

Understanding School Performance Data (Secondary)

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Governors' use of school data

Key questions:

- *Where is my school most successful?*
- *Which areas need to improve?*

To answer these questions, you need access to an externally produced dataset that provides comparative benchmarks, e.g. how does this compare to the rest of the country, to similar schools etc?

Data Analysis Tools to be discussed today

<p>Compare School Performance (produced by DfE) <i>(School, LA and national data)</i></p> <p><i>NB this tool is in the public domain</i></p>	<p>KS4 and KS5 – plus some info about pupils on roll, absence, finance etc</p>
<p>Analyse School Performance – including the Inspection Data Summary Report (produced by Ofsted/DfE) <i>(School, LA and national data)</i></p> <p><i>Secure site i.e. not in the public domain – goes into more detail than CSP</i></p>	<p>KS4 only (but includes access to the IDSR document – KS4 & 5)</p>

Key Concepts

- **Attainment**

- standards achieved by pupils at a particular point in time (regardless of starting points)
- often expressed in terms of national expectations

- **Progress**

- a measure of the gains in learning made by pupils between two different points in time (e.g. progress from KS2 to KS4)

NB attainment data and progress data can tell very different stories about a school. Both types of measure are important, although Ofsted give greater weighting to progress.

Attainment 8 and Progress 8



English

Double-weighted*



Maths

Double-weighted



3



4



5

EBacc qualifications

(sciences, computer science, geography,
history and languages)



6



7



8

'Open group'

**Remaining EBacc qualifications and
other approved qualifications**

(GCSEs and other approved academic, arts or vocational
qualifications)

**Higher score of English Language or English Literature
double-weighted if a student has taken both qualifications*

School Performance Tables report on schools' Attainment 8 and Progress 8 scores, based on pupils' performance across 8 subjects in the categories illustrated above

Points for the grades achieved are allocated to the 'buckets' and added up to give the student's Attainment 8 score

Calculating Attainment 8 – example

Qualification	Grade	Allocated to which element	Doubled?	Points
GCSE maths	7	Maths	Yes	14
GCSE English language	8	English	Yes	16
GCSE Eng. Lit.	6	Open		6
GCSE core science	6	EBacc		6
GCSE additional science	5	EBacc		5
GCSE French	5	EBacc		5
GCSE art	6	Open		6
GCSE Religious Studies	4	Open		4
GCSE music	3	<i>not used</i>		

Example student “Charlie”

Total Attainment 8 points = 62

Therefore, Attainment 8 average grade = $62/10 = 6.2$

(equivalent to Grade B in old system)

KS4 – Attainment 8

Attainment 8 score ?



The average of each individual's Attainment 8 score is the school's Attainment 8 score.

Calculating the Progress 8 measure

Stage 1:

This is Charlie



Look back to how Charlie achieved at the end of Key Stage 2:

English – level 4a (fine level 4.8)

Maths – level 5b (fine level 5.4)

Therefore, average fine level

$$= (4.8 + 5.4) / 2$$

$$= 5.1$$

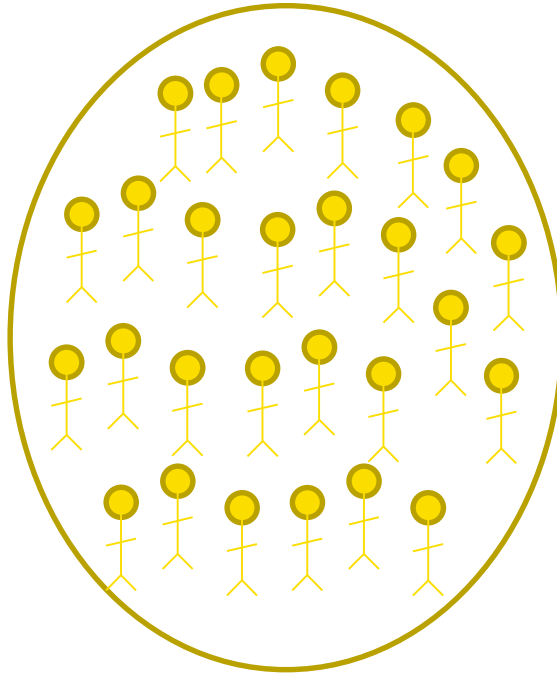
Calculating the Progress 8 measure

Stage 1:

