done of pupils' progress across a key stage and beyond?
- What are the characteristics of pupils who make slow or accelerated progress across a given key stage in the core subjects?
- Are we clear which FSM pupils are making good progress and which are not?
- Are we using this analysis to:
 - inform early identification of FSM pupils who are likely to make slow progress?
 - set out the expected progress each year, supported by robust tracking?
 - provide high-quality teaching, challenge, support, and intervention where needed?
- Is every teacher in every class aware of FSM pupils whose progress is at risk, and accountable for effective action to understand the needs of these pupils and accelerate their progress?

The facilitator will need to judge the level of data literacy in the school and pitch discussion, either to confirm effective practice through detailed answers or, alternatively, validate this as an important agenda for development. Ask participants to confirm whether these are valid questions and to add any other 'powerful questions' they may wish to generate.

Plenary

(5 minutes)

Slide 11 brings the workshop together, with agreement of next steps to feed in to Workshop 4. **Slide 12** sets out the focus of further workshops to support data analysis. It may also be helpful to draw participants' attention to the Narrowing the Gaps area of the National Strategies website, where further resources are available.

Workshop 2P (Primary): Using RAISEonline to examine attainment data (95 minutes)

Participants

This activity can be undertaken by senior leadership teams in primary schools and could, in addition, involve subject leaders.

Objectives

- To examine the data analyses that are available in RAISEonline and how they can be used to explore attainment gaps
- To use the analyses to identify attainment gaps in the school and agree aspects of focus for improvement

Resources

- Resources 2.1P–2.7P (pages 34–44)
- The most recent RAISEonline full report for your school
- Internet access to interactive RAISEonline (requires a username and password)
- Slide presentation *Workshop 2P (Primary): Using RAISEonline to examine attainment data* (00912-2009PPT-EN-02) (optional – available to download from www.standards.dfes.gov.uk/nationalstrategies, select ‘Leadership’, then ‘Narrowing the Gaps’, then ‘Know the gaps’, and then ‘Identifying underachieving pupils’)

Introduction (5 minutes)

Introduce the workshop with **slide 1**, which sets out the objectives.

Activity 1: Analysing gaps, using average point scores (45 minutes)

Activity 1a: Attainment gaps relating to gender and FSM eligibility

RAISEonline contains analyses that allow identification of gaps in terms of average point scores (APS) for all key groups within the school. The analyses are in the attainment section of RAISEonline. (See www.dfes.gov.uk/performancetables/primary_07/2007Testandexaminationpointscores.doc for help converting National Curriculum levels into point scores.)

Look at **Resource 2.1P: KS2 APS by pupil type – gender and FSM**, which is also shown on **slide 2**. Record your observations and hypotheses from the data in this table. Then refer to **slide 3**.

Some key points to note

- In this school, boys do better than girls overall and in English, mathematics and science, while nationally girls do better than boys, except in mathematics.
- FSM children attain roughly half a National Curriculum level (3 points) above the national average.
- The attainment gap between non-FSM children and the national average is much less, roughly 0.5 points.

Activity 1b: Attainment gaps relating to special educational needs

Look at **Resource 2.2P: KS2 APS by pupil type – SEN**, which is also shown on **slide 4**. Record your observations and hypotheses from the data in this table. Then refer to **slide 5**.

Some key points to note

- There is only one child in the school with a statement of SEN, and they have attained level 5b (33 points) in all subjects at Key Stage 2.
- There are three children at school action plus; their attainment is very close to the national average, except in English, where it is 1 point below (half a sublevel).
- Children with no identified SEN, and those at school action, attain consistently above the national average in all three core subjects.

Activity 1c: Attainment gaps relating to ethnicity

Look at **Resource 2.3P: KS2 APS by pupil type – ethnicity**, which is also shown on **slide 6**. Record your observations and hypotheses. Then refer to **slide 7**.

Some key points to note

- One child of Indian heritage attains well below the national average in all subjects, the smallest gap being in science (about 2 points or one sublevel below the national average).
- One child is ascribed as a Traveller of Irish heritage; this child is attaining almost one level above the national average in English (6 points) and almost two levels above the national average in mathematics.

Now look at the equivalent data for your school. Discuss and record any key issues or observations relating to gender, FSM eligibility, SEN status and ethnicity.

Look up the equivalent analysis for Key Stage 1 for your own school: Report KS1.2B. Record any key issues or observations.

Activity 1d: In-school variation

Look at **Resource 2.4P: KS1 APS for all National Curriculum subjects – five-year trend by subject**, which is also shown on **slide 8**. Record your observations and hypotheses from this data. Then refer to **slide 9**.

Some key points to note

- There was a significant improvement in the APS (all subjects) in 2005 to 16.0 points, but this was followed in 2006 by a significant fall to 14.4 points.
- Attainment in writing in 2008 was significantly below the national average, while reading and mathematics were in line with the national average.

Find the equivalent table for your own school. Record any key issues or observations.

Look up the equivalent analysis for Key Stage 2 for your own school: Report KS2.2B and record any key issues or observations from this data. Refer to **slides 10 and 11**.

Key questions about average point scores

- How does the gender gap in core subjects in the school compare to the gender gap nationally?
- How well do FSM children do compared to the school average for all children? For non-FSM children? Is the gap narrowing, or getting wider, compared to previous years?
- How well do children on the SEN register do, compared to the school average? Is the gap narrowing, or getting wider, compared to previous years?
- Are sufficiently ambitious targets set for children from underachieving ethnic groups? If children meet their targets, will this result in a narrowing of the gap between disadvantaged groups and their peers?
- How are groups that have underperformed historically being targeted for additional support?
- How much variability is there in attainment in different subjects?

Activity 2: Analysing gaps, using threshold measures**(45 minutes)****Activity 2a: Threshold measures and gender and FSM eligibility**

RAISEonline offers analysis that allows identification of gaps in terms of the percentage of children reaching or exceeding a given threshold score, for all key groups within the school. The analysis is in the attainment section of RAISEonline.

Look at **Resource 2.5P: Percentage of pupils attaining or surpassing each level in Key Stage 1 writing – gender and FSM**, which is also shown on **slide 12**. Record your observations and hypotheses from this data. Then refer to **slide 13**.

Some key points to note

- No children in this school have gained level 3 in writing, compared to 12% nationally.
- No FSM children in this school have achieved level 2a or better in writing, whereas 38% of the non-FSM children have achieved this threshold.

Look at the equivalent data for your school. Discuss and record any key issues or observations relating to gender and FSM eligibility.

Use the 'Subject' drop-down menu to look at reading and mathematics for your school. Record any key issues or observations.

Now look up the equivalent analysis for Key Stage 2 for your own school: Report KS2.4A and record any key issues or observations.

Activity 2b: Threshold measures and gender and FSM eligibility, in a particular subject

Look at **Resource 2.6P: Percentage of pupils achieving or surpassing each sublevel in Key Stage 2 by subject (English) – gender and FSM**, which is also shown on **slide 14**. Record your observations and hypotheses. Then refer to **slide 15**.

Some key points to note

- 11% of children in the school achieve level 5b, compared to 8% nationally; however, no children achieve level 5a.

- Only one FSM child achieves level 5c or above, while 23 non-FSM children achieve this.

Look at the equivalent data for your school. Discuss and record any key issues or observations relating to gender and FSM eligibility and attainment in English.

Activity 2c: Threshold measures and gender, FSM eligibility and ethnicity, in a particular subject

Look at **Resource 2.7P: Percentage of children achieving or surpassing each sublevel in Key Stage 2 (mathematics) – gender, FSM and ethnicity**, which is also shown on **slide 16**. Record your observations and hypotheses from the data in the table. Then refer to **slide 17**.

A key point to note

- There are 52 children in the cohort; 14 children are non-FSM White British girls. Of these, 71% achieved level 4a or better in mathematics, compared to 68% of the non-FSM White British boys.

Look at the equivalent data for your school. Discuss and record any key issues or observations relating to threshold measures in mathematics. Refer to **slides 18 and 19**.

Key questions about *threshold measures*

- How well do FSM children or children from minority ethnic groups attain, compared to school and national averages on statutory threshold indicators (level 4+ in both English and mathematics)? Are gaps narrowing?
- Does the school provide good opportunities for children on the gifted and talented register, and higher-attaining children generally, to gain level 3 at Key Stage 1 or level 5 at Key Stage 2?
- Does the school tracking system generate reports that allow leaders and practitioners to see how well key groups are progressing towards ambitious targets? Are targets set that will ensure attainment gaps narrow over time?
- How are groups that have underperformed historically being targeted for additional support?
- How much variability is there in attainment in different subjects?

Workshop 2S (Secondary): Using RAISEonline to examine attainment data (95 minutes)

Participants

This activity can be undertaken by senior and/or middle leadership teams in secondary schools.

Objectives

- To examine the data analyses that are available in RAISEonline and how they can be used to explore attainment gaps
- To use the analyses to identify attainment gaps in the school and agree aspects of focus for improvement

Resources

- Resources 2.1S–2.8S (pages 45–55)
- The most recent RAISEonline full report for your school
- Internet access to interactive RAISEonline (requires a username and password)
- Slide presentation *Workshop 2S (Secondary): Using RAISEonline to examine attainment data* (00912-2009PPT-EN-03) (optional – available to download from www.standards.dfes.gov.uk/nationalstrategies, select ‘Leadership’, then ‘Narrowing the Gaps’, then ‘Know the gaps’, and then ‘Identifying underachieving pupils’)

Introduction (5 minutes)

Introduce the workshop with **slide 1**, which sets out the objectives.

Activity 1: Analysing gaps using average point scores (45 minutes)

Activity 1a: Attainment gaps relating to ethnicity

RAISEonline contains analysis that allows identification of gaps in terms of average point scores for all key groups within the school. The analysis is in the attainment section of RAISEonline. (See www.dfes.gov.uk/performancetables/primary_07/2007Testandexaminationpointscores.doc for help converting GCSE grades and equivalents into point scores.)

Look at **Resource 2.1S: Key Stage 4 capped APS by pupil characteristics – ethnicity**, which is also shown on **slide 2**. Record your observations and hypotheses from this data. Then refer to **slide 3**.

Some key points to note

- The capped APS for White British pupils in this school is about 82 points below the national average – the equivalent of almost 14 GCSE grades across the eight subjects. (Each GCSE grade is worth 6 points.)
- There is a great deal of variability in the attainment of different groups on this measure, with some performing above the national average (for example, Bangladeshi) and others performing below the national average (for example, Black Caribbean, whose score of 63 points is equivalent to four GCSE grade Ds).

- Scores that are significantly below the national average are identified by the blue Sig– cell in the last column of the table.

Activity 1b: Attainment gaps relating to gender and FSM

Look at **Resource 2.2S: Key Stage 4 capped APS by pupil characteristics – gender and FSM**, which is also shown on **slide 4**. Record your observations and hypotheses from the data in this table. Then refer to **slide 5**.

Some key points to note

- All the groups shown attain significantly below the national average (Sig–).
- The school gap between boys and girls is 55.8 points – equivalent to more than nine GCSE grades across the eight subjects. Nationally this gap is 21.8 points, equivalent to about four GCSE grades across the eight subjects. (Each GCSE grade is worth six points.)
- The school gap between FSM and non-FSM pupils is 54.1 points, compared to a national gap of 63.0 points. The relatively narrow gap in this school could be explained by good achievement by FSM pupils, or poor achievement by non-FSM pupils.

Activity 1c: Attainment and special educational needs

Look at **Resource 2.3S: Key Stage 4 capped APS by pupil characteristics – SEN**, which is also shown on **slide 6**. Record your observations and hypotheses from the data in this table. Then refer to **slide 7**.

Some key points to note

- Pupils at school action and school action plus attain significantly below the national averages.
- Pupils with a statement of SEN have an average capped total point score of 115.7 points. This is equivalent to seven GCSEs at grade G (GCSE grade G is equivalent to 16 points). Nationally, statemented pupils gain an average of 188.1 points, the equivalent of eight GCSEs at grade F, or nearly five GCSEs at grade C.

Now look at the equivalent data for your school. Discuss and record any key issues or observations. Include ethnicity, gender, FSM eligibility and SEN status in your analysis.

Activity 1d: Attainment and ethnicity, in a particular subject

Look at **Resource 2.4S: Key Stage 4 capped APS by subject (mathematics) – ethnicity**, which is also shown on **slide 8**. Record your observations and hypotheses from this data. Then refer to **slide 9**.

Some key points to note

- White and Black Caribbean pupils are attaining significantly below the national average in mathematics. The gap of 13 points equates to just over two GCSE grades.
- Only one group (any other Asian background) have an average point score that equates to a grade C or above in mathematics (40 points or more).
- The nine pupils of White and Black Caribbean origin in the school attain 2.5 points less in mathematics than all pupils in the school – roughly half a GCSE grade. This is similar to the picture nationally, where the attainment gap in mathematics is 3.1 points.

Now look at the equivalent data for your school. Discuss and record any key issues or observations.

Using the ‘Subject’ drop-down menu in RAISEonline (See Key skill 2, page 82), obtain your data by pupil characteristics for English and mathematics. Discuss and record any further issues or observations. Refer to **slides 10 and 11**.

Key questions about average points scores

- How does the gender gap in core subjects in the school compare to the gender gap nationally?
- How well do FSM pupils do, compared to the school average for all pupils? And compared to non-FSM pupils? Is the gap narrowing, or getting wider compared to previous years?
- How well do pupils on the SEN register do, compared to the school average? Is the gap narrowing, or getting wider, compared to previous years?
- Are sufficiently ambitious targets set for pupils from underachieving ethnic groups? If pupils meet their targets, will this result in a narrowing of the gap between disadvantaged groups and their peers?
- How are groups that have underperformed historically being targeted for additional support?
- How much variability in attainment is there across different subjects?

Activity 2: Analysing gaps using threshold measures**(45 minutes)****Activity 2a: Threshold measures and gender and FSM eligibility**

RAISEonline offers analysis that allows identification of gaps in terms of the percentage of pupils reaching or exceeding a given threshold score for all key groups within the school. The analysis is in the attainment section of RAISEonline.

Look at **Resource 2.5S: Key Stage 4 attainment thresholds by pupil characteristics – gender and FSM**, which is also shown on **slide 12**. This report provides analysis of pupils' performance at GCSE and equivalent. Record your observations and hypotheses from this data. Then refer to **slide 13**.

Some key points to note

- Of the 28 FSM pupils in the cohort, only 4% gain 5+ A*-C including English and mathematics (one pupil), a gap of 9 ppts with all pupils, and 12 ppts with non-FSM pupils.
- Boys outperform girls on the threshold indicators that include English, mathematics or functional skills.

Look at the equivalent data for your school. Discuss and record any key issues or observations. Include SEN status and ethnicity in your analysis, as well as gender and eligibility for FSM.

Activity 2b: Threshold measures – English and mathematics

Look at **Resource 2.6S: Key Stage 4 attainment thresholds by subject – English and mathematics**, which is also shown on **slide 14**. This analysis shows the performance of full GCSE subjects at Key Stage 4 for all pupils. Significance tests compare school data against the corresponding national data. Record your observations and hypotheses from the extract for English and mathematics. Then refer to **slide 15**.

Some key points to note

- There are significant attainment gaps for higher-attaining pupils, with the percentage of pupils gaining A*-A grades in English literature, English language or mathematics significantly below that seen nationally.
- The percentage of pupils gaining A*-C grades in English or mathematics is significantly below the national average, with gaps of 33.5 ppts and 40.6 ppts respectively.

Look at the equivalent data for your school. Discuss and record any key issues or observations. Use the 'Options' menu to view this report for boys only, or girls only (Key skill 7, page 93).

Activity 2c: Threshold measures – English/English language

Look at **Resource 2.7S: Key Stage 4 percentage achieving attainment threshold measures by subject (English/English language) – gender, FSM and SEN**, which is also shown on **slide 16**. Record your observations and hypotheses. Then refer to **slide 17**.

Some key points to note

- The gap between boys and girls in the school is 1 ppt, compared to 13 ppts nationally. This is because of the marked underperformance of girls compared to the national average.
- The gap between FSM and non-FSM pupils in the school is 22 ppts, compared to 25 ppts nationally.
- All groups except SEN with a statement, are attaining significantly below the national average on this threshold indicator.

Look at the equivalent data for your school. Discuss and record any key issues or observations relating to threshold measures in English. Include ethnicity in your analysis. Use the 'Subject' menu to look at outcomes for mathematics (Key skill 2, page 90).

Activity 2d: Threshold measures and gender, ethnicity and FSM eligibility

Look at **Resource 2.8S: Key Stage 4 percentage achieving attainment threshold measures by subject (English/English language) – gender, FSM and main ethnic code**, which is also shown on **slide 18**. Record your observations and hypotheses. Then refer to **slide 19**.

Some key points to note

- 31% of the non-FSM White British girls gained A*-C in English, while only 18% of the FSM White British girls achieved this threshold, a gap of 13 ppt.
- 34% of the non-FSM White British boys gained A*-C in English, while only 6% of the FSM White British boys achieved this threshold, a gap of 28 ppt.

Look at the equivalent data for your school (selecting English/English language and multiple grouping – Key skill 5, page 92). Discuss and record any key issues or observations. Refer to **slides 20 and 21**.

Key questions about threshold measures

- How well do FSM pupils or pupils from minority ethnic groups attain, compared to school and national averages on statutory threshold indicators (5+ A*-C, including English and mathematics)? Are gaps narrowing?
- Does the school provide good opportunities for pupils on the gifted and talented register, and higher-attaining pupils generally, to gain A*-A grades at Key Stage 4?
- Does the school tracking system generate reports that allow leaders and practitioners to see how well key groups are progressing towards ambitious targets? Are targets set that will ensure attainment gaps narrow over time?
- How are groups that have underperformed historically being targeted for additional support?
- How much variability in attainment is there across different subjects?

Workshop 3P (Primary): Analysing progress data (120 minutes)

Participants

This activity can be undertaken by senior leadership teams in primary schools and could, in addition, involve subject leaders.

Objectives

- To explore the data analyses that are available in RAISEonline and how they can be used to identify differences in progression rates
- To consider the use of pupil estimates, available through FFT Live data, to set challenging targets aimed at narrowing attainment gaps

Resources

- Resources 3.1P–3.9P (pages 56–71)
- The most recent RAISEonline full report for your school
- Internet access to interactive RAISEonline (requires a username and password)
- Internet access to FFT Live (requires a username and password)
- Slide presentation *Workshop 3P (Primary): Analysing progress data* (00912-2009PPT-EN-04) (optional – available to download from www.standards.dcsf.gov.uk/nationalstrategies, select ‘Leadership’, then ‘Narrowing the Gaps’, then ‘Know the gaps’, and then ‘Identifying underachieving pupils’)

Introduction (5 minutes)

Introduce the workshop with **slide 1**, which sets out the objectives.

Progress

Measures of progress allow an analysis of the learning journey that cohorts, groups and individuals have made since the previous key stage. Several different reports are available to support this analysis. Value-added (VA) reports are based on prior attainment at the previous key stage. Contextual value-added (CVA) reports are based on prior attainment and a wide range of contextual factors, including ethnicity, gender, SEN status. VA and CVA reports are based on the change in average point score (APS) from one key stage to the next. Pupil Progress Reports describe the learning journey that children have made, using National Curriculum levels, allowing analysis of the number of levels of progress made by individuals and groups of children. Conversion tables show what percentage of a cohort has moved from a given sublevel at one key stage to a given level, sublevel or grade at the next key stage.

