School Data Dashboard guidance

This document provides guidance on the measures used to populate the School Data Dashboard. Specifically, it provides information on the definitions used, the limitations of the data and any changes in methodology that may have impacted on the data.

The information provided in the key stage subsections (attainment, expected progress and so on) details the definitions underlying the measures. Please refer to the issues section at the end of each key stage for information on methodological changes affecting trend data.
The Office for Standards in Education, Children's Services and Skills (Ofsted) regulates and inspects to achieve excellence in the care of children and young people, and in education and skills for learners of all ages. It regulates and inspects childcare and children's social care, and inspects the Children and Family Court Advisory and Support Service (Cafcass), schools, colleges, initial teacher training, further education and skills, adult and community learning, and education and training in prisons and other secure establishments. It assesses council children’s services, and inspects services for looked after children, safeguarding and child protection.

If you would like a copy of this document in a different format, such as large print or Braille, please telephone 0300 123 1231, or email enquiries@ofsted.gov.uk.

You may reuse this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence, write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

This publication is available at www.gov.uk/government/organisations/ofsted.

Interested in our work? You can subscribe to our monthly newsletter for more information and updates: http://eepurl.com/iTrDn.

Piccadilly Gate
Store Street
Manchester
M1 2WD

T: 0300 123 1231
Textphone: 0161 618 8524
E: enquiries@ofsted.gov.uk
W: www.gov.uk/government/organisations/ofsted

© Crown copyright 2015
Contents

General information  4
  National Curriculum standards  4
  National levels  4
  All schools  5
  Similar schools  5
  Quintiles  6
  Data management  7

Key Stage 1  8
  Attainment  8
  Attendance  8
  Closing the gap between advantaged and disadvantaged pupils  8
  Key Stage 1 data issues  9

Key Stage 2  9
  Expected progress  9
  Attainment  10
  Attendance  10
  Closing the gap between advantaged and disadvantaged pupils  10
  Key Stage 2 data issues  11

Key Stage 4  11
  Expected progress  12
  Attainment  13
  Attendance  13
  Closing the gap between advantaged and disadvantaged pupils  14
  Key Stage 4 issues  14
General information

National Curriculum standards

Table 1: National Curriculum standards by key stage and expected level of achievement

<table>
<thead>
<tr>
<th>National Curriculum year group</th>
<th>Reception</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key stage</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

Data on attainment and progress provide information on the achievements of pupils as measured against National Curriculum standards. The National Curriculum standards have been designed so that most pupils will progress by approximately one level every two years (see Table 1). From September 2014 the current National Curriculum system will be replaced.

- Key Stage 1 attainment data are based on National Curriculum teacher assessments.
- Key Stage 2 attainment data are based on National Curriculum tests and teacher assessments.
- Key Stage 3 is not covered by the School Data Dashboard as there are no National Curriculum tests at this stage.
- Key Stage 4 attainment data are based on exam results for GCSE and equivalent exams.

Pupils with missing or invalid results are not included in the calculations.

National levels

National level data for attainment, expected progress and closing the gap measures include maintained state primary, middle and secondary schools (including academies), along with city technology colleges and special schools.

National level data for attendance include maintained state primary, middle and secondary schools (including academies) and city technology colleges, but special schools are excluded. National data for attendance are further split by phase of education into primary, middle deemed primary, secondary and middle deemed secondary, dependent on the type of provider.

---

1 For more information on changes to the National Curriculum, see: www.education.gov.uk/schools/teachingandlearning/curriculum/nationalcurriculum2014

2 For definitions of middle deemed primary and middle deemed secondary: www.education.gov.uk/edubase/glossary.xhtml?letter=M
All schools

‘All schools’ is defined as all schools covered by the School Data Dashboard and providing the key stage of interest. This includes maintained state primary, middle and secondary schools (including academies), along with city technology colleges and special schools.

Independent schools, independent special schools, hospital schools and pupil referral units are excluded from this measure.

Similar schools

Each school has its own group of ‘similar schools’ for each measure on the dashboard.

For 2013 similar schools (and onwards), Ofsted aligned its methodology with the Department for Education (DfE) similar schools methodology.

The methodology used to define the similar schools and group them is as follows.

- Use the prior attainment of pupils to estimate their future attainment. For Key Stage 2 primary schools, this will be the Key Stage 1 assessment results; for Key Stage 4 secondary schools, this will be the Key Stage 2 tests and assessments.
- Average the estimates of pupils within schools to create a school level attainment estimate.
- Use the school level attainment estimates to select a unique group of similar schools for every school included in the measure.

Therefore, the pupils of all schools in the same similar schools group have similar prior attainment and therefore those schools are predicted to achieve similar outcomes for their pupils.

The measure does not take into account other contextual factors such as deprivation or levels of special needs because these factors should already be reflected in the prior attainment of the pupils.

There is no similar schools comparison for Key Stage 1 data.

Key Stage 2 schools are compared with the most similar 124 schools; Key Stage 4 with the most similar 54. These sizes were chosen for consistency with the DfE.