This is Charlie



All other students nationally
with KS2 fine level of 5.1



Back to Charlie



Charlie's results are

- Prior attainment (KS2) = 5.1
- **KS4 Attainment 8 total score = 62**

He got **2.2 points** more than the average for those with similar starting points.

Divide that by 10 (the total volume of the 8 'buckets')

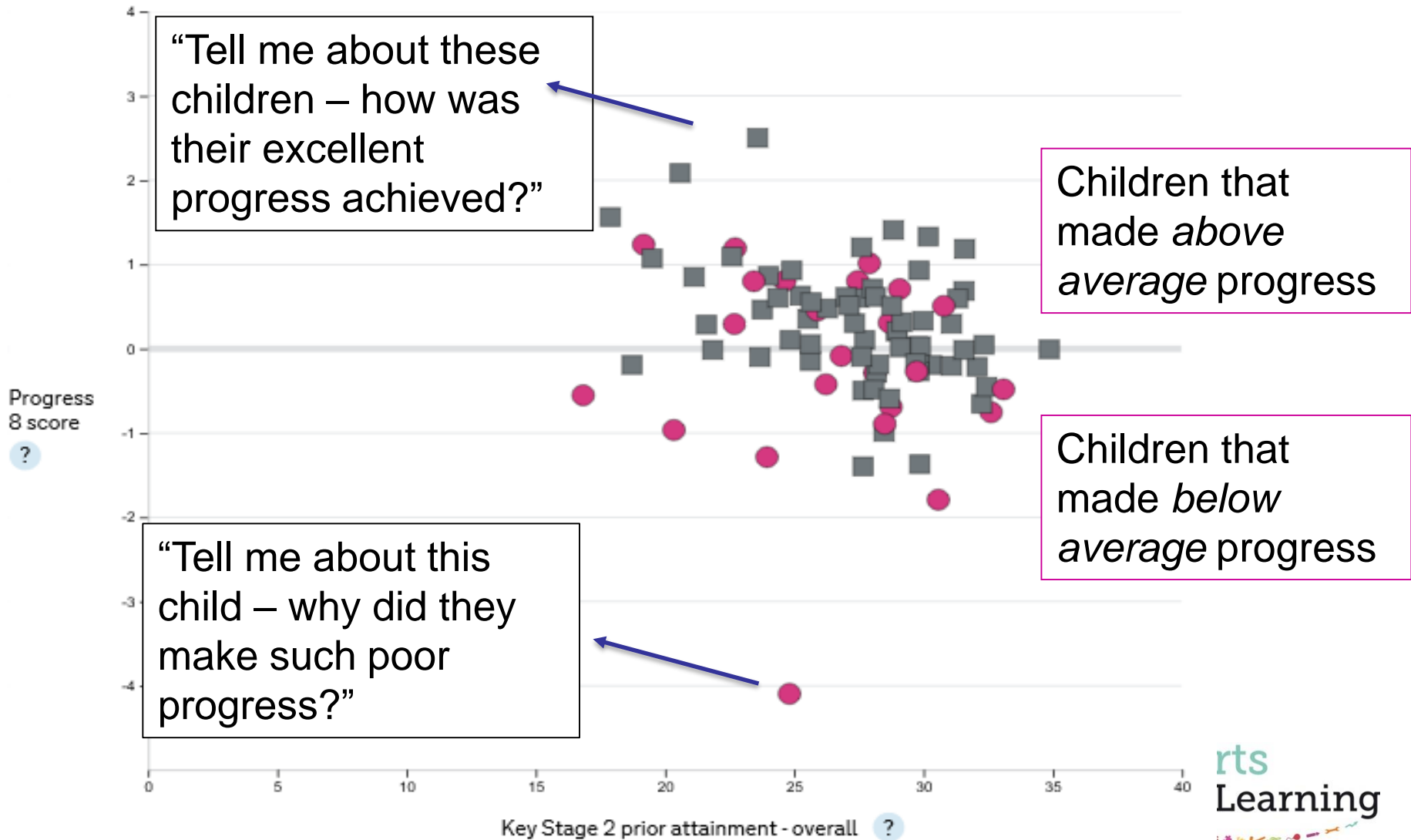
All these pupils' KS4 Attainment 8 totals are added together and divided by the number of pupils in the group
= average (national mean)
Attainment 8 total of **59.8**