Activity 1: Analysing differences in progression rates, using value-added reports (30 minutes)

Activity 1a: Analysing differences in progression rates, using VA reports – gender

The VA reports in RAISEonline compare the actual outcomes of individual children with predicted outcomes that are based on their prior attainment. Look at **Resource 3.1P: Key Stage 1 to Key Stage 2 VA expected vs actual scatterplot – gender**, which is also shown on **slide 2**. The analysis is based upon comparing the predicted outcome with the actual outcome of each child. Record your observations and hypotheses. Then refer to **slide 3**.

Some key points to note

- Three boys but no girls have made progress that is in line with the top 10% of children nationally.
- One boy and one girl have made progress that is in line with the bottom 10% of children nationally.

Look at the equivalent VA report for your school. Discuss and record any key issues or observations about the progress of your children from Key Stage 1 to Key Stage 2.

Activity 1b: Analysing differences in progression rates, using fine-grade VA analysis – SEN

Resource 3.1P (Report Pri10E) in Activity 1a showed the average progress children made across all three subjects (English, mathematics and science). This could mask any differences in value added between the core subjects. Using the 'Subject' menu, it is possible to identify and explore any differences.

Using the 'Subject' drop-down menu in RAISEonline and the grouping facility, it is possible to obtain value-added data for science, for example, showing the distribution of children on the SEN register within a cohort.

Look at **Resource 3.2P: Key Stage 1 to Key Stage 2 VA expected vs actual scatterplot (science) – SEN**, which is also shown on **slide 4**. The analysis is based upon comparing the predicted outcome with the actual outcome of each child. Record your observations and hypotheses. Then refer to **slide 5**.

Some key points to note

- Eight children are identified on the SEN register as requiring school action.
- Six of these children have expected Key Stage 2 scores of 25 points or below (level 4c or below).
- Only one of these children is making significantly less progress than might be expected, having an expected score of 25.5 and an actual score of 22.5. This indicates that the child is about a year behind the expected score in science (half a National Curriculum level).

Now look at the equivalent analyses for your school, for each of English, mathematics and science. Discuss and record any key issues or observations about the progress of your children from Key Stage 1 to Key Stage 2. Refer to **slides 6 and 7**.

Key questions about VA reports

- How many children lie above the 10th percentile line, or below the 90th percentile line? Is either of these groups dominated by a particular group of children (e.g. boys, girls, FSM children, children from minority ethnic groups)?
- Is there a difference in the pattern of progress in core subjects for lower-attaining children (expected score below 21 (level 3b) at Key Stage 2) and that of their peers?
- Is there a difference in the pattern of progress in core subjects for higher-attaining children (expected score above 27 (level 4b) at Key Stage 2) and that of their peers?
- Does school analysis make effective use of the 'Subject' and 'Group' menus when analysing progress?

Activity 2: Analysing differences in progression rates, using contextual value-added reports**(30 minutes)****Activity 2a: Analysing differences in progression rates, using CVA reports – gender**

The CVA reports in RAISEonline compare the actual outcomes of individual children with the predicted outcomes, based on their prior attainment and a wide range of contextual factors, including ethnicity, gender and SEN status.

Look at **Resource 3.3P: Key Stage 1 to Key Stage 2 CVA analysis, expected vs actual scatterplot (English) – boys**, which is also shown on **slide 8**. Record your observations and hypotheses from the data in the scatterplot. Then refer to **slide 9**.

Some key points to note

- Boys are making good progress in English. Only one boy is below the 75th percentile line. His expected Key Stage 2 score was 20 points, and he actually scored 17 points. The difference of 3 points is half a National Curriculum level, equivalent to about one year's progress.
- The boy with the lowest expected score made exceptionally good progress, scoring 25 points (equivalent to level 4c).

Find the equivalent data for your school (English selected, filtered for boys, Key skill 4, page 91). Discuss and record any key issues or observations.

Activity 2b: Analysing differences in progression rates using CVA reports – FSM

Look at **Resource 3.4P: Key Stage 1 to Key Stage 2 CVA analysis, expected vs actual scatterplot (mathematics) – FSM**, which is also shown on **slide 10**. Record your observations and hypotheses from the data in this scatterplot. Then refer to **slide 11**.

Some key points to note

- FSM children all make progress that is in line with, or better than, expectations.
- The progress of higher-attaining children is variable (those with expected Key Stage 2 score of at least 31 points (level 5c). Three of these children are located between the 75th and 90th percentiles, while five are located on or above the 25th percentile line).

Find the equivalent report for your school (Mathematics selected, grouped by FSM eligibility, Key skill 3, page 91). Discuss and record any key issues or observations.

Explore other subjects and groups for your school.

Activity 2c: Analysing differences in progression rates using CVA reports – gender, FSM eligibility and SEN

Look at **Resource 3.5P: Key Stage 1 to Key Stage 2 CVA dynamic report (mathematics) – gender, FSM and SEN**, which is also shown on **slide 12**. Record your observations and hypotheses from the data in this table. Then refer to **slide 13**.

Some key points to note

- Two groups have CVA scores below 100. These are not identified as significant (sig) – because the confidence intervals are large because of the small group sizes. Both these groups refer to children entitled to FSM.
- One child (a boy) has a statement of special educational need. He is not entitled to FSM, and has a CVA score of 101.1 for mathematics.

Find the equivalent data for your own school (mathematics selected, grouped by gender, FSM eligibility and SEN status, Key skill 3, page 91). Discuss and record any key issues or observations. Refer to **slides 14 and 15**.

Key questions about CVA reports

- Are groups that have underperformed historically making enough progress to narrow attainment gaps? How can these groups, especially FSM children, be supported further to ensure that they achieve key threshold indicators?
- How many children lie above the 10th percentile line, or below the 90th percentile line? Is either of these groups dominated by a particular group of children (e.g. boys, girls, FSM children, children from minority ethnic groups)?
- Is there a difference in the pattern of progress in core subjects for lower-attaining children (expected score below 21 (level 3b) at Key Stage 2) and that of their peers?
- Is there a difference in the pattern of progress in core subjects for higher-attaining children (expected score above 27 (level 4b) at Key Stage 2) and that of their peers?
- Does school analysis make effective use of the 'Subject' and 'Group' menus when analysing progress?

Activity 3: Analysing differences in progression rates, using CVA threshold measures (15 minutes)

RAISEonline offers analysis that provides the number of children who achieved a particular threshold, grouped by their estimated probability of achieving the threshold. The probability for each child is calculated by taking into account their contextual characteristics and their prior attainment. Where the school value differs significantly from the school's corresponding predicted success rate, it is highlighted in green (sig+) or blue (sig-).

Look at **Resource 3.6P: Key Stage 1 to Key Stage 2 CVA threshold measures report (level 4+ in English and mathematics)**, which is also shown on **slide 16**. Record your observations and hypotheses from the data in this table. Then refer to **slide 17**.

A key point to note

- The success rate for all three groups of children is below the predicted rate, but significantly so for children with a lower probability of meeting the threshold.

Find the equivalent table for your own school. Discuss and record any key issues or observations.

Use the 'Options' menu to look at the equivalent report for level 5+ in English and mathematics. Discuss and record any key issues or observations.

Activity 4: Using conversion charts to analyse progression

(20 minutes)

Activity 4a: Using conversion charts to analyse progression in a particular subject

This analysis details progression rates for all children in the cohort. Charts are available, showing the progression rates of children who do not reach national expectations, and also for children who meet or exceed national expectations.

Look at **Resource 3.7P: Key Stage 1 to Key Stage 2 pupil progress chart (English)**, which is also shown on **slide 18**. Record your observations and hypotheses from the data. Then refer to **slide 19**.

Some key points to note

- All seven children who achieved level 3 at Key Stage 1 made fewer than two levels of progress in Key Stage 2.
- 64% of the children who achieved below level 4 at Key Stage 2 were boys.
- 57% of the children who achieved below level 4 at Key Stage 2 were entitled to FSM.

Create the equivalent chart for your school. Discuss and record any key issues or observations.

Activity 4b: Using conversion charts to analyse progression in a particular subject – gender

Look at **Resource 3.8P: Key Stage 1 to Key Stage 2 pupil progress chart (English) – high attainers, girls**, which is also shown on **slide 20**. Record your observations and hypotheses from the data. Then refer to **slide 21**.

A key point to note

- Seven girls achieved level 3 at Key Stage 1. Three of them made expected progress to level 5 at Key Stage 2, while four made only one level of progress during Key Stage 2.

Create the equivalent chart for your own school (English selected, filtered on girls). Discuss and record any key issues or observations. Explore progression patterns in core subjects for key groups in your school. Refer to **slides 22 and 23**.

Key questions about conversion charts

- Which groups of children in the school are stuck? (That is, they made no measurable progress during a key stage.)
- Which groups of children make slow progress?
- Which groups of children make expected or better progress, but still fail to reach important threshold measures?
- Does the school tracking system accurately identify children who are falling behind in the early years of a key stage?
- Does the school tracking system identify children who are falling behind in one or other of the core subjects?
- How rigorously is the impact of interventions designed to raise attainment in core subjects evaluated?

Activity 5: Setting targets, using Fischer Family Trust (FFT) estimates

(20 minutes)

FFT Live provides schools and LAs with a range of online reports to support self-evaluation. This workshop explores some primary-phase reports that are used extensively by schools, and the options available online to refine the analysis.

The aim of FFT is to help schools make effective use of value-added test and teacher assessment (TA) data to raise individual children's attainment. Analyses are based upon matched pupil data and provide a range of estimates of likely attainment. There are two models for FFT estimates:

- the prior attainment model (model PA)
- the socio-economic model (model SE)

Using Model PA gives one type of estimate:

- Type A, based upon children's prior attainment, gender and age.

Using Model SE gives three types of estimate:

- Type B, based upon children's prior attainment, gender, age and school context
- Type C, based on Type B and then taking into account the improvement needed for national or locally negotiated local authority targets
- Type D, based on Type B and then adjusting to ensure it is consistent with the 'top 25%' of schools (value-added).

Look at **Resource 3.9P: Key Stage 2 pupil estimate report (English)**, which is also shown on **slide 24**. This report shows the probability of each child attaining individual Key Stage 2 levels. Estimates are available for all Key Stage 2 core subjects (including reading and writing) and can be selected using the pull-down menu options in the grey box at the top of the report.

Record your observations and hypotheses from the data in this table. Then refer to **slide 25**.

Some key points to note

- The green highlight shows the levels achieved by children within the top 5%, 10%, 15%, 20% or 25% (user option). In this example, the 25% option is selected. The orange highlight shows the level with the highest probability of being achieved by the child.
- Katrina Aluminium has almost as high an estimated probability of achieving level 3 as level 2 but one in twenty similar children historically have attained level 4.

Find the equivalent table for your own school. Discuss and record any issues or observations. Refer to **slide 25**.

Key questions about FFT pupil estimate reports

- Is the school's use of pupil estimates based on a thorough understanding of the difference between estimates and targets?
- How is information about individual children's expertise and interest in a subject taken into account when using FFT estimates (that are based on prior attainment in core subjects)?
- How is additional challenge incorporated in individual children's targets to ensure that attainment gaps are narrowed for groups that have underperformed historically?

Workshop 3S (Secondary): Analysing progress data (120 minutes)

Participants

This activity can be undertaken by senior leadership teams in secondary schools and could also involve subject leaders.

Objectives

- To explore the data analyses that are available in RAISEonline and how they can be used to identify differences in progression rates
- To consider the use of pupil estimates, available through FFT Live data, to set challenging targets aimed at narrowing attainment gaps

Resources

- Resources 3.1S–3.9S (pages 72–86)
- The most recent RAISEonline full report for your school
- Internet access to interactive RAISEonline (requires a username and password)
- Internet access to FFT Live (requires a username and password)
- Slide presentation *Workshop 3S (Secondary): Analysing progress data* (00912-2009PPT-EN-05) (optional – available to download from [www.standards.dcsf.gov.uk/nationalstrategies](http://www.standards.dfes.gov.uk/nationalstrategies), select ‘Leadership’, then ‘Narrowing the Gaps’, then ‘Know the gaps’, and then ‘Identifying underachieving pupils’)

Introduction (5 minutes)

Introduce the workshop with **slide 1**, which sets out the objectives.

Measures of progress allow an analysis of the learning journey that cohorts, groups and individuals have made since the previous key stage. Several different reports are available to support this analysis. Value-added (VA) reports are based on prior attainment at the previous key stage. Contextual value-added (CVA) reports are based on prior attainment and a wide range of contextual factors, including ethnicity, gender, SEN status. VA and CVA reports are based on the change in average point score from one key stage to the next. Pupil Progress Reports describe the learning journey that pupils have made, using National Curriculum levels, allowing analysis of the number of levels progress made by individuals and groups of pupils. Conversion tables show what percentage of a cohort have moved from a given sublevel at one key stage to a given level, sublevel or grade at the next key stage.

Activity 1: Analysing differences in progression rates, using VA reports (30 minutes)

Activity 1a: Analysing differences in progression rates, using VA reports – gender

The VA reports in RAISEonline compare the actual outcomes of individual pupils with predicted outcomes that are based on their prior attainment. Look at **Resource 3.1S: Key Stage 2 to Key Stage 4 VA, expected vs actual scatterplot – gender**, which is also shown on **slide 2**. Record your observations and hypotheses. Then refer to **slide 3**.

Some key points to note

- The progress of two girls and one boy is comparable with the bottom 10% of pupils nationally.
- Some pupils from across the ability range have made better than expected progress.

Look at the equivalent VA report for your school. Discuss and record any key issues or observations about the progress of your pupils from Key Stage 2 to Key Stage 4.

Resource 3.1S (Report Sec10E) showed the average progress pupils made across eight GCSE subjects. This could mask differences in value added between the core subjects. It is possible to use the 'Subject' menu to identify and explore any differences.

Activity 1b: Analysing differences in progression rates, using fine grade VA analysis (mathematics) – FSM eligibility

Look at **Resource 3.2S: Key Stage 2 to Key Stage 4 VA, expected vs actual scatterplot (mathematics) – gender and FSM**, which is also shown on **slide 4**. Record your observations and hypotheses. Then refer to **slide 5**.

Some key points to note

- Two pupils have not achieved a GCSE grade in mathematics; one of these pupils was entitled to FSM.
- FSM pupils are well represented at all GCSE grades, and only two FSM pupils have progress significantly lower than expected (below the 75th percentile).

Now look at the equivalent analyses for your school, for English and for mathematics. Discuss and record any key issues or observations about the progress of your pupils from Key Stage 2 to Key Stage 4. Refer to **slides 6 and 7**.

Using the 'Subject' drop-down menu in RAISEonline, and the grouping facility, it is possible to obtain value-added data for mathematics, for example, showing the distribution of pupils entitled to FSM within a cohort.

Key questions about VA reports

- How many pupils lie above the 10th percentile line, or below the 90th percentile line? Is either of these groups dominated by a particular group of pupils (e.g. boys, girls, FSM pupils, pupils from minority ethnic groups)?
- Is there a difference in the pattern of progress in core subjects for lower-attaining pupils (expected score below 28 (grade E) at Key Stage 4) and that of their peers?
- Is there a difference in the pattern of progress in core subjects for higher-attaining pupils (expected score above 48 (grade B) at Key Stage 4) and that of their peers?
- Does school analysis make effective use of the 'Subject' and 'Group' menus when analysing progress?

Activity 2: Analysing differences in progression rates, using CVA reports

(30 minutes)

The CVA reports in RAISEonline compare the actual outcomes of individual pupils with the predicted outcomes, based on their prior attainment and a wide range of contextual factors, including ethnicity, gender and SEN status.

Activity 2a: Analysing differences in progression rates, using CVA reports – gender

Look at **Resource 3.3S: Key Stage 2 to Key Stage 4 CVA, expected vs actual scatterplot (English/English language – boys)**, which is also shown on **slide 8**. Record your observations and hypotheses from the data in this graph. Then refer to **slide 9**.

Some key points to note

- A significant number of boys score no points in English.
- A large number of boys from across the whole ability range are above the 10th percentile line.
- Most boys are making satisfactory or better progress in English, with only 12 below the 75th percentile line.

Create an equivalent scatterplot for your school. Discuss and record any key issues or observations.

Activity 2b: Analysing differences in progression rates, using CVA reports – ethnicity

Look at **Resource 3.4S: Key Stage 2 to Key Stage 4 CVA, expected vs actual scatterplot (English/English language) – ethnicity**, which is also shown on **slide 10**. Record your observations and hypotheses from the data in this graph. Then refer to **slide 11**.

Some key points to note

- Of the pupils who achieved a points score in English, the three pupils with the lowest rates of progress were all of Pakistani origin.
- Of the 11 pupils who achieved no score, 10 were White British and one was mixed White and Asian.
- Bangladeshi pupils all made progress in line with expectation.

Create equivalent scatterplots for your own school. Discuss and record any key issues or observations.

Use the ‘Subject’ menu and the ‘Group’ menu to explore other subjects and groups for your school.

Activity 2c: Analysing differences in progression rates, using CVA reports – FSM eligibility and other contextual factors

Look at **Resource 3.5S: Key Stage 2 to Key Stage 4 CVA dynamic report (mathematics) – gender, FSM and SEN**, which is also shown on **slide 12**. Record your observations and hypotheses from the data in this table. Then refer to **slide 13**.

Some key points to note

- FSM and non-FSM pupils all make progress that is in line with expectation.
- The group with the lowest CVA (998.6) are non-FSM girls at school action.
- The group with the highest CVA (1003.3) are non-FSM, statemented boys. This score shows that they have achieved about half a GCSE grade better than expected in mathematics.

Find this data, and the equivalent data for English, for your own school. Record any key issues or observations. Refer to **slides 14 and 15**.

Key questions about CVA reports

- Are groups that have underperformed historically making enough progress to narrow attainment gaps? How can these groups, especially FSM pupils, be supported further to ensure that they achieve key threshold indicators?
- How many pupils lie above the 10th percentile line, or below the 90th percentile line? Is either of these groups dominated by a particular group of pupils (e.g. boys, girls, FSM pupils, pupils from minority ethnic groups)?
- Is there a difference in the pattern of progress in core subjects for lower-attaining pupils (expected score below 28 (grade E) at Key Stage 4) and that of their peers?
- Is there a difference in the pattern of progress in core subjects for higher-attaining pupils (expected score above 48 (grade B) at Key Stage 4) and that of their peers?
- Does school analysis make effective use of the 'Subject' and 'Group' menus when analysing progress?

Activity 3: Analysing differences in progression rates, using CVA threshold measures**(15 minutes)**

RAISEonline offers analysis that provides the number of pupils who achieved a particular threshold, grouped by their estimated probability of achieving the threshold. The probability for each pupil is calculated by taking into account their contextual characteristics and their prior attainment. Where the school value differs significantly from the school's corresponding predicted success rate, it is highlighted in green (sig+) or blue (sig-).

Look at **Resource 3.6S: Key Stage 2 to Key Stage 4 CVA measures report**, which is also shown on **slide 16**. Record your observations and hypotheses from the data in this table. Then refer to **slide 17**.

A key point to note

- 36 out of the 52 pupils with a middle probability of achieving 5+ A*-C grades, including English and mathematics, achieved this threshold. This is significantly more than the 18 pupils from this group that were expected to do so.