The technical guidance for the Ofsted similar schools methodology can be found in the Supporting Information tab on the dashboard website. The technical guidance for the DfE methodology can be found here:

Key Stage 4 - [www.education.gov.uk/schools/performance/secondary_13/s15.html](http://www.education.gov.uk/schools/performance/secondary_13/s15.html)

Quintiles

In order to see how the school of interest compares with 'all schools' and to 'similar schools' (as defined in the sections 'All schools' and 'Similar schools'), the School Data Dashboard includes quintiles. Quintiles split the data into five sections, with approximately 20% of the data held in each.

'All schools’ quintiles

For the comparison with ‘all schools’, the quintiles are calculated by taking all of the data of interest for all of the schools and allocating approximately 20% of schools to each quintile using the following process:

a) The data for the specific measure and the group of interest - for example, the percentage of pupils achieving expected progress in Key Stage 2 English in ‘all schools’ - are selected.

b) The scores for all schools are then ranked.

c) The ranks are split into five subgroups, each group representing approximately 20% of the ranks in the whole group.

For example, if a dataset had ranks 1 to 100, then ranks 1 to 20 would be allocated to a quintile, as would ranks 21 to 40, 41 to 60, 61 to 80 and 81 to 100.

These groups do not necessarily have the same number of schools in them because identical percentages or scores would be allocated to the same quintile.

'Similar schools’ quintiles

For the comparison with ‘similar schools’, the quintiles are calculated in a different way. This is due to the fact that the similar schools groups are much smaller and tend to have more identical percentages or scores. To calculate the quintiles for ‘similar schools’, the following process is used:

a) The data for the specific measure, the key stage and the ‘similar schools’ group of interest are selected - for example, the percentage of pupils achieving expected progress in Key Stage 2 reading for school A’s ‘similar schools’ group.

b) The scores are then ranked. Identical scores will receive the same rank. For example, if a similar schools group for Key Stage 4 had 10 schools with 100%, 20 schools with 97%, 10 schools with 95%, 10 schools with 94% and 10 schools with 90%, then all the 100% results would be rank 1, all the 97% rank 2, and so on.

c) The ranks are split into five subgroups, each group representing approximately 20% of the ranks in the whole group. For the example above, the schools with 100% would be in the highest quintile, 97% in the second, 95% in the third, 94% in the fourth and 90% in the lowest.
The quintiles for both ‘all schools and ‘similar schools’ are labelled as follows:

- Highest
- 2nd quintile
- 3rd quintile
- 4th quintile
- Lowest

In order to provide a simple means of visualising school performance, a colour code is provided with green indicating that the school is in the top quintile (highest 20%) and red indicating that the school is in the bottom quintile (lowest 20%). The full colour coding is:

- Top 20%
- Bottom 20%

**Data management**

**Rounding**

Calculations are made on unrounded data before the percentages presented in the School Data Dashboard are rounded to zero decimal places. The exception to this is attendance data, which are rounded to one decimal place in line with school targets. The rounding convention is as follows: any decimal fractions of 0.5 and above will be rounded up and anything less than 0.5 will be rounded down. For example, 74.5 will be rounded to 75 while 85.4 will be rounded to 85.

**Percentage points**

The School Data Dashboard measures changes over the most recent two years in terms of percentage points.

The term ‘percentage point’ refers to an absolute change between two percentage units. This is in contrast to actual percentage change, which refers to a relative change based on the original value.

For example, the absence record of a school is 4.5% in 2010 and 6.7% in 2011, therefore:

- the change in percentage points is calculated as: 4.5–6.7% = an increase of 2.2 percentage points
the change in percentage would be calculated as \( \frac{6.7 - 4.5}{4.5} \times 100 = \) an increase of 48.9%.

**Data suppression**

For all key stages, data are suppressed if they are based on a denominator of five or fewer.

Data in the attendance section are based on the number of sessions and are not suppressed.

**Key Stage 1**

**Attainment**

Data provide information on the attainment of pupils as measured against the National Curriculum standards (see the section ‘National Curriculum standards’). Key Stage 1 attainment data are based on National Curriculum teacher assessments and require the pupil to have attained the benchmark of National Curriculum Level 2 or above. Pupils with missing or invalid results are not included in the calculations.

Data are provided for the percentage of pupils attaining Level 2 or above in teacher assessments of reading, writing and mathematics.

**Attendance**

Overall attendance is the percentage of sessions (a session is defined as morning or afternoon) attended by all pupils in the school and is calculated as:

\[
\text{Attendance} = 100\% - \% \text{ of overall absence.}
\]

The measure of overall absence that underlies this calculation is based on two terms of school level absence data, collected via the School Census, which are then combined. It should be noted that attendance figures are at school level and therefore not specific to any key stage.