= +0.22

Progress 8 scatterplots (ASP)

● Disadvantaged ■ Non disadvantaged

🔍 Zoom in

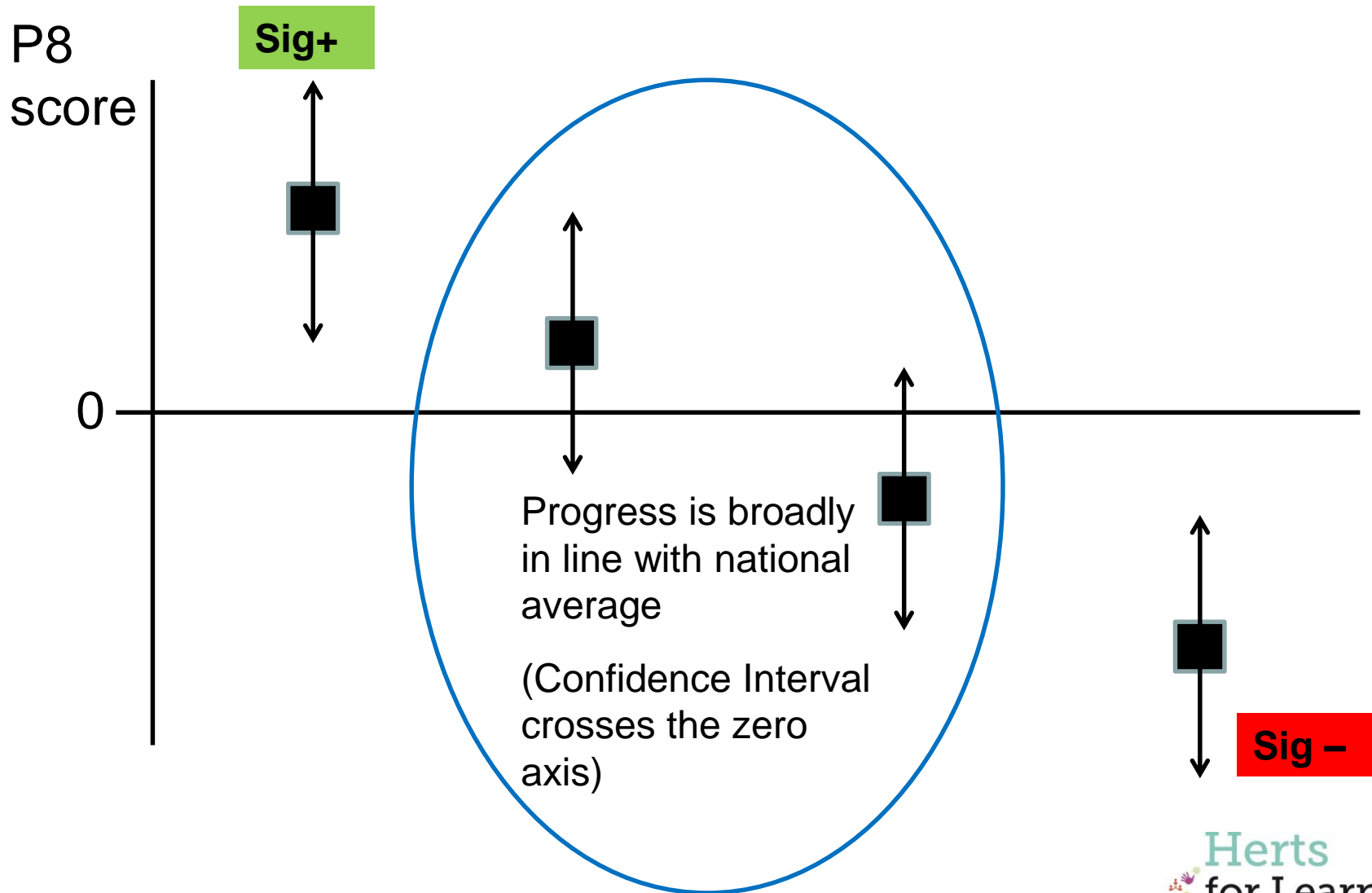


KS4 Progress 8 Score

- The average of all the individual students' Progress 8 scores is the school's Progress 8 score
- A score of zero represents average progress
- Positive scores show better than average progress; negative scores show below average progress

- Progress 8 measure also includes a “confidence interval” – a statistical margin of error e.g. plus/minus 0.3
- Example: if the Progress = +0.5, and the C.I. is +/-0.3, that means the range of possible values is +0.2 to +0.8
- *If entire range is positive, it is statistically significantly above average (sig+)*
- *If entire range is negative, it is statistically significantly below average (sig-)*

KS4 Progress 8



Progress 8 data in ASP

Key stage 4

This is revised data for 2016/2017.

Progress 8 ?

School ?

Number of pupils = 155



Confidence interval ?

0.46 to 0.84

When this is updated to show the 2018 results, this will also indicate how many pupils had 'adjusted scores' ('outlier' pupils).

 [Explore data in detail](#)

 [View pupil breakdown](#)

Distribution of the progress bands



NB any school whose Progress 8 score is not statistically significantly different to national average will be in the central yellow zone ('Average')

Progress 8 shown by elements and by pupil groups

Progress 8 by pupil group ?											
Breakdown	Cohort	Overall Progress 8		English element ?		Maths element ?		English Baccalaureate element ?		Open element ?	