Find the equivalent report for your own school. Record any key issues or observations.

Activity 4: Using conversion charts to analyse progression**(20 minutes)**

This analysis details progression rates for all pupils in the cohort. Charts are available showing the progression rates of pupils who do not reach national expectations, and also for children who meet or exceed national expectations.

Activity 4a: Using conversion charts to analyse progression in a particular subject

Look at **Resource 3.7S: Key Stage 3 to Key Stage 4 pupil progress chart (mathematics)**, which is also shown on **slide 18**. Record your observations and hypotheses from the data. Then refer to **slide 19**.

Some key points to note

- Nine pupils achieved level 5 or above at Key Stage 3, but only a GCSE grade D in mathematics.
- Six pupils (7%) did not achieve any GCSE grade in mathematics.
- 53% of the pupils below GCSE grade C were boys.

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Narrowing the Gaps: from data analysis to impact
A practical guide

Create the equivalent chart for your school. Discuss and record any key issues or observations.

Activity 4b: Using conversion charts to analyse progression in a particular subject – high attainers, FSM eligibility

Look at **Resource 3.8S: Key Stage 3 to Key Stage 4 pupil progress chart (mathematics) – high attainers and FSM**, which is also shown on **slide 20**. Record your observations and hypotheses from the data. Then refer to **slide 21**.

Some key points to note

- No Key Stage 4 grade was recorded for five out of 26 FSM pupils (19%).
- 17 out of 26 FSM pupils (65%) achieved grade D or below.
- Two FSM pupils who achieved level 6 at Key Stage 3 got a grade C at GCSE.
- No FSM pupils achieved level 7 at Key Stage 3.

Create equivalent charts for your own school. Discuss and record any key issues or observations.

Looking at pupils' progress charts, filtered for FSM and non-FSM pupils, side by side, helps to compare their attainment at the previous key stage, and their outcomes at the end of the next key stage. Refer to **slides 22 and 23**.

Key questions about progress charts

- Which groups of pupils in the school are stuck? (That is, they made no measurable progress during a key stage.)
- Which groups of pupils make slow progress?
- Which groups of pupils make expected or better progress, but still fail to reach important threshold measures?
- Does the school tracking system accurately identify pupils that are falling behind in the early years of a key stage?
- Does the school tracking system identify pupils that are falling behind in one or other of the core subjects?
- How rigorously is the impact of interventions designed to raise attainment in core subjects evaluated?

Activity 5: Setting targets, using Fischer

Family Trust (FFT) estimates

(20 minutes)

FFT Live provides schools and LAs with a range of online reports to support self-evaluation. This workshop explores some primary phase reports that are used extensively by schools, and the options available online to refine the analysis.

The aim of FFT is to help schools make effective use of value-added test and teacher assessment (TA) data to raise individual pupils' attainment. Analyses are based upon matched pupil data and provide a range of estimates of likely attainment. There are two models for FFT estimates:

- the prior attainment model (model PA)
- the socio-economic model (model SE)

Using Model PA gives one type of estimate:

- Type A, based upon pupils' prior attainment, gender and age.

Using Model SE gives three types of estimate:

- Type B, based upon pupils' prior attainment, gender, age and school context
- Type C, based on Type B and then taking into account the improvement needed for national or locally negotiated local authority targets
- Type D, based on Type B and then adjusting to ensure it is consistent with the 'top 25%' of schools (value-added).

Look at **Resource 3.9S: Key Stage 4 pupil estimate report (English)**, which is also shown on **slide 24**.

This report shows each pupil's probability of attaining individual Key Stage 4 grades in a range of GCSE subject areas. Use the 'Estimate Basis' option to select either PA or SE estimate models and select a rank (50 to 5) to compare against schools at the 50th to 5th percentiles. By selecting a rank of 10, for example, the estimates will be based on the progress made by pupils in schools at the 10th percentile for value added. The higher the rank (5 highest, 50 lowest), the more challenging the estimates.

Record your observations and hypotheses from the data in this table. Then refer to **slide 25**.

Some key points to note

- Ethan Almond has a 25.8% chance of gaining grade A*-C in mathematics, based on Key Stage 2 prior attainment, and would be an ideal candidate to target for additional support.
- Based on his Key Stage 3 prior attainment, this chance drops to 9.2%, indicating slow progress during Key Stage 3, which needs to be compensated for with accelerated progress during Key Stage 4.

Find the equivalent table for your own school. Record any key issues or observations. Then refer to **slide 26**.

Key questions about FFT pupil estimate reports

- Is the school's use of pupil estimates based on a thorough understanding of the difference between estimates and targets?
- How is information about individual pupils' expertise and interest in a subject taken into account when using FFT estimates (that are based on prior attainment in core subjects)?
- How is additional challenge incorporated in individual pupils' targets to ensure that attainment gaps are narrowed for groups that have underperformed historically?

Workshop 4: Planning next steps (85 – 90 minutes)

Participants

This workshop could be used as a follow-up session for:

- senior and subject or year leaders in primary schools
- senior leadership team, middle leaders, core subject teams in secondary schools
- members of cross-phase development groups, Narrowing the Gaps (NtG), FSM leads

Objectives

- To consider how data analyses can be used to identify historical patterns in progress and attainment, in order to understand and address gaps in attainment
- To identify priorities for accelerating progress of pupils who are falling behind or are in danger of underperforming
- To plan next steps for narrowing gaps in attainment

Resources

- Resource 4.1 (page 87)
- A copy of *Narrowing the Gaps: from data analysis to impact – the golden thread*
- The most recent RAISEonline full report for your school
- Slide presentation *Workshop 4: Planning next steps* (00912-2009PPT-EN-06) (optional – available to download from [www.standards.dcsf.gov.uk/nationalstrategies](http://www.standards.dfes.gov.uk/nationalstrategies), select 'Leadership', then 'Narrowing the Gaps', then 'Know the gaps', and then 'Identifying underachieving pupils'

Introduction (10 minutes)

Introduce the workshop with **slide 1**, which sets out the objectives.

Explain that the purpose of this workshop is to reflect on the issues and observations that have arisen in examining attainment and progress data in workshops 2 and 3, and to devise a clear statement of what the school is doing to support the ambitions of the recent White Paper, *New Opportunities – Fair chances for the future*, to tackle the wide gap in aspiration and achievement between disadvantaged and vulnerable children and their peers.

Set the scene by returning to the questions from Workshop 1 (**slides 9 and 10**), which are given as **slides 2–3** for this session.

- What analyses have we done of pupils' progress across a key stage and beyond?
- What are the characteristics of pupils who make slow or accelerated progress across a given key stage in the core subjects?
- Are we clear which FSM pupils are making good progress and which are not?
- Are we using analyses to:
 - inform early identification of FSM pupils who are likely to make slow progress?
 - set out the expected progress each year, supported by robust tracking?
 - provide high-quality teaching, challenge, support and intervention where needed?

- Is every teacher in every class aware of FSM pupils whose progress is at risk, and accountable for effective action to understand these pupils' needs and accelerate their progress?

Good analyses, including those that may have arisen in workshops 2 and 3, will have provided evidence to support schools in answering these questions.

Emphasise that developing the knowledge and expertise to use the data analyses available through RAISEonline and FFT is important in helping schools' self-evaluation processes and revealing significant gaps in the performance and progress of cohorts, groups and individuals. Without good data analysis tools, data analyses can be time-consuming.

It is also important that analyses are sharply focused. The starting point is the school's knowledge of its own context, its current pupil community and hypotheses about attainment gaps.

The questions raised in the activities that follow are closely aligned to some in Ofsted's evaluation schedule for inspections from September 2009. Participants' answers will provide the basis for useful evaluations and evidence for the new Ofsted self-evaluation form (SEF). Ofsted recognises the importance of self-evaluation as a crucial part of a school's ongoing cycle of review and planning. Demonstrating the move from analysis to impact is particularly important.

The impact of your self-evaluation in helping to bring about improvement will be a major factor in inspectors' judgements about the effectiveness of leadership and management and the school's capacity to sustain improvement.

Self-evaluation form guidance, Ofsted 2009

Activity 1: What is our current context? (15 minutes)

The first section of the RAISEonline full report provides useful contextual information and information about absence for current cohorts. Ask participants to consider the information in Tables 1.1, 1.2 and 1.6 in the first section of the RAISEonline report for their school, in the light of their knowledge of their own tracking information. The questions below (**slides 4–5**) are intended as a starting point for probing the information and identifying any key aspects worthy of further investigation.

- Are there any significant changes in the basic characteristics of our school?
- Are there any factors that might influence our focus on narrowing attainment gaps?
- Are there any significant differences between year groups that will need to be taken into account?
- Are there any factors in a particular year group that will influence our focus on narrowing attainment gaps?
- Are there any significant factors that might link persistent absence, FSM eligibility, progress and attainment?
- Do we know precisely which pupils' progress and attainment, in which year groups, are likely to be affected?

Activity 2: Issues identified from historic data (15 minutes)

How do we use what we have gleaned from historic data and what we know about your current pupils to steer improvements in narrowing gaps, in order to ensure an impact on future outcomes?

Table 1.5 of schools' RAISEonline reports provides information about prior attainment of pupils currently in the school, and the national picture for maintained mainstream schools. Ask participants to consider this information and to reflect on and collate the key issues and observations they discussed and recorded in workshops 2 and 3 (**slide 6**).

- Are there any patterns of underperformance that are, or are in danger of, repeating themselves?

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- Are there any particular groups (e.g. FSM pupils, pupils from minority ethnic groups, gifted and talented pupils) that historically are underperforming?
- Is there any pattern that indicates significant in-school variation – variations between year-groups or between subjects?

Activity 3: Target setting and tracking

(15 minutes)

How well do we use challenging targets to raise standards for all pupils and eliminate any low attainment among particular groups?

Table 4.1 of schools' RAISEonline reports provides School Forward Estimates for the following year, based on prior attainment and probabilities in relation to schools with similar prior attainment. Use the questions below (**slides 7–8**) as a starting point in considering whether targets are sufficiently focused on key groups and whether the school's tracking systems will support them in reaching the targets identified.

- Bearing in mind any significant changes in cohort, are the forward estimates realistic? Do they present sufficient challenge? Which model do we aspire to?
- If particular gaps in attainment are narrowed, could the actual results be more positive than the forward estimates indicate? To what extent?
- To what extent do the forward estimates provide a realistic framework to inform our tracking and target-setting processes?
- Does our tracking system generate regular reports that enable us to evaluate the impact of interventions for individuals, groups, subjects?
- Do we know of any particular pupils who are 'falling through the net' or not making expected progress? Which pupils or groups of pupils need further focused attention in order to accelerate progress?
- Does our tracking system predict test and examination results accurately – for individuals, groups, subjects, classes, cohorts?
- What are we doing to ensure that our teacher assessments are accurate and consistent?

Activity 4: Next steps – how can we make a difference?

(30 minutes)

Data analyses raise questions. They do not provide solutions. The purpose of this last activity is to reach a consensus on how to move forward in raising attainment **and** narrowing gaps and to ensure that plans are in place to tackle any underperformance and to make a difference to pupils who are at the greatest risk of underperforming, particularly pupils eligible for FSM – those from the most disadvantaged backgrounds.

Use **Resource 4.1: Key actions summary – the golden thread** and **slide 9** to structure discussion about next steps for immediate attention, asking participants to record and then to share key points.

- Who needs to be given our particular attention?
 - What are our priorities?
 - What are our objectives?
- How are we going to ensure that we can make a difference?
 - What actions will we take?
 - Who will be responsible?
 - What are the resource implications?

- How will we measure progress? How will we know we have made a difference?

Ensure that a consensus is reached on the next steps to be taken, that the outcomes of the discussion are recorded and that there is clarity about future actions – what needs to be done, by whom and by when.

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A practical guide

Workshop 2P (Primary): Using RAISEonline to examine attainment data

Resource 2.1P: KS2 APS by pupil type – gender and FSM

RAISEonline report KS2.2A: KS2 average point scores, for all National Curriculum core subjects, by pupil type (gender and FSM)

		All NC Core Subjects				English				Mathematics				Science			
		School		National		School		National		School		National		School		National	
		Cohort	APS	APS	Cohort	APS	Cohort	APS	Cohort	APS	Cohort	APS	Cohort	APS	Cohort	APS	Cohort
All Pupils	34	28.9	27.9	34	28.2	27.5	34	28.8	27.4	34	29.8	28.9					
Gender																	
Male	14	29.4	27.7	14	28.7	26.8	14	29.1	27.7	14	30.4	28.8					
Female	20	28.6	28.1	20	27.9	28.2	20	28.5	27.1	20	29.4	29.0					
Free School Meals																	
FSM	12	29.3	25.8	12	28.0	25.2	12	30.0	25.3	12	30.0	27.0					
Non FSM	22	28.7	28.3	22	28.4	27.9	22	28.1	27.8	22	29.7	29.3					

Record your observations and hypotheses from the data in this table

Resource 2.2P: KS2 APS by pupil type – SEN

RAISEonline report KS2.2A: KS2 average point scores, for all National Curriculum core subjects, by pupil type (SEN)

Special Educational Needs	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	Cohort	APS	APS	Cohort	APS	Cohort	APS	Cohort	APS	Cohort	APS	
No Identified SEN	12	31.5	29.1	12	31.0	28.8	12	32.0	28.7	12	31.5	29.9												
SEN without a statement	21	27.3	24.3	21	26.4	23.4	21	26.7	23.6	21	28.7	26.0												
School Action	18	28.0	24.9	18	27.3	24.2	18	27.3	24.1	18	29.3	26.4												
School Action plus	3	23.0	23.3	3	21.0	22.0	3	23.0	22.6	3	25.0	25.3												
SEN with a statement	1	33.0	20.9	1	33.0	19.9	1	33.0	20.4	1	33.0	22.8												

Record your observations and hypotheses from the data in this table.

Resource 2.3P: KS2 APS by pupil type – ethnicity

RAlSEonline report KS2.2A: KS2 average point scores, for all National Curriculum core subjects, by pupil type (ethnicity)

Ethnicity Group	All NC Core Subjects				English				Mathematics				Science			
	School		National		School		National		School		National		School		National	
	Cohort	APS	Cohort	APS	Cohort	APS	Cohort	APS	Cohort	APS	Cohort	APS	Cohort	APS	Cohort	APS
White British	29	28.9	28.1	29	28.2	27.6	29	28.7	27.5	29	29.7	29.1				
Traveller of Irish Heritage	1	31.0	22.0	1	27.0	21.6	1	33.0	22.0	1	33.0	23.6				
Any other White background	1	33.0	27.3	1	33.0	26.6	1	33.0	27.2	1	33.0	28.2				
Indian	1	23.0	28.5	1	21.0	28.1	1	21.0	28.3	1	27.0	29.2				
Any other Asian background	2	30.0	27.8	2	30.0	27.2	2	30.0	27.9	2	30.0	28.5				

Record your observations and hypotheses from the data in this table.

Find the equivalent table for your own school. Record any key issues or observations. Include gender, FSM eligibility, SEN and ethnicity in your analysis.

Access route: KS2 > Attainment > APS > KS2 APS by pupil characteristics – KS2.2A

You can look at a four-year trend for each indicator by using the 'Data' drop-down menu and selecting different years (Key skill 6, page 85).

Look up the equivalent analysis for KS1 for your own school: RAISEonline report KS1.2B. Record any key issues or observations.

Access route: KS1 > APS > KS1 average point scores for all National Curriculum core subjects by pupil type – KS1.2B

Resource 2.4P: KS1 APS for all National Curriculum subjects – five-year trend by subject

RAISEonline report KS1.1 Trend: KS1 average point scores for all National Curriculum subjects (5-year trend)

Year		2004	2005	2006	2007	2008
All Subjects	Cohort	31	30	29	24	27
	School	14.7	16.0 ↑	14.4 ↓	15.1	14.5
	National	15.6	15.4	15.3	15.2	15.2
	Difference	-1.0	0.5	-0.9	-0.1	-0.7
	Significance	Sig-	Sig+	Sig-	Sig-	
Reading	Cohort	31	30	29	24	27
	School	14.3	16.4	14.4 ↓	15.2	15.1
	National	15.8	15.8	15.7	15.6	15.7
	Difference	-1.5	0.6	-1.2	-0.4	-0.5
	Significance					
Writing	Cohort	31	30	29	24	27
	School	13.6	15.2	13.9 ↓	13.8	12.8
	National	14.6	14.6	14.5	14.2	14.3
	Difference	-1.0	0.6	-0.6	-0.4	-1.5
	Significance		Sig+		Sig-	
Mathematics	Cohort	31	30	29	24	27
	School	16.0	16.3	15.0 ↓	16.4	15.6
	National	16.3	16.0	15.8	15.8	15.8
	Difference	-0.3	0.4	-0.8	0.6	-0.2
	Significance					

Record your observations and hypotheses from the data in the table above.

Find the equivalent table for your own school. Record any key issues or observations.

Access route: KS1 > Attainment > APS > KS1 APS Summary and 5 year trend by subject – KS1.Trend

Look up the equivalent analysis for KS2 for your own school: RAISEonline report KS2.1Trend. Record any key issues or observations.

Access route: KS2 > Attainment > APS > KS2 APS Summary and 5 year trend by subject – KS2.1Trend

Key questions about average point scores

- How does the gender gap in core subjects in the school compare to the gender gap nationally?
- How well do FSM children do compared to the school average for all children? For non-FSM children? Is the gap narrowing, or getting wider, compared to previous years?
- How well do children on the SEN register do, compared to the school average? Is the gap narrowing, or getting wider, compared to previous years?
- Are sufficiently ambitious targets set for children from underachieving ethnic groups? If children meet their targets, will this result in a narrowing of the gap between disadvantaged groups and their peers?
- How are groups that have underperformed historically being targeted for additional support?
- How much variability is there in attainment in different subjects?

Resource 2.5P: Percentage of pupils attaining or surpassing each level in Key Stage 1 writing – gender and FSM

RAISEonline report KS1.4A: Percentage of pupils attaining or surpassing each level in Key Stage 1 writing, by pupil type (gender and FSM)

	Level 2C +						Level 2B +						Level 2A +						Level 3 +					
	Cohort	School	National	Sig	Cohort	School	National	Sig	Cohort	School	National	Sig	Cohort	School	National	Sig	Cohort	School	National	Sig	Cohort	School	National	Sig
All pupils	23	78	81	-	23	52	59	-	23	26	32	-	23	0	12	-								
Gender																								
Male	10	70	75	-	10	40	51	-	10	20	25	-	10	0	9	-								
Female	13	85	86	-	13	62	67	-	13	31	39	-	13	0	16	-								
Free School Meals																								
FSM	7	71	64	-	7	43	38	-	7	0	15	-	7	0	4	-								
Non FSM	16	81	84	-	16	56	63	-	16	38	35	-	16	0	14	-								

The 'Options' menu allows you to select a threshold indicator to view (Key skill 7, page 93). This extract shows Level 2c or above.

Record your observations and hypotheses from the data in the table above.

Find the equivalent table for your own school. Record any key issues or observations.

Access route: KS1 > Attainment > Thresholds > Key Stage 1 proportion achieving or surpassing each level by pupil characteristic > Select 'Writing' from the 'Subject' menu

Use the 'Subject' drop-down menu to look at 'Reading' and 'Mathematics' for your school (Key skill 2, page 90).