		School	National benchmark	School	National benchmark	School	National benchmark	School	National benchmark	School	National benchmark
All pupils	89	0.18	0.00	-0.20	0.00	0.18	0.00	0.16	0.00	0.45	0.00
Male ?	58	0.12	-0.12	-0.30	-0.24	0.23	0.06	0.10	-0.08	0.34	-0.22
Female ?	31	0.30	0.13	-0.02	0.24	0.07	-0.06	0.28	0.08	0.67	0.22
Disadvantaged ?	24	-0.18	0.12	-0.41	0.09	-0.48	0.11	-0.26	0.15	0.25	0.11
Other ?	65	0.31	0.12	-0.12	0.09	0.42	0.11	0.32	0.15	0.53	0.11

National figures for same group (e.g. comparing your boys to national boys)

National figures for opposite group (e.g. comparing your disadvantaged pupils to national non-disadvantaged)

Some comparisons are made against the overall national figure for All pupils (i.e. 0) e.g. SEN, EAL

National Benchmarks used for Pupil Groups

- Figure for **equivalent national group** shown in the case of:
Gender, not Disadvantaged (“Other”), no SEN,
On roll in Y10&11, Prior Attainment groups*
- Figure for **opposite national group** shown in the case of:
Disadvantaged, Ever 6 FSM, CLA
- Figure for **all children (national figure)** shown in the case of:
SEN (statement/EHCP or support),
EAL or English first language

* Prior Attainment groups based on KS2 fine level average:
(Low: fine level < 4, Middle: fine level ≥ 4 and < 5, High: fine level ≥ 5)

Other key indicators to explore

- % achieving a strong pass (Grade 5+) in both English and maths
- % achieving a standard pass (Grade 4+) in both English and maths
- achievement in EBacc – now expressed as a point score, along with % entered into EBacc subjects
- % staying in education / employment / training

Inspection Data Summary Report

- Areas to investigate (instead of ‘Strengths and Weaknesses’)
- Floor and coasting measures
- School context and prior attainment information
- Absence and exclusions data
- KS4 Progress – 3 year trends
- KS4 (latest year) - Progress and Attainment
- KS5 attainment and progress
- KS5 retention rates

Prior attainment data

Prior attainment

Difference from the national average point scores



Underlined once: more than one standard deviation from national

Underlined twice: more than two standard deviations from national

Quick guide:

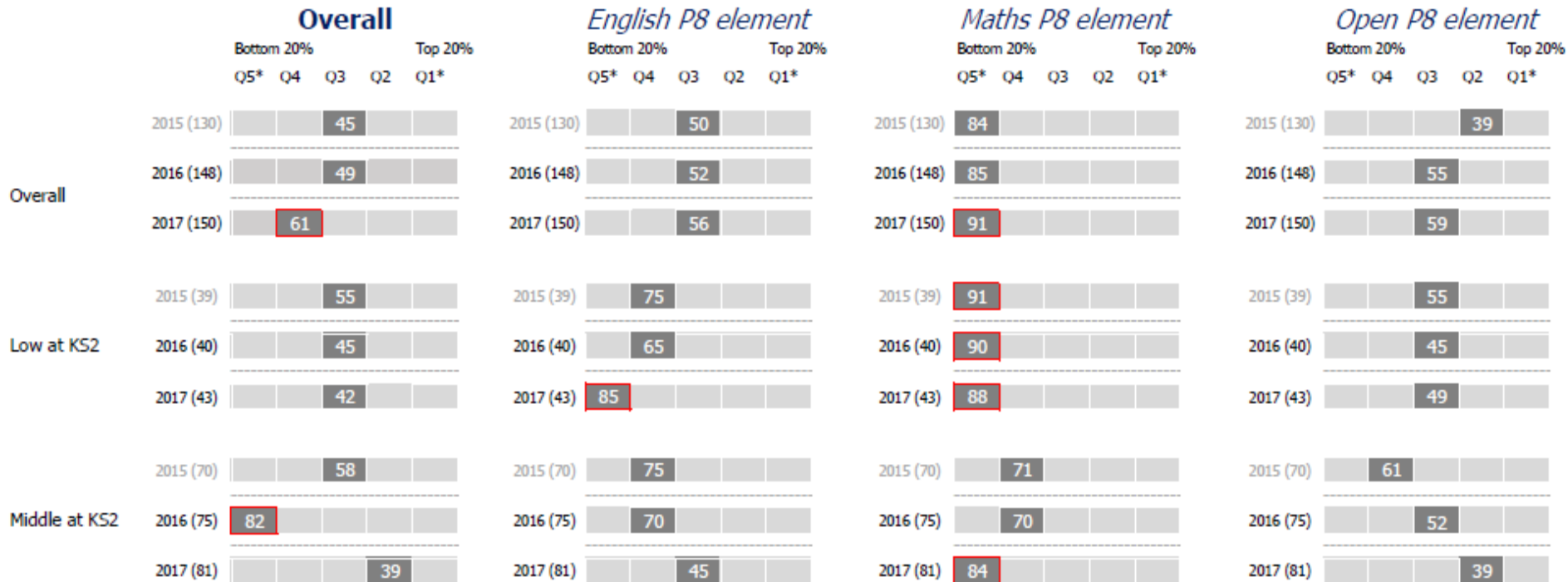
If the score is more than 1 standard deviation from the national, this puts it in the top or bottom 16% of the distribution

If the score is more than 2 standard deviations from the national this puts it in the top or bottom 2½% of the distribution