Look up the equivalent analysis for KS2 for your own school: RAISEonline report KS2.4A. Record any key issues or observations

Access route: KS2 > Attainment > Thresholds > Key Stage 2 proportion achieving or surpassing each level by pupil characteristic > Select 'English', 'Mathematics' or 'Science' from the 'Subject' menu. (Key skill 2, page 90)

Resource 2.6P: Percentage of pupils achieving or surpassing each sublevel in Key Stage 2 by subject (English) – gender and FSM

RAISEonline report KS2.5A: Percentage of pupils achieving or surpassing each sublevel in Key Stage 2 by subject (English, level 5) and pupil type (gender and FSM)

		5C			5B			5A					
		Co	Sc	Na	Sig	Co	Sc	Na	Sig	Co	Sc	Na	Sig
All Pupils		24	45	27	Sig+	6	11	8		0	0	1	
Gender													
Male		12	40	21	Sig+	4	13	6		0	0	0	
Female		12	52	33		2	9	11		0	0	1	
Free School Meals													
FSM		1	17	12		0	0	2		0	0	0	
Non-FSM		23	49	30	Sig+	6	13	10		0	0	1	

Record your observations and hypotheses from the data in the table above

Find the equivalent table for your own school. Record any key issues or observations.

Access route: KS2 > Attainment > Thresholds > Key Stage 2 proportion achieving or surpassing each sublevel by pupil characteristic > Select 'English' from the 'Subject' menu (Key skill 2, page 90)

Resource 2.7P: Percentage of children achieving or surpassing each sublevel in Key Stage 2 (mathematics) – gender, FSM and ethnicity

RAISEonline report KS2.5A: Percentage of pupils achieving or surpassing each sub-level in Key Stage 2 by subject (mathematics, levels 3–4) and pupil type (grouped by gender, FSM, ethnicity)

All Pupils	Gender	Free school meal eligibility	Main ethnic code	3B			3A			4C			4B			4A			5C		
				Co	Sc	Na															
Female	No	White British	14	100	-	14	100	-	14	100	-	13	93	-	10	71	-	8	57	-	
Female	No	Refused	1	100	-	1	100	-	1	100	-	1	100	-	0	0	-	0	0	-	
Female	No	Information Not Obtained	5	100	-	5	100	-	5	100	-	4	80	-	2	40	-	1	20	-	
Female	Yes	White British	2	100	-	2	100	-	2	100	-	2	100	-	2	100	-	1	50	-	
Female	Yes	Information Not Obtained	1	100	-	1	100	-	1	100	-	1	100	-	0	0	-	0	0	-	
Male	No	White British	18	95	-	18	95	-	17	89	-	17	89	-	13	68	-	9	47	-	
Male	No	Chinese	2	100	-	2	100	-	2	100	-	2	100	-	2	100	-	2	100	-	
Male	No	Information Not Obtained	6	100	-	6	100	-	6	100	-	6	100	-	4	67	-	3	50	-	
Male	Yes	White British	3	100	-	3	100	-	3	100	-	2	67	-	2	67	-	0	0	-	

Record your observations and hypotheses from the data in the table above.

Find the equivalent table for your own school. Record any key issues or observations.

Access route: KS2 > Attainment > Thresholds > Key Stage 2 proportion achieving or surpassing each sublevel by pupil characteristic > Select 'Mathematics' from the 'Subject' menu, and gender, FSM, main ethnic code from the groupings menus (Key skill 5, page 92)

Key questions about threshold measures

- How well do FSM children or children from minority ethnic groups attain, compared to school and national averages on statutory threshold indicators (level 4+ in both English and mathematics)? Are gaps narrowing?
- Does the school provide good opportunities for children on the gifted and talented register, and higher-attaining children generally, to gain level 3 at Key Stage 1 or level 5 at Key Stage 2?
- Does the school tracking system generate reports that allow leaders and practitioners to see how well key groups are progressing towards ambitious targets? Are targets set that will ensure attainment gaps narrow over time?
- How are groups that have underperformed historically being targeted for additional support?
- How much variability is there in attainment in different subjects?

Workshop 2S (Secondary): Using RAISEonline to examine attainment data

Resource 2.1S: Key Stage 4 capped APS by pupil characteristics – ethnicity

RAISEonline report KS4.2A: Key Stage 4 average point score by pupil characteristics (average capped total point score and ethnicity)

Ethnicity Group	Average capped total point score (best 8 subjects)			
	Cohort	School	National	Sig
White				
British	173	227.6	309.8	Sig-
Irish	1	-	322.0	-
Traveller of Irish Heritage	1	-	156.3	-
Any Other White background	2	343.0	304.6	
Mixed				
White & Black Caribbean	9	242.0	288.1	
Any other mixed background	1	54.0	315.9	-
Asian or Asian British				
Indian	4	348.5	348.2	
Pakistani	33	286.8	302.8	
Bangladeshi	2	329.0	308.8	
Any other Asian background	2	413.0	320.1	
Black or Black British				
Black Caribbean	3	63.0	289.1	Sig-
Black African	3	342.0	302.7	

The table shows the average total GCSE points achieved by pupils in their eight best subjects. Eight C grades would give a point score of 320 (GCSE grade C is equivalent to 40 points).

Record your observations and hypotheses from the data in this table.

Resource 2.2S: Key Stage 4 capped APS by pupil characteristics – gender and FSM

RAISEonline report KS4.2A: Key Stage 4 average point score by pupil characteristics (average capped total point score, gender and FSM)

	Average capped total point score (best 8 subjects)			
	Cohort	School	National	Sig
All pupils	234	238.6	307.8	Sig-
Gender				
Male	129	213.6	297.1	Sig-
Female	105	269.4	318.9	Sig-
Free School Meals				
FSM	82	203.5	252.5	Sig-
Non FSM	152	257.6	315.5	Sig-

Record your observations and hypotheses from the data in this table.

Resource 2.3S: Key Stage 4 capped APS by pupil characteristics – SEN

RAISEonline report KS4.2A: Key Stage 4 average point score by pupil characteristics (average capped total point score and SEN)

	Average capped total point score (best 8 subjects)			
	Cohort	School	National	Sig
No Identified SEN	106	312.7	329.6	Sig-
School Action	68	209.5	245.6	Sig-
School Action Plus	57	142.2	191.7	Sig-
SEN with a statement	3	115.7	188.1	

Write down your observations and hypotheses from the data in this table.

Find the equivalent table for your own school. Record any key issues or observations. Include ethnicity, gender, FSM eligibility and SEN status in your analysis.

Access route: KS4 > Attainment > APS > KS4 APS by pupil characteristics (KS4.2A)

Resource 2.4S: Key Stage 4 capped APS by subject (mathematics) – ethnicity

RAISEonline report KS4.2B: Key Stage 4 capped average point score by subject (mathematics) and pupil characteristics (ethnicity)

Ethnic Group	Average Points per Pupil in mathematics, Key Stage 4			
	Entries	School	National	Sig
All Pupils	234	24.1	37.7	Sig-
White				
British	173	22.4	37.6	Sig-
Irish	1	0	39.5	-
Traveller of Irish Heritage	1	0	24.9	-
Any Other White Background	2	22	38.4	-
Mixed				
White and Black Caribbean	9	21.6	34.6	Sig-
Any other Mixed Background	1	16	38.4	-
Asian or Asian British				
Indian	4	38.5	42.6	
Pakistani	33	32.1	36.0	
Bangladeshi	2	28	37.5	
Any other Asian Background	2	43	41.6	
Black or Black British				
Caribbean	3	20	34.3	Sig-
African	3	36	36.9	

Record your observations and hypotheses from the data in this table

Find the equivalent table for your own school. Record any key issues or observations. Use the 'Subject' drop-down menu (Key skill 2, page 90) to look at attainment by pupil characteristics for English and mathematics. Discuss and record any further issues or observations.

Access route: KS4 > Attainment > APS > KS4 APS by subject and by pupil characteristics (KS4.2B)

To see a three-year trend in average point scores, use RAISEonline report KS4.1C and D. You can select core subjects, using the drop-down menu (Key skill 2, page 90).

Key questions about *average point scores*

- How does the gender gap in core subjects in the school compare to the gender gap nationally?
- How well do FSM pupils do, compared to the school average for all pupils? And compared to non-FSM pupils? Is the gap narrowing, or getting wider compared to previous years?
- How well do pupils on the SEN register do, compared to the school average? Is the gap narrowing, or getting wider, compared to previous years?
- Are sufficiently ambitious targets set for pupils from underachieving ethnic groups? If pupils meet their targets, will this result in a narrowing of the gap between disadvantaged groups and their peers?
- How are groups that have underperformed historically being targeted for additional support?
- How much variability in attainment is there across different subjects?

Resource 2.5S: Key Stage 4 attainment thresholds by pupil characteristics – gender and FSM

RAISEonline report KS4.22: Key Stage 4, attainment thresholds by pupil characteristics (gender and FSM)

	Cohort	Percentage of pupils achieving each threshold			
		5+ A* to C	5+ A* to C (incl Eng and Mat)	5+ A* to C (incl. func Eng and Mat)	5+ A* to G
All pupils	156	51	13	28	83
Gender					
Male	81	49	15	31	80
Female	75	53	12	24	85
Free School Meals					
FSM	28	29	4	7	64
Non FSM	128	56	16	32	87

Record your observations and hypotheses from the data in this table

Find the equivalent table for your own school. Record any key issues or observations. Include SEN status and ethnicity in your analysis, as well as gender and FSM eligibility.

Access route: KS4 > Attainment > Thresholds > KS4 threshold measures by pupil characteristics (KS4.22)

You can look at a four-year trend for each indicator by using the 'Data' drop-down menu and selecting different years (Key skill 6, page 93).

Resource 2.6S: Key Stage 4 attainment thresholds by subject – English and mathematics

RAISEonline report KS4.21: Summary of full GCSE results by subject (English and mathematics)

Subject		Number of entries	Entry as a percentage of cohort	% A*-A	% A*-C	% A*-G	% Fail	Average Point Score
ENGLISH LITERATURE	School	69	44.2	4.3	58.0	97.1	2.9	37.3
	National	471,873	79.5	18.2	68.0	98.0	2.0	40.0
ENGLISH/ENGLISH LANGUAGE - SINGLE	School	155	99.4	1.3	29.0	91.6	8.4	28.4
	National	567,550	95.7	14.1	62.5	98.6	1.4	38.9
MATHEMATICS	School	155	99.4	0.6	17.4	96.1	3.9	27.9
	National	576,456	97.2	14.7	58.0	97.8	2.2	37.5

Record your observations and hypotheses relating to English and mathematics.

Find the equivalent table for your own school. Record any key issues or observations.

Access route: KS4 > Attainment > Thresholds > Summary of full GCSE results by subject (KS4.21)

Use the 'Options' menu to view this report for boys only, or girls only (Key skill 7, page 93).

Resource 2.7S: Key Stage 4 percentage achieving attainment threshold measures by subject (English/English language) – gender, FSM and SEN

RAISEonline report KS4.4B: Key Stage 4 attainment thresholds by subject (English/English language) and pupil characteristic (gender, FSM and SEN)

	Cohort	Percentage of cohort gaining A* to C in English/English language				Significance
		School	National	Difference		
All Pupils	156	29	66	-37		Sig-
Gender						
Male	81	28	60	-32		Sig-
Female	75	29	73	-44		Sig-
Free School Meals						
FSM	28	11	44	-33		Sig-
Non FSM	128	33	69	-36		Sig-
Special Educational Needs						
No Identified SEN	89	43	75	-32		Sig-
SEN without a statement						
School Action	39	15	34	-19		Sig-
School Action Plus	22	5	27	-22		Sig-
SEN with a statement	6	0	22	-22		-

Record your observations and hypotheses from the data in this table.

Find the equivalent table for your own school. Record any key issues or observations, including ethnicity in your analysis.

Access route: KS4 > Attainment > Thresholds > KS4 proportion achieving threshold measures by subject and pupil characteristics (English/English language selected) (Key skill 2, page 90).

Use the 'Subject' menu to look at outcomes for mathematics (Key skill 2, page 90).

Resource 2.8S: Key Stage 4 percentage achieving attainment threshold measures by subject (English/English language) – gender, FSM and main ethnic code

RAISEonline report KS4.4D: Key Stage 4 attainment thresholds, by subject (English/English language) and pupil characteristic (gender, FSM and main ethnic code)

			Percentage of cohort gaining A*-C in English / English Language		
			Cohort	School	National
All pupils	Gender	Main ethnic code	156	29	66
	Female	No White British	64	31	-
	Female	Yes White British	11	18	-
	Male	No White British	61	34	-
	Male	No White and Asian	1	100	-
	Male	No Any other Mixed Background	1	0	-
	Male	No Pakistani	1	0	-
	Male	Yes White British	16	6	-
	Male	Yes African	1	0	-

Record your observations and hypotheses from the data in this table.

Find the equivalent table for your own school. Record any key issues or observations, including ethnicity in your analysis.

Access route: KS4 > Attainment > Thresholds > KS4 proportion achieving threshold measures by subject and pupil characteristics (KS4.4B), with three groupings applied: gender, FSM and main ethnic code (Key skill 5, page 92)

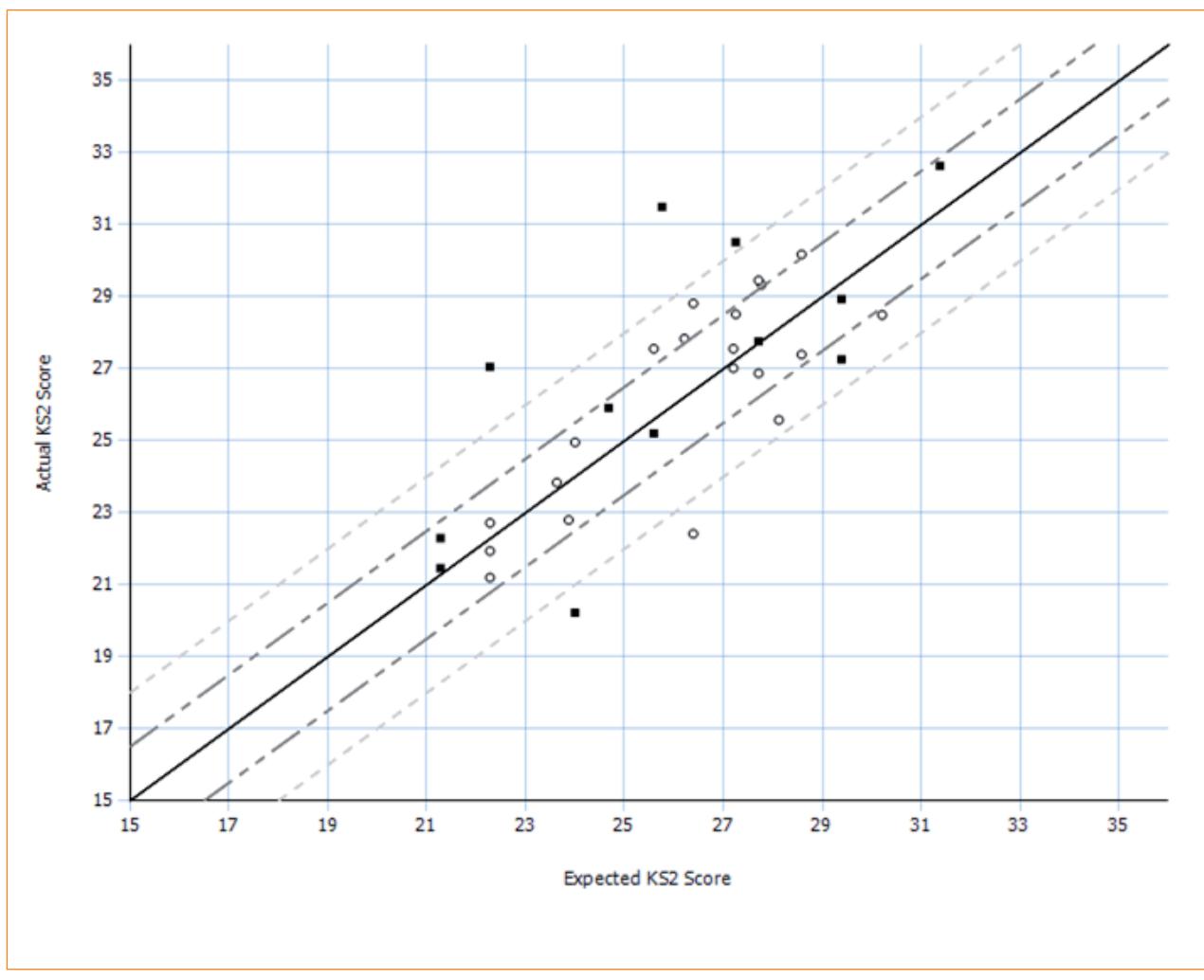
Key questions about *threshold measures*

- How well do FSM pupils or pupils from minority ethnic groups attain, compared to school and national averages on statutory threshold indicators (5+ A*-C, including English and mathematics)? Are gaps narrowing?
- Does the school provide good opportunities for pupils on the gifted and talented register, and higher-attaining pupils generally, to gain A*-A grades at Key Stage 4?
- Does the school tracking system generate reports that allow leaders and practitioners to see how well key groups are progressing towards ambitious targets? Are targets set that will ensure attainment gaps narrow over time?
- How are groups that have underperformed historically being targeted for additional support?
- How much variability in attainment is there across different subjects?

Workshop 3P (Primary): Analysing progress data

Resource 3.1P: Key Stage 1 to Key Stage 2 VA, expected vs actual scatterplot – gender

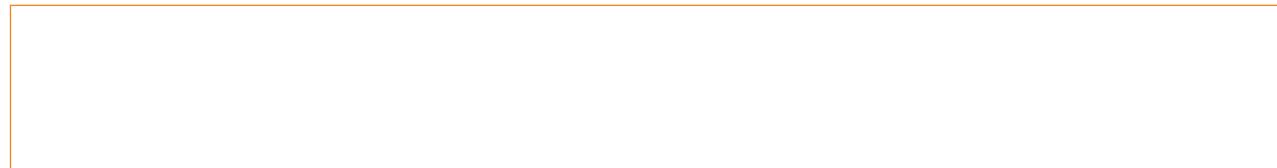
RAISEonline report Pri10E: Key Stage 1 to Key Stage 2 fine grades value-added analysis by pupil (APS value-added line showing spread of pupils by gender)



Record your observations and hypotheses from the data in this scatterplot.

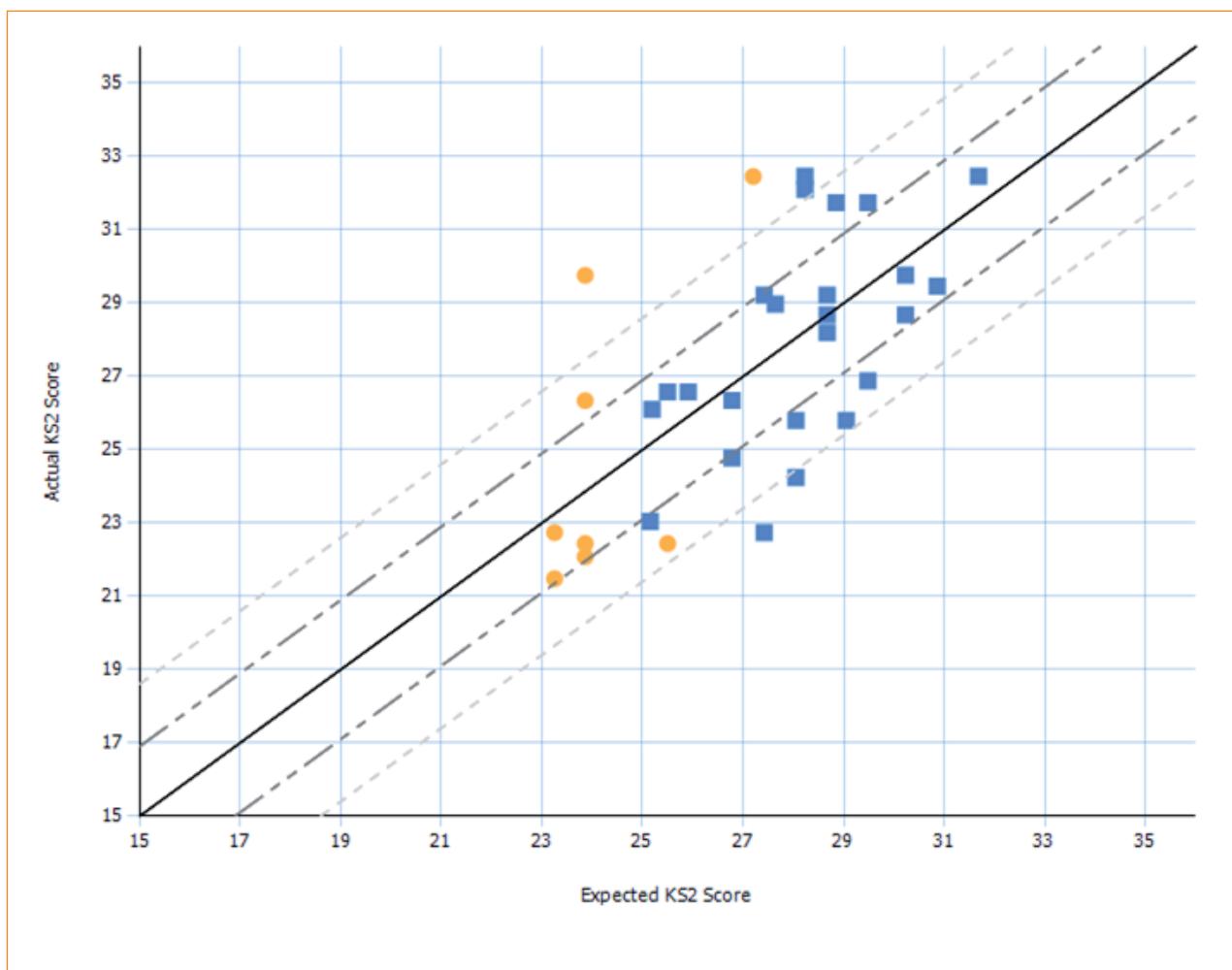
Find the equivalent report for your own school. Record any key issues or observations.

Access route: KS2 > Progress > VA > KS1-2 VA Expected vs. Actual – Scatterplot (Pri10E)



Resource 3.2P: Key Stage 1 to Key Stage 2 VA, expected vs actual scatterplot (science) – SEN

RAISEonline report Pri10E: Key Stage 1 to Key Stage 2 fine grades value-added scatterplot analysis by subject (science KS2) and pupil characteristics (showing spread of pupils by SEN, with value-added line)



- | | |
|---|--|
| ■ (24) No special provision
● (8) School action
— Zero VA Line | ----- 10th & 90th Percentile Lines
----- 25th & 75th Percentile Lines |
|---|--|

Record your observations and hypotheses from the data in this scatterplot.

Find the equivalent analyses for your own school. Find the equivalent data for English, mathematics and science. Record any key issues or observations.

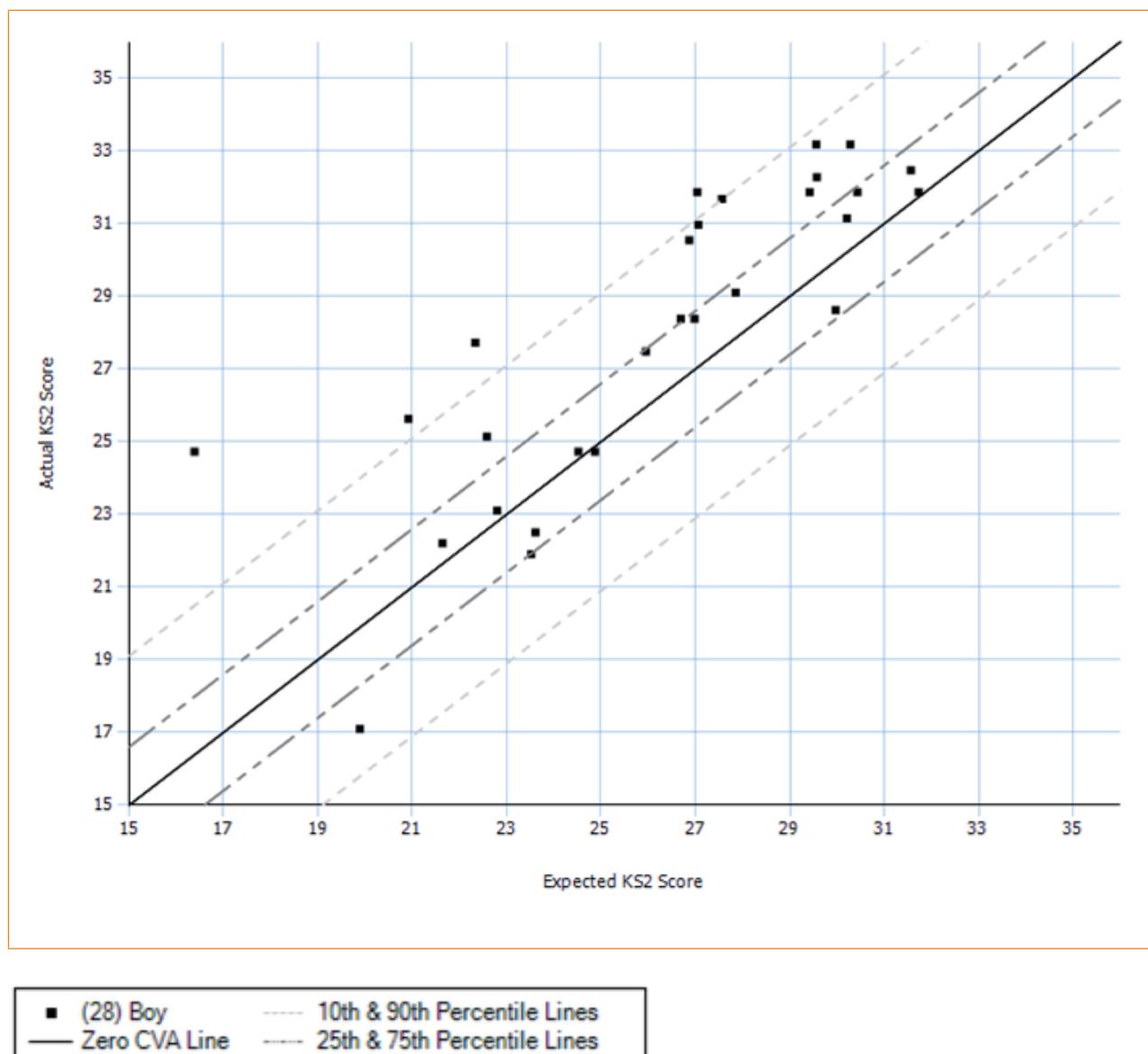
Access route: KS2 > Progress > VA > KS1-2 VA Expected vs. Actual – Scatterplot (Pri10E), science selected from 'Subject' menu (Key skill 2), and SEN selected from 'Group' menu (Key skill 3)

Key questions about VA reports

- How many children lie above the 10th percentile line, or below the 90th percentile line? Is either of these groups dominated by a particular group of children (e.g. boys, girls, FSM children, children from minority ethnic groups)?
- Is there a difference in the pattern of progress in core subjects for lower-attaining children (expected score below 21 (level 3b) at Key Stage 2) and that of their peers?
- Is there a difference in the pattern of progress in core subjects for higher-attaining children (expected score above 27 (level 4b) at Key Stage 2) and that of their peers?
- Does school analysis make effective use of the 'Subject' and 'Group' menus when analysing progress?

Resource 3.3P: Key Stage 1 to Key Stage 2 CVA analysis, expected vs actual scatterplot (English) – boys

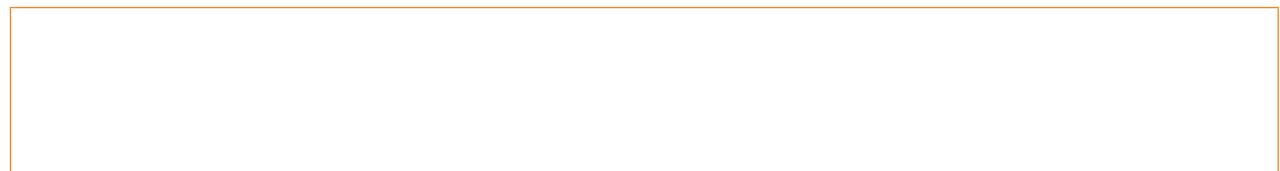
RAISEonline report Pri6: Key Stage 1 to Key Stage 2 contextual value-added analysis by pupil, primary English (KS2) with contextual value-added line, showing spread of pupils (gender – boys)



Record your observations and hypotheses from the data in this scatterplot.

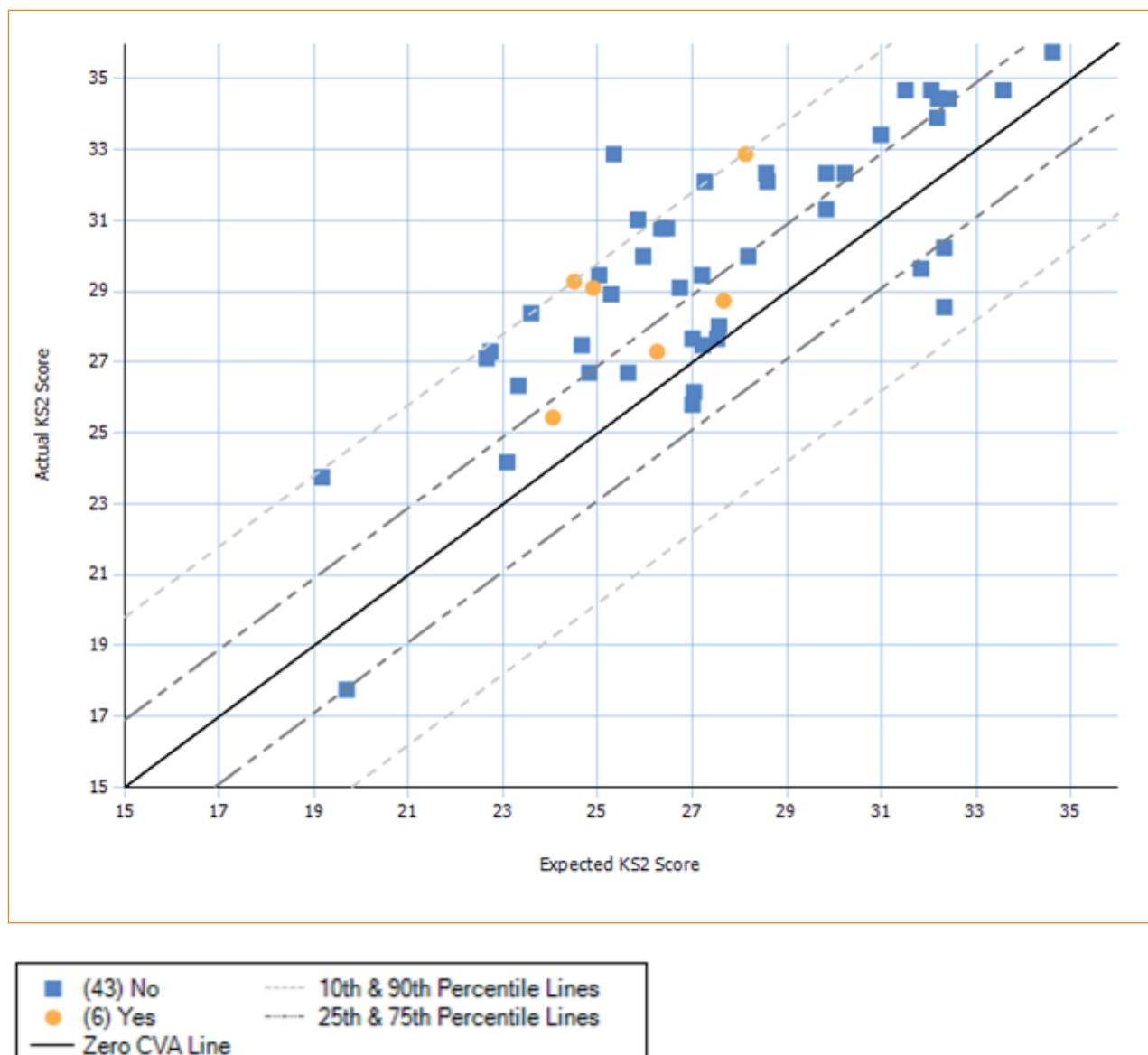
Find the equivalent data for your own school. Record any key issues or observations.

Access route: KS2 > Progress > CVA > KS1-2 CVA Expected vs. Actual – Scatterplot (Pri6) (English selected from 'Subject' menu, and boys ticked on the 'Set Filters' page (Key skill 4, page 91)



Resource 3.4P: Key Stage 1 to Key Stage 2 CVA analysis, expected vs actual scatterplot (mathematics) – FSM

RAISEonline report Pri6: Key Stage 1 to Key Stage 2 contextual value-added analysis by pupil (KS2 primary mathematics contextual value-added line, showing spread of pupils by FSM eligibility)



Record your observations and hypotheses from the data in this scatterplot.

Find the equivalent report for your own school. Record any key issues or observations.

Access route: KS2 > Progress > CVA > KS1-2 CVA Expected vs. Actual – Scatterplot (Pri6) Mathematics selected from 'Subject' menu (Key skill 2), and FSM selected from 'Group' menu (Key skill 3)

Use the 'Subject' and 'Group' menus to explore other subjects and groups for your school. If you click on any point on the scatterplot, you can see the name of the pupil concerned, and their contextual information.

Resource 3.5P: Key Stage 1 to Key Stage 2 CVA dynamic report (mathematics) – gender, FSM and SEN

RAISEonline report Pri5.2: Key Stage 1 to Key Stage 2 contextual value-added analysis by pupil, dynamic report, mathematics (gender, FSM and SEN)

Gender	Free school meal eligibility	Special educational needs	Cohort for CVA	CVA School Score	95% Confidence Interval	S
Female	No	No special provision	11	101.1	1.6	
Female	No	School action	3	100.4	2.3	
Female	Yes	No special provision	1	99.8	2.7	
Male	No	No special provision	5	100.2	2.0	
Male	No	School action	1	100.5	2.7	
Male	No	School action plus	4	100.8	2.1	
Male	No	Statemented	1	101.1	2.7	
Male	Yes	No special provision	2	99.4	2.5	
Male	Yes	School action plus	2	101.6	2.5	

Record your observations and hypotheses from the data in this table.

Find the equivalent data for your own school. Record any key issues or observations.

Access route: KS2 > Progress > CVA > KS1–2 CVA Dynamic Report (Pri5.2) (Mathematics selected from 'Subject' menu (Key skill 2), and gender, FSM, SEN selected from 'Group' menu) (Key skill 3, page 91)

Key questions about CVA reports

- Are groups that have underperformed historically making enough progress to narrow attainment gaps? How can these groups, especially FSM children, be supported further to ensure that they achieve key threshold indicators?
- How many children lie above the 10th percentile line, or below the 90th percentile line? Is either of these groups dominated by a particular group of children (e.g. boys, girls, FSM children, children from minority ethnic groups)?
- Is there a difference in the pattern of progress in core subjects for lower-attaining children (expected score below 21 (level 3b) at Key Stage 2) and that of their peers?
- Is there a difference in the pattern of progress in core subjects for higher-attaining children (expected score above 27 (level 4b) at Key Stage 2) and that of their peers?
- Does school analysis make effective use of the 'Subject' and 'Group' menus when analysing progress?

Resource 3.6P: Key Stage 1 to Key Stage 2 CVA threshold measures report (level 4+ in English and mathematics)

RAISEonline report Pri11: Contextual threshold measures report Key Stage 1–2

Probability of achieving Level 4+	Number of pupils	Number of pupils achieving Level 4+	Success rate	Predicted success rate
Higher	6	5	83%	97%
Middle	5	3	60%	79%
Lower	18	3	17%	39%
Whole School	29	11	38%	58%

Record your observations and hypotheses from the data in this table.

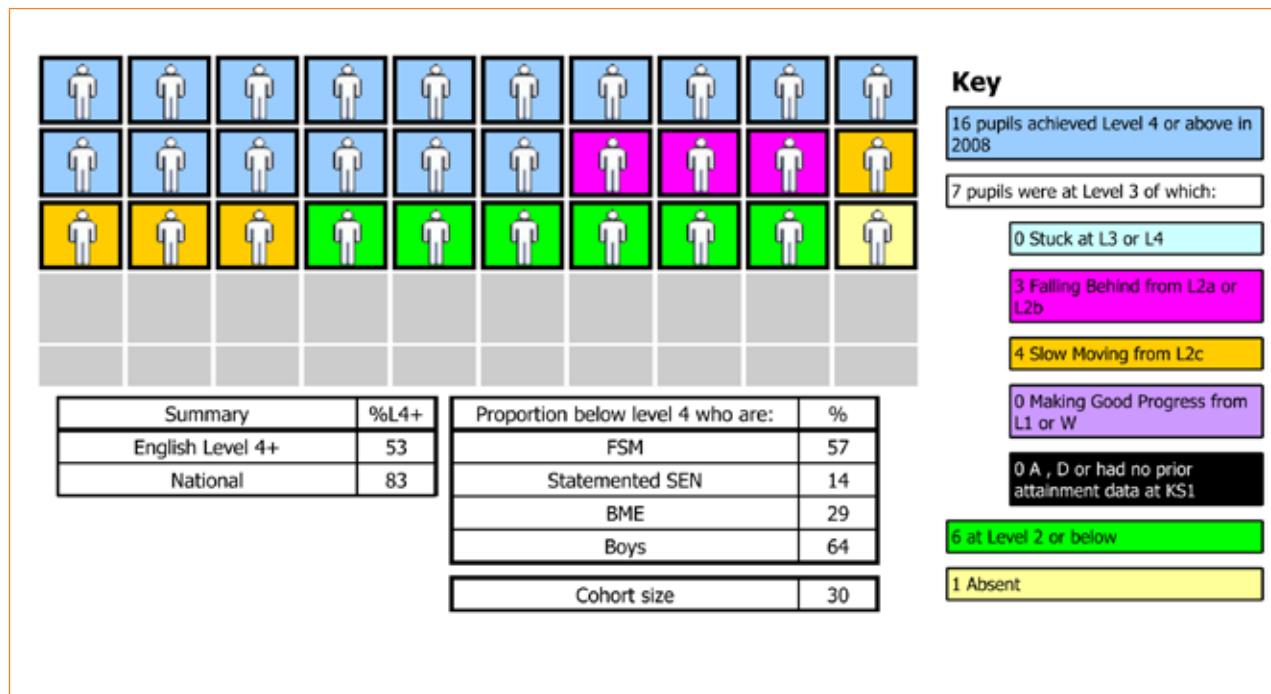
Find the equivalent table for your own school. Record any key issues or observations.