KS4 Progress – 3 year trend

Trends over time

Progress quintiles displaying percentile rank

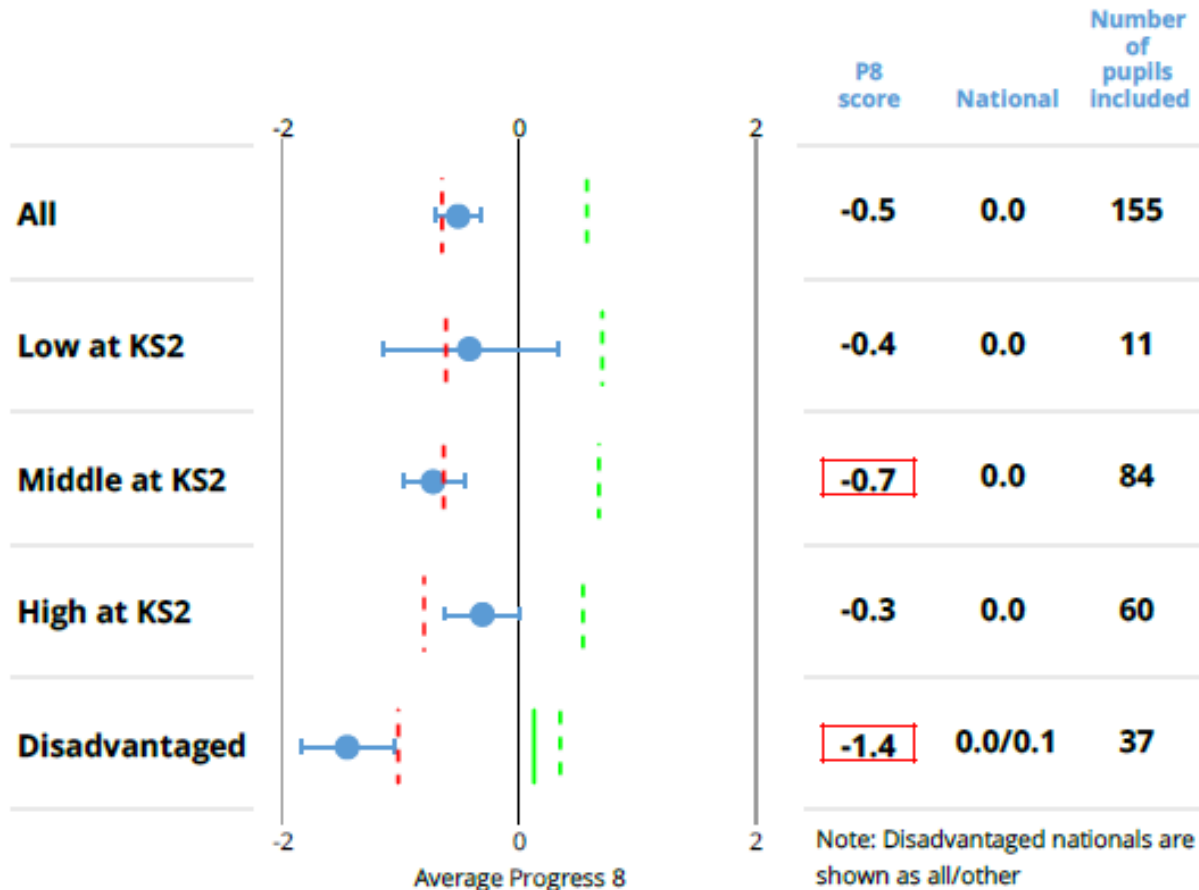


Red/green outlines show where a figure is statistically significantly different to the national average

KS4 Progress (latest year)