Access route: KS2 > Progress > CVA > KS1-2 CVA Threshold Measures (Pri11)

Use the 'Options' menu (Key skill 7, page 93) to see the equivalent report for L5+ in English and mathematics.

Resource 3.7P: Key Stage 1 to Key Stage 2 pupil progress chart (English)

RAISEonline report KS2_Y: Key Stage 1–2 pupil progress chart, English selected



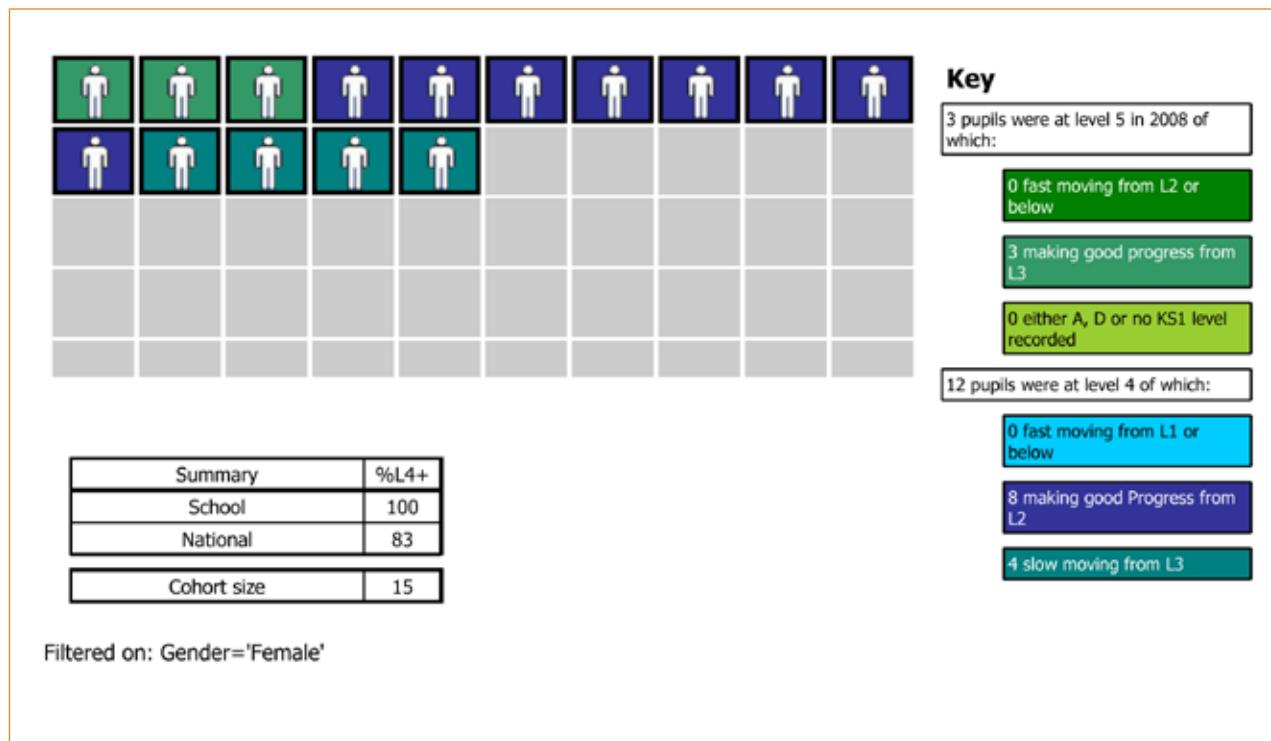
Record your observations and hypotheses from the data in this chart.

Create the equivalent chart for your own school. Record any key issues or observations.

Access route: KS2 > Progress > Conversion > KS1-2 Pupil progress Chart (KS2_Y))

Resource 3.8P: Key Stage 1 to Key Stage 2 pupil progress chart (English) – high attainers, girls

RAISEonline report KS2_X: Key Stage 1–2 Pupil Progress Chart, English selected (high attainers, girls)



Record your observations and hypotheses from the data in this chart.

Create the equivalent chart for your own school. Record any key issues or observations.

Access route: KS2 > Progress > Conversion > KS1-2 Pupil Progress Chart – High Attainers (KS2_X) , English selected from 'Subject' menu and girls selected on 'Set Filters' menu. (Key skill 4, page 91)

Explore the progression patterns in core subjects for key groups in your school by filtering for FSM and then for non-FSM and looking at the charts side by side. Do the same thing for gender and ethnicity.

Key questions about conversion charts

- Which groups of children in the school are stuck? (That is, they made no measurable progress during a key stage.)
- Which groups of children make slow progress?
- Which groups of children make expected or better progress, but still fail to reach important threshold measures?
- Does the school tracking system accurately identify children who are falling behind in the early years of a key stage?
- Does the school tracking system identify children who are falling behind in one or other of the core subjects?
- How rigorously is the impact of interventions designed to raise attainment in core subjects evaluated?

Resource 3.9P: Key Stage 2 pupil estimate report (English)

Chart 5.1: KS2 pupil estimate report for English (estimate basis: SE – Rank: 25, Type D)

This report shows the probability of each child attaining individual Key Stage 2 levels. Estimates are available for all Key Stage 2 core subjects (including reading and writing) and can be selected, using the pull-down menu options in the grey box at the top of the report. Use the 'Estimate Basis' option to select either PA or SE estimate models and select a rank (50 to 5) to compare against schools at the 50th to 5th percentile (FFT Key skills 2 and 3, page 82). By selecting a rank of 10, for example, the estimates will be based on the progress made by children in schools at the 10th percentile for value added. The higher the rank (5 highest, 50 lowest) the more challenging the estimates.

Pupil Details	Name	KS1 Results					Est Basis	Subject	% chance of achieving KS2 Level			
		S+L	Read	Write	MA	SC			2	3	4	5+
	Aluminium, Katrina	F	W	W	1	1	SE	English	49.6%	45.3%	5.1%	1%
	Apricot, Grace	F	3	3	2A	3	SE	English	1%	1%	17.9%	82.8%
	Argon, Nigel	M	2	3	2B	3	SE	English	1%	1%	25.9%	73.6%
	Arsenic, Kelly	F	3	3	3	3	SE	English	1%	1%	7.2%	92.7%
	Arsenic, Kym	F	2	2A	2A	2B	SE	English	1%	1%	33.5%	65.8%
	Arsenic, Oliver	M	2	2B	2B	2C	SE	English	1%	9.4%	78.1%	12.1%
	Artichoke, John	M	2	2A	2B	2A	SE	English	1%	2%	51.6%	46.3%

Record your observations and hypotheses from the data in this table.

Find the equivalent table for your own school. Record any key issues or observations.

Access route: www.fftlive.org > Pupil Estimates > Pupil (FFT Key skill 1, page 88)

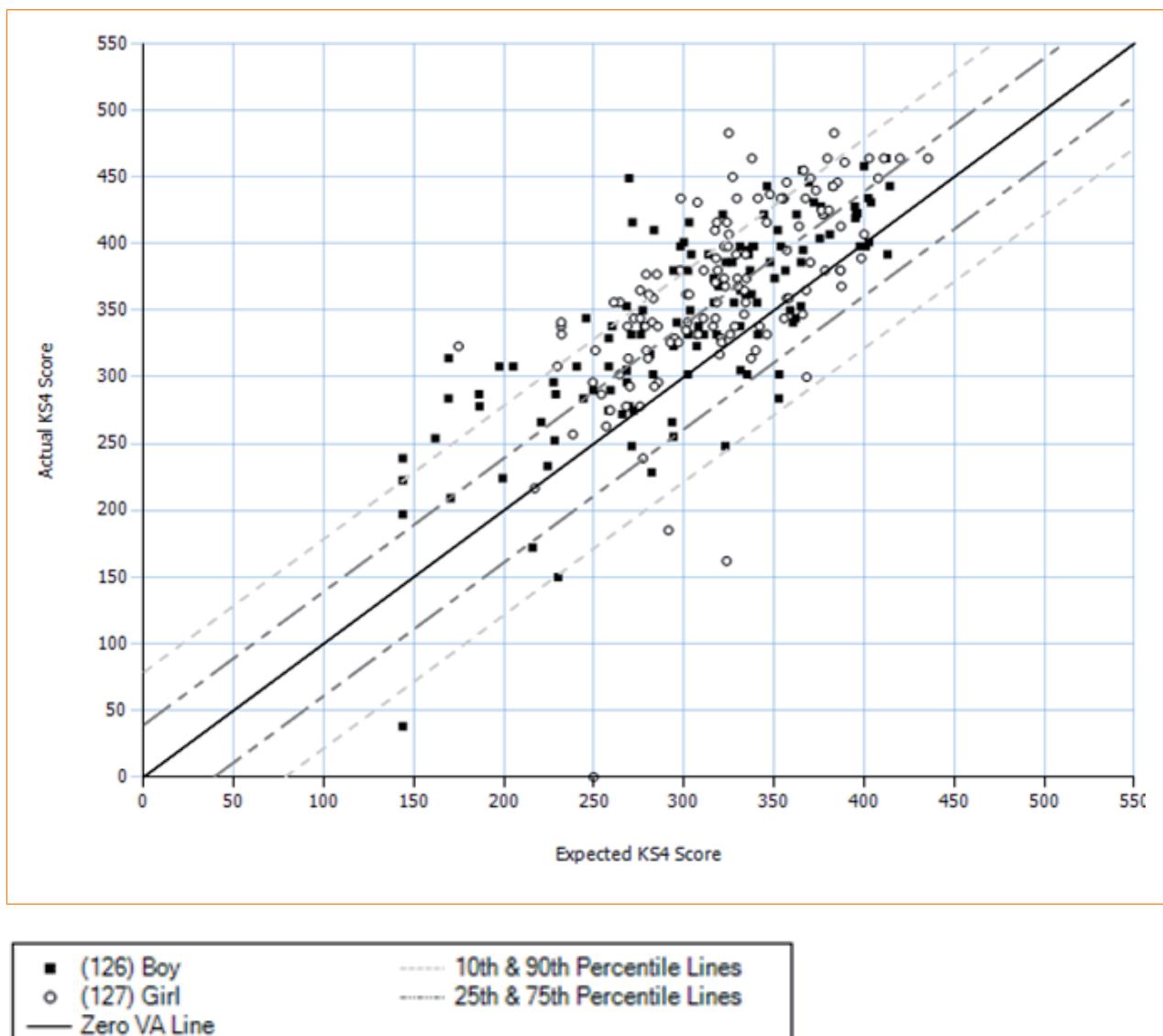
Key questions about *FFT pupil estimate reports*

- Is the school's use of pupil estimates based on a thorough understanding of the difference between estimates and targets?
- How is information about individual children's expertise and interest in a subject taken into account when using FFT estimates (that are based on prior attainment in core subjects)?
- How is additional challenge incorporated in individual children's targets to ensure that attainment gaps are narrowed for groups that have underperformed historically?

Workshop 3S (Secondary): Analysing progress data

Resource 3.1S: Key Stage 2 to Key Stage 4 VA, expected vs actual scatterplot – gender

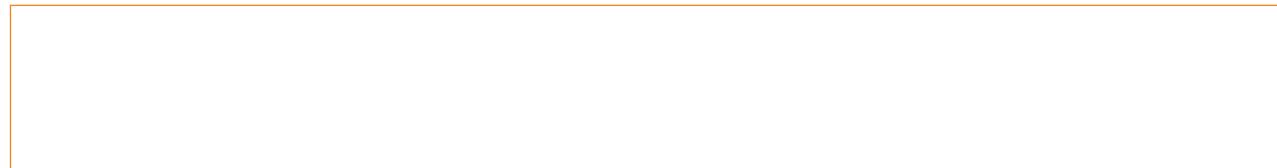
RAISEonline report Sec10E: Key Stage 2 to Key Stage 4 fine grades value-added analysis by pupil (APS value-added line, showing spread of pupils by gender)



Record your observations and hypotheses from the data in this table.

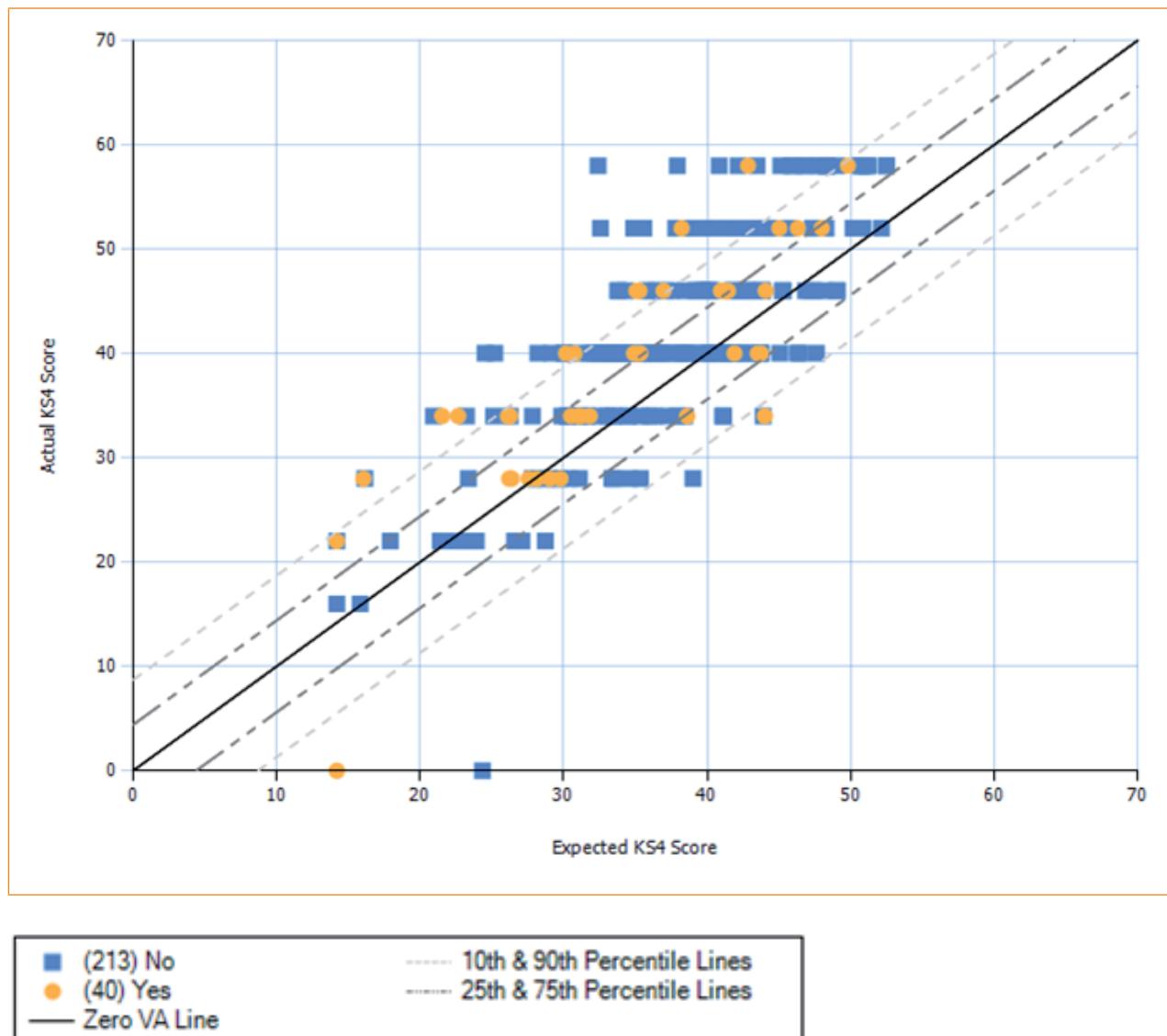
Find the equivalent report for your own school. Record any key issues or observations.

Access route: KS4 > Progress > VA > KS2-4 VA Expected vs Actual – Scatterplot (Sec10E)



Resource 3.2S: Key Stage 2 to Key Stage 4 VA, expected vs actual scatterplot (mathematics) – gender and FSM

RAISEonline report Sec10E: Key Stage 2 to Key Stage 4 fine grades value-added analysis by pupil (mathematics value-added line, showing spread of pupils by FSM eligibility)



Record your observations and hypotheses from the data in this table.

Find equivalent analyses for your school, for English and for mathematics. Record any key issues or observations.

Access route: KS4 > Progress > VA > KS2-4 VA Expected vs. Actual – Scatterplot (Sec10E), mathematics selected from 'Subject' menu, and FSM selected from 'Group' menu

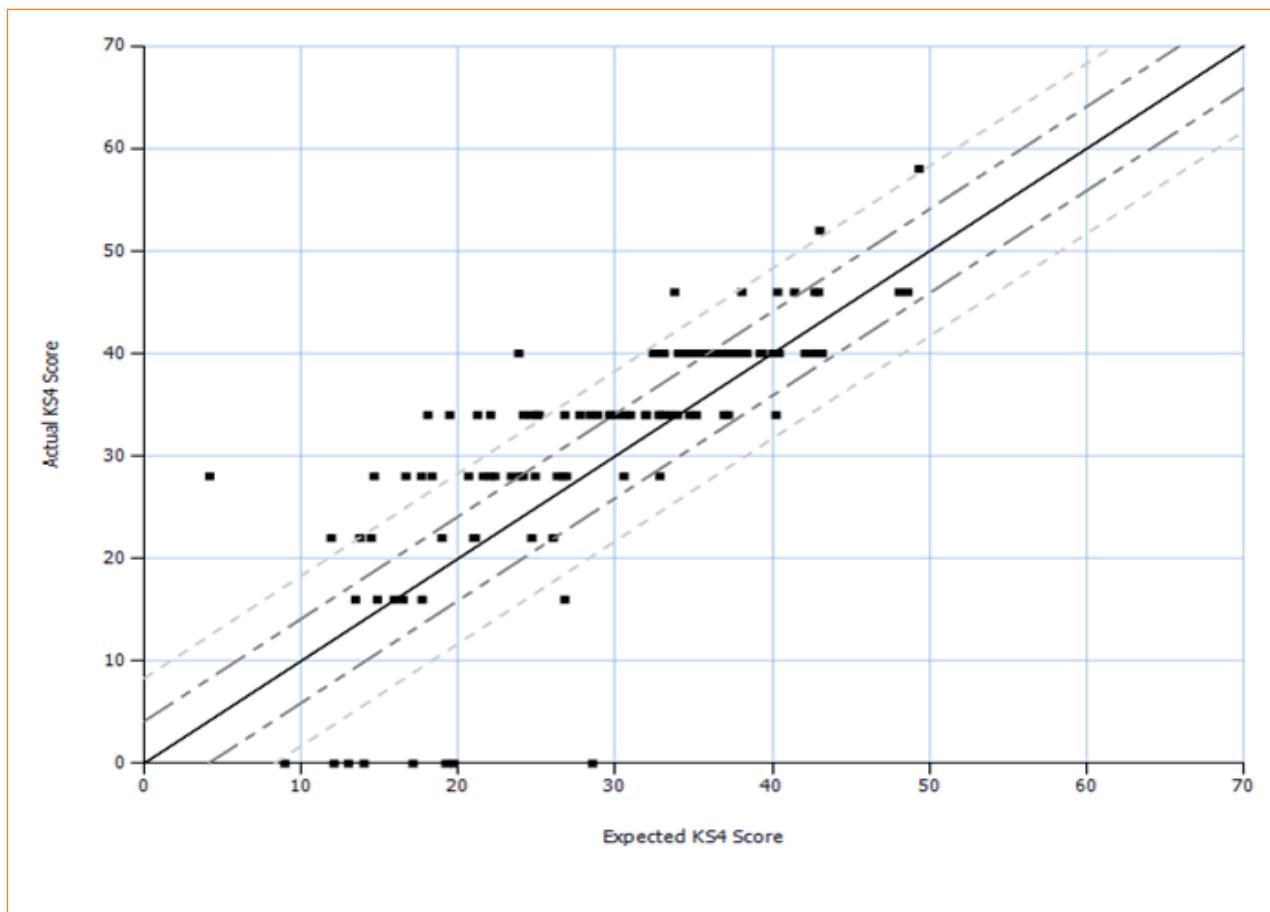
Use the 'Subject' menu (Key skill 2, page 90) and the 'Group' menu (Key skill 3, page 91) to explore other subjects and groups for your school. If you click on any point on the scatterplot, you can see the name of the pupil concerned, and their contextual information.