Overall Progress 8

--- Bottom 10% --- Top 10% — Other national



Significantly below national and in bottom 10%

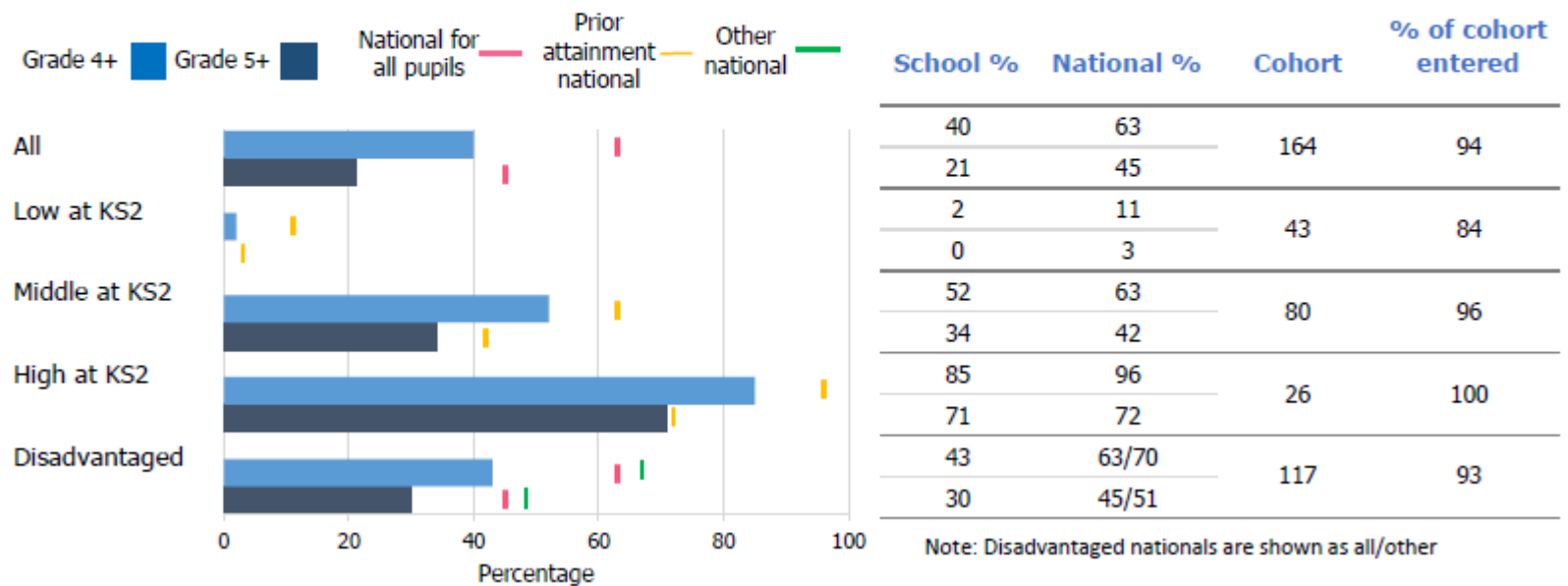
Significantly above national and in top 10%

Shading based on statistical significance and top/bottom 10% will not be shown for special schools.