Key questions about VA reports

- How many pupils lie above the 10th percentile line, or below the 90th percentile line? Is either of these groups dominated by a particular group of pupils (e.g. boys, girls, FSM pupils, pupils from minority ethnic groups)?
- Is there a difference in the pattern of progress in core subjects for lower-attaining pupils (expected score below 28 (grade E) at Key Stage 4) and that of their peers?
- Is there a difference in the pattern of progress in core subjects for higher-attaining pupils (expected score above 48 (grade B) at Key Stage 4) and that of their peers?
- Does school analysis make effective use of the 'Subject' and 'Group' menus when analysing progress?

Resource 3.3S: Key Stage 2 to Key Stage 4 CVA, expected vs actual scatterplot (English/English language – boys)

RAISEonline report Sec6: Key Stage 2 to Key Stage 4 contextual value-added analysis by pupil (secondary English/English language contextual value-added line, showing spread of pupils by gender – boys)



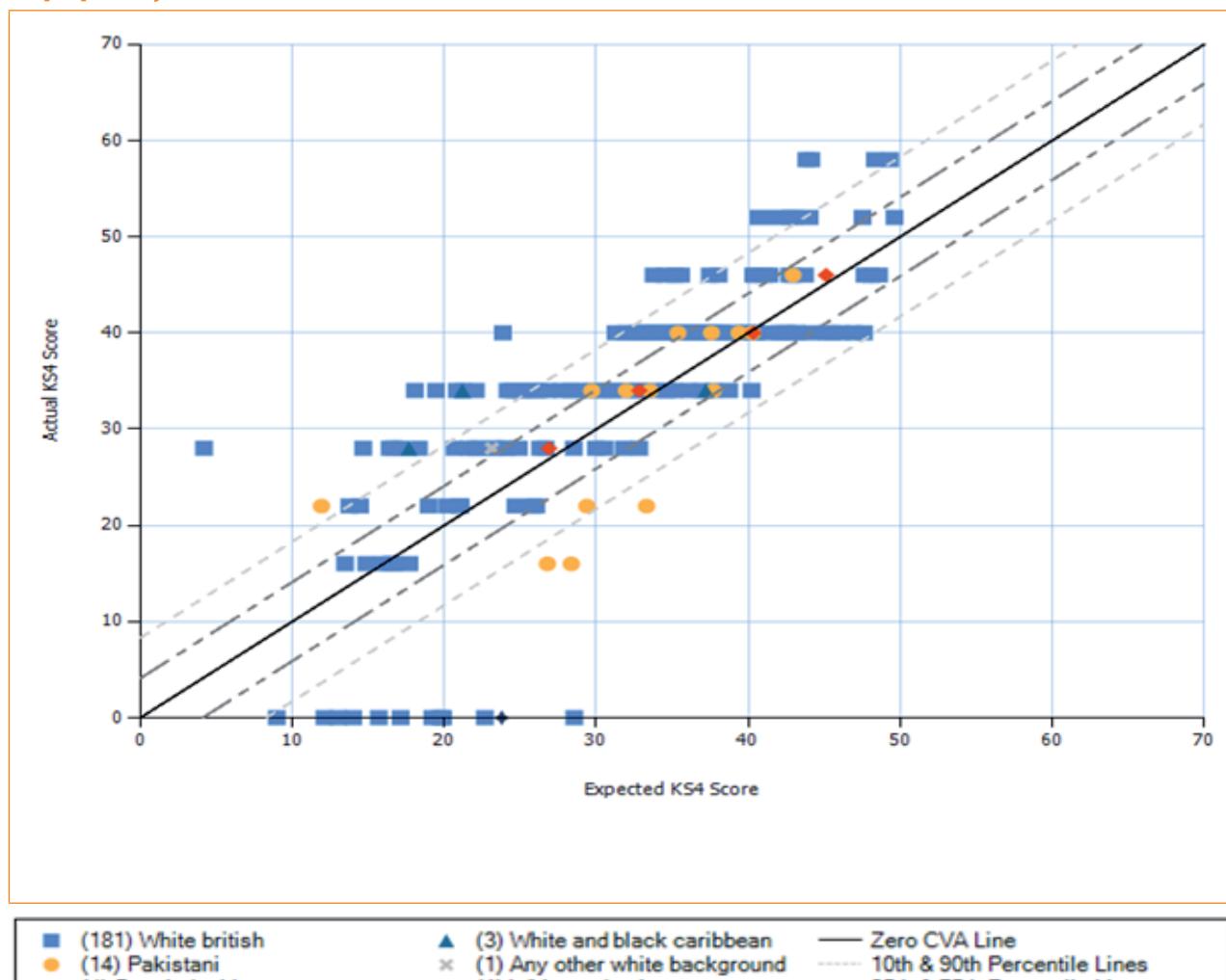
Record your observations and hypotheses from the data in this table.

Create an equivalent scatterplot for your own school. Record any key issues or observations.

Access route: KS4 > Progress > CVA > KS2-4 CVA Expected vs. Actual – Scatterplot (Sec6) (English selected from 'Subject' menu (Key skill 2, page 90) and boys selected on the 'Set Filters' menu (Key skill 5, page 92)

Resource 3.4S: Key Stage 2 to Key Stage 4 CVA, expected vs actual scatterplot (English/English language) – ethnicity

RAISEonline report Sec6: Key Stage 2 to Key Stage 4 contextual value-added analysis by pupil (secondary English/English language contextual value-added line, showing spread of pupils by main ethnic code)



Record your observations and hypotheses from the data in this table.

Create equivalent scatterplots for your own school. Record any key issues or observations.

Access route: KS4 > Progress > CVA > KS2-4 CVA Expected vs. Actual – Scatterplot (Sec6) (English selected from 'Subject' menu (Key skill 2, page 90), and main ethnic code selected from the 'Groups' menu (Key skill 3, page 91)

Use the 'Subject' menu (Key skill 2, page 90) and the 'Group' menu (Key skill 3, page 91) to explore other subjects and groups for your school. If you click on any point on the scatterplot, you can see the name of the pupil concerned, and their contextual information.

Resource 3.5S: Key Stage 2 to Key Stage 4 CVA dynamic report (mathematics) – gender, FSM and SEN

RAISEonline report Sec 5.2: Key Stage 2 to Key Stage 4 contextual value added: performance of groups within school, dynamic report for mathematics (gender, FSM and SEN)

Gender	Free school meal eligibility	Special educational needs	Cohort for CVA	CVA School Score	95% Confidence Interval	Significance
Female	No	School action	6	998.6	3.9	
Female	Yes	No special provision	19	1,001.4	2.9	
Female	Yes	School action	2	999.8	4.6	
Male	No	No special provision	83	1,001.4	1.6	
Male	No	School action	15	1,001.1	3.1	
Male	No	School action plus	2	999.3	4.6	
Male	No	Statemented	7	1,003.3	3.8	
Male	Yes	No special provision	11	999.9	3.4	
Male	Yes	School action	5	1,000.5	4.1	
Male	Yes	Statemented	3	999.4	4.4	

Record your observations and hypotheses from the data in this table.

Find this this data, and the equivalent data for English, for your own school. Record any key issues or observations.

Access route: KS4 > Progress > CVA > KS2-4 CVA Dynamic Report (Sec5.2) (Mathematics selected from 'Subject' menu, and grouped by gender, FSM and SEN status) (Key skill 5, page 92)

Key questions about CVA reports

- Are groups that have underperformed historically making enough progress to narrow attainment gaps? How can these groups, especially FSM pupils, be supported further to ensure that they achieve key threshold indicators?
- How many pupils lie above the 10th percentile line, or below the 90th percentile line? Is either of these groups dominated by a particular group of pupils (e.g. boys, girls, FSM pupils, pupils from minority ethnic groups)?
- Is there a difference in the pattern of progress in core subjects for lower-attaining pupils (expected score below 28 (grade E) at Key Stage 4) and that of their peers?
- Is there a difference in the pattern of progress in core subjects for higher-attaining pupils (expected score above 48 (grade B) at Key Stage 4) and that of their peers?
- Does school analysis make effective use of the ‘Subject’ and ‘Group’ menus when analysing progress?

Resource 3.6S: Key Stage 2 to Key Stage 4 CVA measures report

RAISEonline report Sec1: Contextual threshold measures report Key Stage 2–4

Probability of achieving 5A*-C, incl EN+MA	Number of pupils	Number of pupils achieving 5A*-C, incl EN+MA	Success rate	Predicted success rate
Higher	33	32	97%	87%
Middle	52	36	69%	49%
Lower	105	6	6%	6%
Whole School	190	74	39%	32%

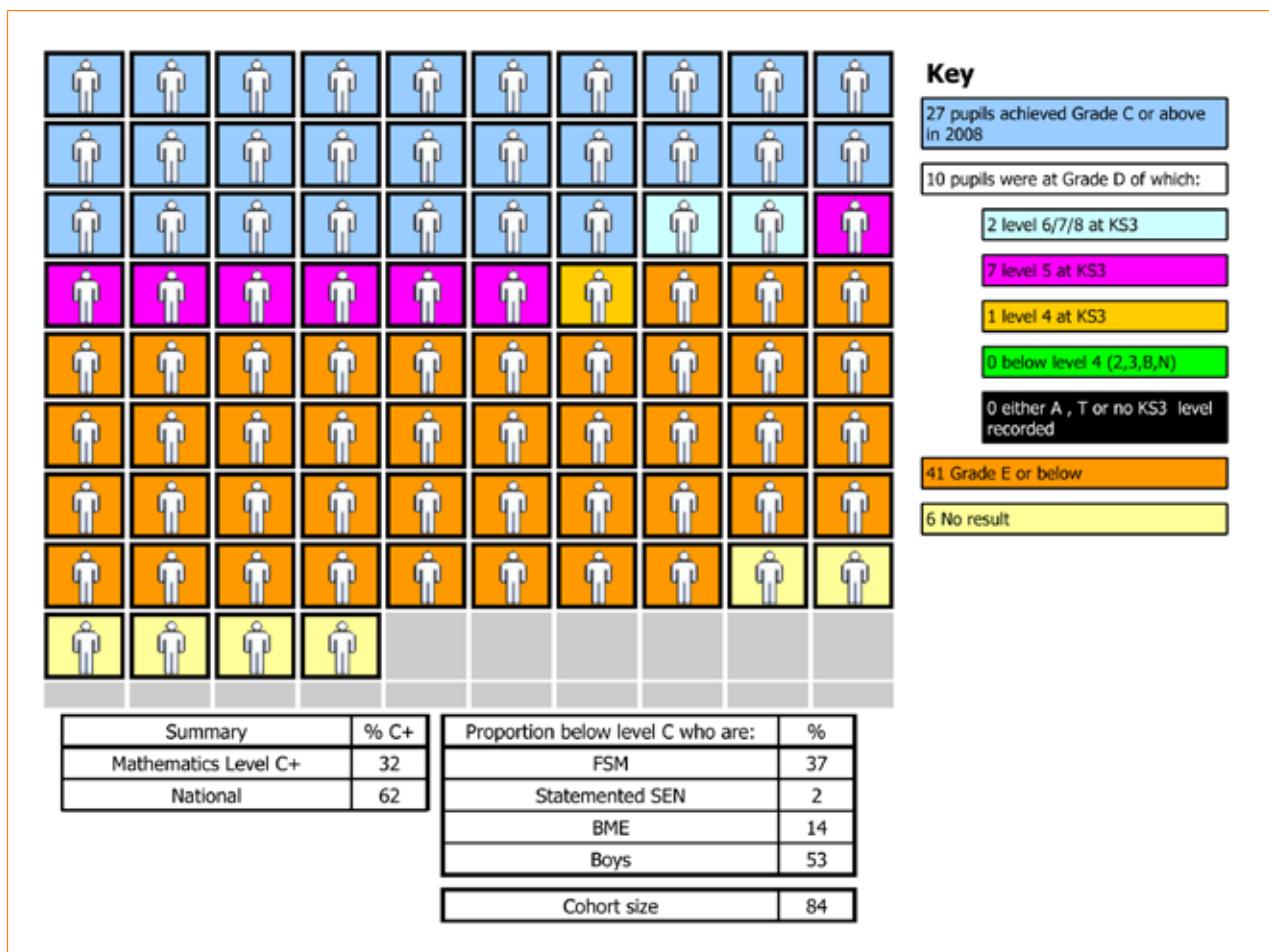
Record your observations and hypotheses from the data in this table.

Find the equivalent report for your own school. Record any key issues or observations.

Access route: KS4 > Progress > CVA > KS2-4 CVA Threshold Measures (Sec1)

Resource 3.7S: Key Stage 3 to Key Stage 4 pupil progress chart (mathematics)

RAISEonline report KS4_Y: Key Stage 3–4 pupil progress chart for mathematics



Record your observations and hypotheses from the data in this table.

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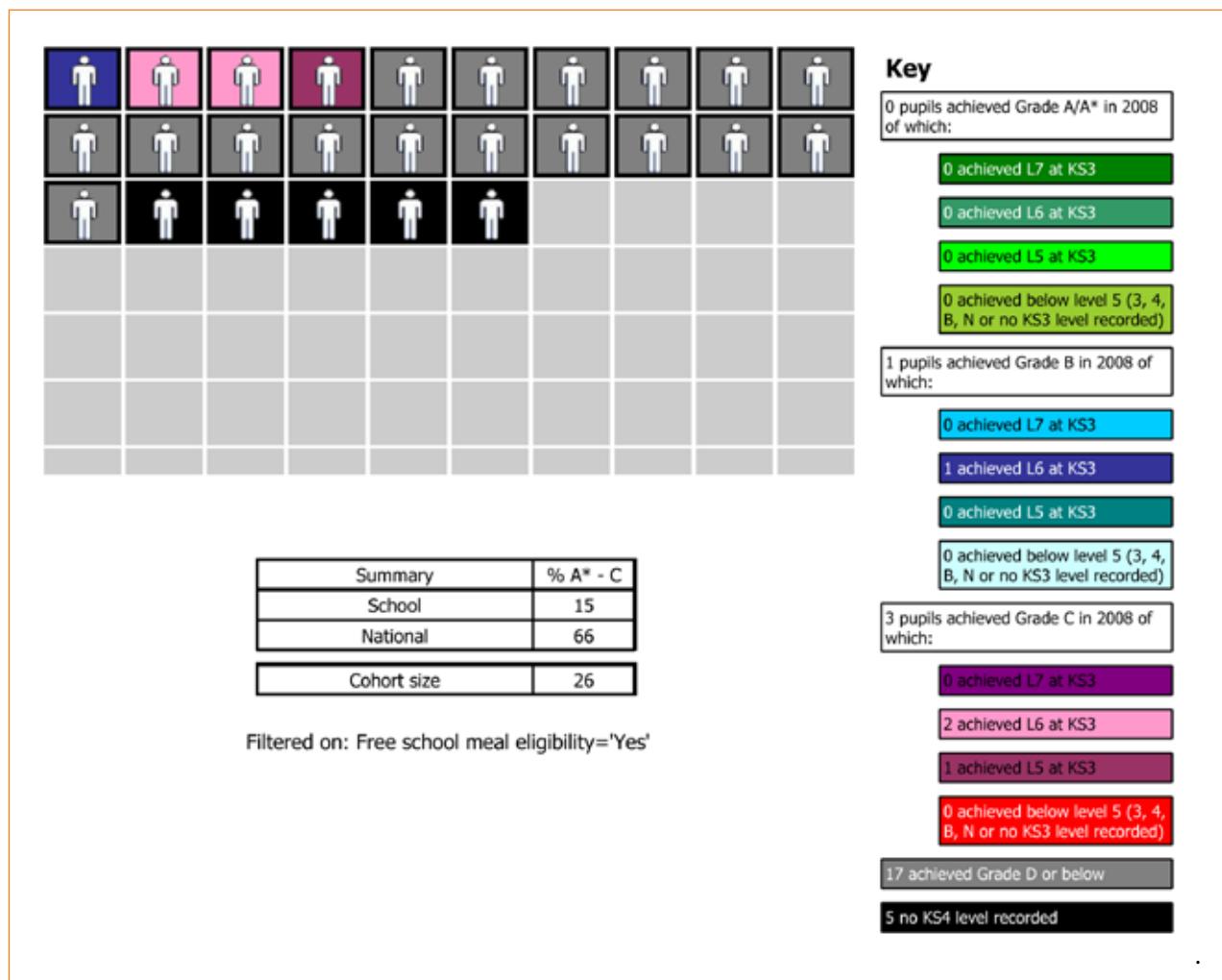
Create the equivalent chart for your own school. Record any key issues or observations.

Access route: KS4 > Progress > Conversions > KS3-4 Pupil Progress Chart (KS4_Y), mathematics selected from the 'Subject' menu

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Resource 3.8S: Key Stage 3 to Key Stage 4 pupil progress chart (mathematics) – high attainers and FSM

RAISEonline report KS4_X: Key Stage 3–4 pupil progress chart for mathematics (high attainers, FSM)



Record your observations and hypotheses from the data in this table

Create equivalent charts for your own school. Record any key issues or observations.

Explore the progression patterns in core subjects for key groups in your school by filtering for FSM and then for non-FSM and looking at the charts side by side. Do the same thing for gender and ethnicity.

Key questions about *conversion charts*

- Which groups of pupils in the school are stuck? (That is, they made no measurable progress during a key stage.)
- Which groups of pupils make slow progress?
- Which groups of pupils make expected or better progress, but still fail to reach important threshold measures?
- Does the school tracking system accurately identify pupils that are falling behind in the early years of a key stage?
- Does the school tracking system identify pupils that are falling behind in one or other of the core subjects?
- How rigorously is the impact of interventions designed to raise attainment in core subjects evaluated?

Resource 3.9S: KS4 pupil estimate report (English)

Chart 5.1: KS4 pupil estimate report, English (estimate basis: SE – Rank: 25, Type D)

This report shows the probability of each pupil attaining individual Key Stage 4 levels in a range of GCSE subject areas. Use the 'Estimate Basis' option to select either PA or SE estimate models and select a rank (50 to 5) to compare against schools at the 50th to 5th percentile (FFT Key skills 2 and 3, page 82). By selecting a rank of 10, for example, the estimates will be based on the progress made by pupils in schools at the 10th percentile for value added. The higher the rank (5 highest, 50 lowest), the more challenging the estimates.