KS4 Attainment

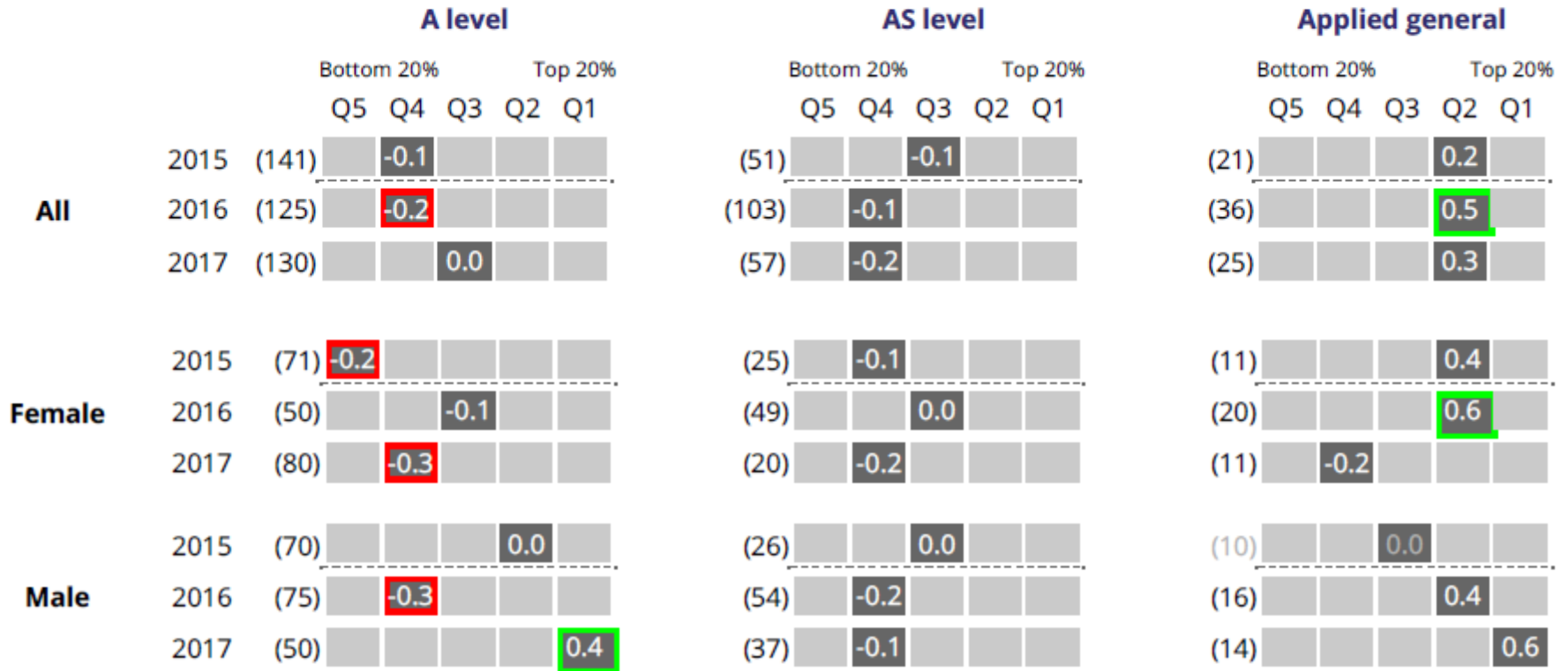
GCSE and equivalent results

Pupils achieving grade 4+ and 5+ in English and mathematics



KS5 Value Added data

Value added (scores and quintiles)





















Compare School Performance

- Completely in the public domain
- Provisional 2018 KS4 data
- KS5 data (still showing 2017 at present)
- Latest Ofsted ratings
- Data on pupil population and absence
- Data on school spending & staffing












- <https://www.compare-school-performance.service.gov.uk>

School Comparison List (3 schools selected)

Overall performance at the end of key stage 4 in 2017 - all pupils

School name 	Type of school 	Number of pupils at the end of key stage 4 	Progress 8 score & description 	Attainment 8 score 	Grade 5 or above in English and maths GCSEs 	Achieving EBacc at grade 5/C or above 	Entering EBacc 	Staying in education or entering employment (2015 leavers) 
School 1	Academy 	121	Above average 0.39 	56.6 	63% 	54% 	90% 	96% (112 of 117 pupils) 
School 2	Maintained School	128	Well below average -0.62 	35.8	17%	5%	11%	91% (135 of 148 pupils)
School 3	Maintained School	227	Well below average -0.7 	40.3	37%	15%	25%	93% (218 of 234 pupils)

16-18 data

School or college name 	Type of school or college  	Number of students with an A level exam entry 	Progress score & description  	Average result 	
				Grade 	Point score 
School 1	Maintained School	120	Average 0.07 	C+	32.94
School 2	Academy	35	Average 0.03 	C	30.75
School 3	Academy	175	Well below average -0.55	C	28.35

Key follow-up questions

- How do our results compare to similar schools?
- Why did this result happen this year?
- Was it expected?
- What strategies contributed to this outcome?
- How well have we done against our key priorities in the school development plan?
- Are there any key lessons to be learnt from these results?
- How should these results inform future priorities in our school development plan?

I hope you have found this session useful.

Any questions?

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