Pupil Details		KS2/3 Results										% chance of achieving KS4 Grade					% chance		
Name	Sex	KS	EN	MA	SC	G	F	E	D	C	B	A	A*	A*-C	Pass				
Almond, Ethan	M	2	4.1	4.2	4.6	4.1%	12.8%	26.6%	32.6%	21.9%	1.9%	1.9%	1.9%	25.8%	97.4%				
		3	2.8	5.1	5.0	6.2%	21.9%	37.9%	27.8%	6.2%	1.9%	1.9%	1.9%	9.2%	95.5%				
Almond, Tracey	F	2	4.0	3.7	4.2	9.1%	24.9%	33.2%	23.6%	9.5%	1.9%	1.9%	1.9%	12.5%	96.4%				
		3	4.7	4.3	4.5	17.1%	40.7%	33.3%	8.3%	1.9%	1.9%	1.9%	1.9%	4.9%	94.6%				
Aluminium, Andrew	M	2	4.8	5.1	5.4	1.9%	1.9%	2.9%	11.8%	42.5%	31.7%	10.6%	1.9%	85.9%	99.9%				
		3	6.1	7.3	6.2	1.9%	1.9%	1.9%	4.9%	37.4%	46.4%	11.7%	1.9%	96.5%	99.9%				
Aluminium, Chelsea	F	2	4.5	4.4	4.5	1.3%	6.5%	19.6%	33.3%	33.5%	5.3%	1.9%	1.9%	40.9%	98.6%				
		3	5.2	5.1	4.5	3.4%	17.5%	40.9%	31.1%	7.1%	1.9%	1.9%	1.9%	10.1%	97.5%				

Record your observations and hypotheses from the data in this table.

Find the equivalent table for your own school. Record any key issues or observations.

Access route: www.fftlive.org > Pupil Estimates > Pupil (FFT Key skill 1, page 88)

Key questions about FFT pupil estimate reports

- Is the school's use of pupil estimates based on a thorough understanding of the difference between estimates and targets?
- How is information about individual pupils' expertise and interest in a subject taken into account when using FFT estimates (that are based on prior attainment in core subjects)?
- How is additional challenge incorporated in individual pupils' targets to ensure that attainment gaps are narrowed for groups that have underperformed historically?

Workshop 4: Planning next steps

Resource 4.1: Key actions summary – the golden thread

Key actions summary - the golden thread

1. Analyse and evaluate

- RAISEonline analysis of outcome data identifies groups making slow progress.
- Data checked against the self-evaluation form (SEF), challenged and confirmed through governors and school improvement partner (SIP).
- Comparative review carried out of live tracking data for similar groups currently in school.
- Specific progress groups identified.

Evaluation = judgement + evidence + progress group(s)

2. Agree priorities

- Priorities for narrowing gaps are agreed.

Priorities = specific area(s) for improvement

3. Set objectives

Clear and explicit definition of what success means, to specify:

- progress group(s), defined by prior attainment, gender, FSM eligibility, ethnicity, subject, year group or key stage precisely enough to be able to list target pupils
- outcomes, for example, in relation to GCSE results
- systems and processes required to underpin improvement.

Objectives = pupil group(s) + outcome + systems and processes

4. Focus actions

Confirm:

- who leads and is accountable for the accelerated progress of pupils identified
- what the school will do for each pupil and why it will work
- the resources allocated
- how and when to judge success, with no indication of milestones and sources of evidence.

Actions = lead + activities + resources + milestones (time line)

5. Measure impact

- Track progress and judge success.

Impact = tracking + evaluation

Appendices

Appendix 1: Key skills

RAISEonline key skills

Key skill 1: Accessing reports in RAISEonline

Go to www.raiseonline.org and enter your username and password. Click on the 'Reports & Analysis' tab.

The screenshot shows the RAISEonline homepage. At the top, there is a logo for 'Ofsted department for children, schools and families'. To the right of the logo is a 'SELECTED SCHOOL:' dropdown menu set to 'School Not Selected (change school)'. Below the logo is a navigation bar with four tabs: 'Home', 'Reports & Analysis' (which is highlighted and circled in red), 'My Reports', and 'Tutorial'. To the right of the navigation bar are links for 'FAQ', 'Feedback', 'Contact Us', 'Site Map', 'Change Password', 'Logout', 'Help', and a question mark icon. The main content area features a photograph of two school children. To the right of the photo is the heading 'Welcome to RAISEonline' and a sub-heading 'Reporting and Analysis for Improvement through School Self-Evaluation'. Below this, it says 'RAISEonline provides a wide range of analytical information to support the analysis of school performance.' A note below the heading reads: 'Please refer to the latest news for details on the latest data release. Users are advised to refer to the tutorial material before starting to use the system.' In the bottom left corner of the main content area, there is a red box containing the heading 'Analysis of School Performance' and the message 'School not selected, please select a school to view reports.' On the right side of the page, there is a 'Latest News' sidebar with two entries: 'Technical support for the Pupil Achievement Tracker (PAT) will end after September' (with a note about PAT ending on 30/09/2009) and 'Planned Downtime - Thursday 01 October 2009' (with a note about the system being unavailable on 01/10/2009).

Now click on 'Click here to view all analyses available'.

The screenshot shows the Ofsted RAISEonline website. At the top right, there is a 'SELECTED SCHOOL:' dropdown with '(change school)' and a 'Help' link. Below the header, there are navigation links: Home, Reports & Analysis (which is highlighted in blue), My Reports, and Tutorial. Under 'Reports & Analysis', the 'Reports and Analysis' section is visible. A red box highlights the 'View all Analyses' link, which is circled in red. Below it, another link 'Click here to view all contextual analyses' is also present.

Home > Reports & Analysis

Reports and Analysis

View all Analyses

[Click here to view all analyses available](#)

[Click here to view all contextual analyses](#)

This takes you to the main RAISEonline menu. This is organised by 'Whole School' and 'Key Stage'. Each key stage has sections on 'Progress', 'Attainment' and 'School Forward Estimates'.

The screenshot shows the Ofsted website interface. At the top, there is a logo for 'Ofsted' with three stars, followed by the text 'department for children, schools and families'. To the right, there is a 'SELECTED SCHOOL:' dropdown menu with '(change school)' option, and links for 'FAQ', 'Feedback', 'Contact Us', 'Site Map', 'Change Password', 'Logout', 'Help', and a question mark icon.

Below the header, there is a navigation bar with tabs: 'Home', 'Reports & Analysis' (which is selected), 'My Reports', and 'Tutorial'. Underneath the navigation bar, the breadcrumb trail reads 'Home > Reports & Analysis > View All Analyses'.

View All Analyses

The main content area displays a hierarchical tree view of available analyses:

- Whole School**
 - Other Outcomes**
 - Absence**
 - School level absence 3 year trend (Abs_1)
- Key Stage 3**
 - Progress**
 - CVA**
 - KS2-3 CVA by Relative Attainment (Sec14CD)
 - KS2-3 CVA Snakeplot and Trend (Sec13AB)
 - KS2-3 CVA by Pupil Characteristics (Sec15B)
 - KS2-3 CVA by Ethnicity (Sec15.1B)
 - KS2-3 CVA Dynamic Report (Sec15.2)
 - KS2-3 CVA Expected vs. Actual Scatterplot (Sec16)
 - VA**
 - KS2-3 VA Summary and Trend (Sec18AB)
 - KS2-3 VA Expected vs. Actual Scatterplot (Sec20E)
 - Conversions**
 - KS2-3 Pupil Progress Chart - High Attainers (KS3_X)
 - KS2-3 Pupil Progress Charts (KS3_Y)

Key skill 2: Using the 'Subject' menu

Using the 'Subject' menu, you can obtain reports by individual core subjects.

The screenshot shows the 'View All Analyses' page with a red circle highlighting the 'Subject' dropdown menu. The menu is open, showing 'All Subjects' (which is selected) and 'Mathematics' and 'English / English Language'.

At the top of the page, there are tabs: 'Home', 'Reports & Analysis' (selected), 'My Reports', and 'Tutorial'. Below the tabs, the breadcrumb trail is 'Select Report -> View All Analyses -> KS4.2A'. There are also buttons for 'Save Link to My Reports', 'How to Print', and a 'Find' button.

Key skill 3: Using the 'Group' menu

Using the 'Group' menu, you can see how the attainments or progress of pupils with particular characteristics are distributed in a cohort. When the 'Group' option is selected, the whole cohort is still displayed but pupils are identified according to the set of characteristics selected. When the group has been selected, click on 'OK'.

The screenshot shows a software interface for data analysis. At the top, there are tabs: Home, Reports & Analysis (which is selected), My Reports, and Tutorial. Below the tabs, it says 'Select Report -> View All Analyses -> Pri1OE'. There are several dropdown menus and buttons: 'Related Analyses: --Select--', 'Data: 2008 Validated Data', 'Save Link to My Reports', 'Subject: Science (KS2)', 'Options: --Select--', 'Set Filters', 'How to Print', 'Group: Select--', and 'OK'. A red circle highlights the 'Group' dropdown menu, which is open to show a list of characteristics: 'Gender', 'Extended ethnic code', 'Free school meal eligibility', 'First language', 'Special educational need', and 'Main ethnic code'. The main title of the report is 'Page 2 Fine Grades Value Added Analysis by pupil, 2008'.

Key skill 4: Using the 'Set Filters' menu and 'School Defined' fields

Using the option 'Set Filters', you can refine an analysis to focus on a specific group of pupils. When filters are used, outcomes for a chosen subset of the whole cohort can be seen in a report. Any number of filters can be selected from the menu, shown below. However, if too many filters are chosen there may not be many pupils left to view.

The screenshot shows the same software interface as the previous one, but with a different focus. A red circle highlights the 'Set Filters' button, which is located in the 'Save Link to My Reports' row of buttons. The other buttons in that row are 'Save Link to My Reports' and 'How to Print'. The rest of the interface is identical to the previous screenshot, including the 'Group' dropdown menu and the report title.

School administrators can set up 'School Defined' fields (see below), which allow, for example, the results of pupils from a particular teaching group, intervention group or non-specified ethnic group (such as Eastern European) to be displayed in tables and charts. For further information about setting up school-defined groups use the 'Tutorial' tab on the home page. Select 'School Administrators' from the 'User groups' menu, scroll down to 'Unit 11 Managing School Data' and choose 'Sub-unit 4 Working with School Defined filters'.

The 'Set Filters' menu, and area for 'School Defined' fields

Further details can be obtained using the help button, or in the tutorial section.

Ethnicity	Free School Meals (FSM)
<input type="checkbox"/> White British <input type="checkbox"/> Irish <input type="checkbox"/> Traveller of Irish Heritage <input type="checkbox"/> Gypsy/Roma <input type="checkbox"/> Any Other White Background <input type="checkbox"/> White and Black Caribbean <input type="checkbox"/> White and Black African <input type="checkbox"/> White and Asian <input type="checkbox"/> Any other Mixed Background <input type="checkbox"/> Indian <input type="checkbox"/> Pakistani <input type="checkbox"/> Bangladeshi <input type="checkbox"/> Any other Asian Background <input type="checkbox"/> Caribbean	<input type="checkbox"/> Yes <input type="checkbox"/> No
First Language	Gender
<input type="checkbox"/> English <input type="checkbox"/> Believed to be English <input type="checkbox"/> Other <input type="checkbox"/> Believed to be other <input type="checkbox"/> Refused <input type="checkbox"/> Information not obtained	<input type="checkbox"/> Female <input type="checkbox"/> Male
Terms-of-Birth	Prior Attainment Band
<input type="checkbox"/> Autumn <input type="checkbox"/> Spring <input type="checkbox"/> Summer	<input type="checkbox"/> Below level <input type="checkbox"/> At level <input type="checkbox"/> Above level
	Special Educational Needs
	<input type="checkbox"/> No special provision <input type="checkbox"/> School action <input type="checkbox"/> School action plus <input type="checkbox"/> Statemented
	School Defined
	<input type="button" value="Apply to Report"/> <input type="button" value="Cancel"/> <input type="button" value="Reset all Filters"/>

Key skill 5: Applying multiple groups

For some reports the 'Group' and 'Set Filters' buttons are replaced with the option to 'Apply filters or groupings to this report'. This allows you to select multiple groupings (up to three characteristics).

Home Reports & Analysis My Reports Tutorial

Select Report -> View All Analyses -> KS4.4B

Related Analyses:	-- none available --	Data:	2008 Final Data	Save Link to My Reports
Subject:	English / English Language	Options:	--Select--	How to Print
<input type="button" value="Apply filters or groupings to this report"/>				
Find Next Select a format Export				

Select Report -> View All Analyses -> KS4.4D

Related Analyses: -- none available -- Data: 2008 Final Data Save Link to My Reports

Subject: English / English Language Options: --Select-- Set Filters

Group: Gender & Free school meal elig & --Select-- OK How to Print

--Select-- Export

Key Stage 4 attainment thresholds by pupil subject, 2008

First language
Special educational need
Main ethnic code

Key skill 6: Using the 'Data' menu

Use the 'Data' menu to access reports from previous years, in order to explore trends.

Select Report -> View All Analyses -> KS4.22

Related Analyses: -- none available -- Data: 2008 Final Data Save Link to My Reports

Options: -- none available -- How to Print

Grouping cannot be specified.

2005 Final Data
2006 Final Data
2007 Final Data
2008 Final Data

Find | Next | Select a format | Export

Key skill 7: Using the 'Options' menu

Use the 'Options' menu to refine the choices you can make when viewing a report.

Select Report -> View All Analyses -> KS4.21

Related Analyses: Select Data: 2008 Final Data Save Link to My Reports

Options: --Select-- How to Print

Grouping cannot be specified.

--Select--
--Select--
View All Pupils
View Boys
View Girls

Find | Next | Select a format | Export

Appendix 2: Fischer Family Trust key skills

Key skill 1: Accessing reports

Go to www.fftlive.org and enter your username and password. Select 'Please click here to view the Reports menu'.

The screenshot shows the FFT Live 3.0 dashboard. The top navigation bar includes links for Home, Logout, Help, Find, Next, Select a format, Export, and Print. The main content area is divided into two main sections:

- Main Reports:**
 - Value Added Significant Areas:** Includes links for 'Significant Areas Grid' (School), 'Significant Areas Detail' (School), 'Value Added Pupil' (Pupil), 'Pupil Estimates' (Pupil, Summary), and 'Summary Estimates' (School).
- Development Reports:**
 - Improved Reports:** Includes links for 'Significant Areas Grid' (School), 'Significant Areas Detail' (School), 'KS2 Estimates' (Pupil), and 'KS2/3/4 Summary Estimates' (School).
 - New Reports:** Includes link for 'KS2 Subject Estimates' (School).
 - New Ideas:** Includes link for 'Student Explorer' (Intro).

Key skill 2: Selecting a subject and changing the estimates basis

Use the menus in the report to change the 'Estimate Basis', and select a 'Subject'.

There are two basic estimates – PA (based on Prior Attainment, gender and month of birth) and SE (School Extended) based on Prior Attainment plus school context factors such as FSM eligibility, deprivation and cohort ability. Select 'All' to view both estimates at the same time.

The screenshot shows the 'KS2 Pupil Report' interface. At the top, there are dropdown menus for LA (Anonymous, School ANON_2004), Year (2009/10), Highlight Top (25%), Subject (English), and Estimate Basis (PA). A red circle highlights the 'Estimate Basis' dropdown menu, which is open to show options: '50 (Type A)' and 'Select a Value'. Below the menu, the report title is 'KS2 Pupil Report (English)' and the report ID is 'ANON_2004 (9992004)'. The report is anonymous. The main content area displays pupil details, KS2 results, and KS2 estimates for English. The 'KS2 Estimates' table includes columns for Basis (PA or SE), Subject (English), and % chance of achieving KS2 Level (ranging from 1% to 99%).

Pupil Details	Deb	Sex	KS2 Results				KS2 Estimates							
			S+L	Read	Write	MA	%C	Est	Subject	2	3	4	5+	4+
Almond, Clare	08/10/98	F	3	3	2A	3	3	PA	English	1%	1%	29%	71%	99%
Almond, Jay	14/01/99	M	3	2A	2A	3	3	PA	English	1%	2%	49%	49%	98%

Key skill 3: Using the 'Estimate Rank' option

The 'Estimate Rank' option (see above) is used in conjunction with the 'Estimate Basis' (PA/SE) and allows users to select a rank from 50 to 5.

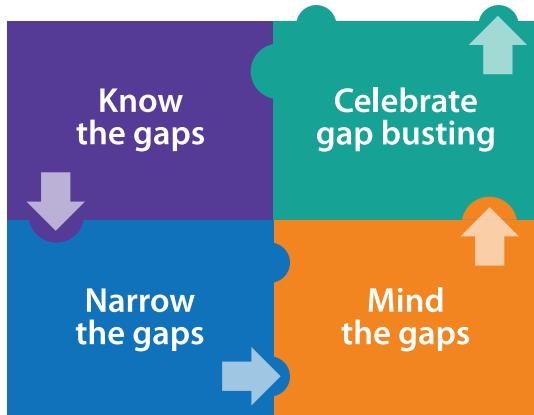
Selecting PA (Prior Attainment) as the 'Estimate Basis' and 50 as the 'Estimate Rank' will produce estimates based on the progress made by similar pupils (based on prior attainment, gender and month of birth) in schools at the 50th percentile for value added. This is how Type A estimates are produced.

Selecting an estimate basis of SE (School Extended) with a rank of 50 will produce Type B estimates and changing the rank to 25 will produce Type D estimates (progress of pupils in schools at the 25th percentile for value added). The higher the rank (e.g. 5), the more challenging will be the estimates.

Appendix 3: Useful references

Web links

- RAISEonline: www.raiseonline.org
- Fischer Family Trust (FFT): www.fftlive.org
- National Strategies, *Evaluating School Performance* – e-learning modules www.standards.dcsf.gov.uk/nationalstrategies, select ‘Leadership’ and then ‘Using data for improvement’



A wide range of guidance and resources to support schools in narrowing attainment gaps is available on the Narrowing the Gaps area of the National Strategies website:

www.standards.dcsf.gov.uk/nationalstrategies.

Select ‘Leadership’ and then ‘Narrowing the Gaps’.

Other references

- DCSF, 2009, *Guidance for local authorities and schools on setting education performance targets for 2011*
– Part 1: *Guidance for local authorities on setting education performance targets*
- DCSF, 2009, *Guidance for local authorities and schools on setting education performance targets for 2011*
– Part 2: *Guidance for local authorities on target setting with schools*
- DCSF, 2009, *Breaking the link between disadvantage and low attainment – Everyone’s business*
(Ref: DCSF-00357-2009)
- DCSF, 2009, *Deprivation and Education: The evidence on pupils in England, Foundation Stage to Key Stage 4*
(Ref: DCSF-RTP-09-01)
- NCSL, November 2008, *Successful leadership for promoting the achievement of white working class pupils: Vignettes – full report*
- NCSL, November 2008, *Successful leadership for promoting the achievement of white working class pupils. Vignettes: Twelve accounts of school life*

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