**Closing the gap between advantaged and disadvantaged pupils**

Disadvantaged pupils are defined as:

- children looked after – pupils who have been looked after continuously for six months (183 days or more) during the year and are aged five to 15. The data do not cover those children looked after under respite care. Data are collected on the standardised SSDA903 return, which provides the Department for Education with data on looked after children in England
- pupils who were eligible for free school meals at any point during the last six years.
Other pupils are defined as those who are not children looked after or eligible for free school meals.

Data are provided on the percentage of pupils achieving Level 2 or above in teacher assessments of reading, writing and mathematics by disadvantaged and other pupil status.

**Key Stage 1 data issues**

Closing the gap measures were changed in 2012 to encompass both pupils eligible for free school meals and children looked after in line with the revised definition of pupils in receipt of the Pupil Premium.\(^3\)

**Key Stage 2**

**Expected progress**

Expected progress is a measure of school performance across a key stage. For expected progress to be achieved, the pupil must progress through two National Curriculum levels between the end of Key Stage 1 and the end of Key Stage 2. Although schools may use key stage sublevels, a pupil at any sublevel of Key Stage 2 (2a, 2b or 2c) who reached Level 4 at the end of that key stage would be deemed to have made the expected progress. This is because National Curriculum tests and assessments are used to define whole levels rather than sublevels. From September 2014 the current National Curriculum system will be replaced\(^4\)

Pupils are included in the progress measures if they are at the end of Key Stage 2 in reading, writing and mathematics – for example, they have taken tests in reading, writing and mathematics and at least one of those tests was in the current year; or they have been marked as working below the level of the tests, absent or working at the level of the tests but unable to access them. Pupils must also have a valid Key Stage 1 assessment.

Further information on the calculation of expected progress between Key Stage 1 and Key Stage 2 can be found in the methodology section of the DfE website:

http://www.education.gov.uk/schools/performance/primary_14/documents.html

Data are provided on expected progress in English and in mathematics.

---

\(^3\) For more information on the Pupil Premium, see www.education.gov.uk/schools/pupilsupport/premium/b00231348/pupil-premium-information-for-schools-and-ap-settings.

\(^4\) For more information on changes to the National Curriculum, see: www.education.gov.uk/schools/teachingandlearning/curriculum/nationalcurriculum2014
**Attainment**

Data provide information on the attainment of pupils as measured against the National Curriculum standards (see the section ‘National Curriculum standards’). Key Stage 2 attainment data are based on National Curriculum tests and/or teacher assessments and, to be successful, the pupil must have achieved the benchmark of National Curriculum Level 4 or above. Pupils who had missing or invalid results are not included in the calculations.

Data are provided for the percentage of pupils attaining Level 4 or above in grammar, spelling and punctuation, reading, writing and mathematics.

**Attendance**

Overall attendance is the percentage of sessions (a session is defined as morning or afternoon) attended by all pupils in the school and is calculated as:

\[
\text{Attendance} = 100\% - \% \text{ of overall absence.}
\]

The measure of overall absence that underlies this calculation is based on two terms of school level absence data, collected via the School Census, which are then combined. It should be noted that attendance figures are at school level and therefore not specific to any key stage.

**Closing the gap between advantaged and disadvantaged pupils**

Disadvantaged pupils are defined as:

- children looked after: pupils who have been looked after continuously for six months (183 days or more) during the year and are aged five to 15. The data do not cover those children looked after under respite care. Data are collected on the standardised SSDA903 return, which provides the Department for Education with data on looked after children in England
- pupils who were eligible for free school meals at any point during the last six years.

Other pupils are defined as those who are not children looked after or pupils eligible for free school meals.

The closing the gap section looks at two areas – attainment and expected progress:

- the percentage of pupils attaining Level 4 and above in teacher assessments/tests of English and in mathematics by disadvantaged and other pupil status
- the percentage of pupils making expected progress in English and in mathematics by disadvantaged and other pupil status.
Key Stage 2 data issues

- 2011 – 203 schools (in 10 local authorities) took single level tests in mathematics instead of the Key Stage 2 mathematics National Curriculum test.

- 2011 – reading and writing attainment were introduced as single units rather than being presented as ‘overall’ English only.

- 2011 – on 18 July 2011, the Secretary of State for Education announced that he had accepted all the recommendations of Lord Bew’s independent review of testing, assessment and accountability at the end of primary school.

- 2011 – the calculation of expected progress changed in 2011 to include Key Stage 2 teacher assessments where no appropriate test level is available. As a result of these changes, data on expected progress in 2011 are not comparable to data for previous years.

- 2012 – changes to assessment processes mean that pupils who are absent for a National Curriculum test (for a valid reason) are now able to take the test up to a week after the published test date.

- 2012 – from 2012 onwards, teacher assessment replaced writing tests, which means that, while reading assessment is comparable to previous years, writing is substantially different.

- These methodological changes also impact on measures of expected progress in writing and on closing the gap measures of attainment and expected progress in writing.

- 2012 – closing the gap measures were changed in 2012 to encompass both children looked after and pupils eligible for free school meals in line with the revised definition of pupils in receipt of the Pupil Premium.5 Data have been recalculated for 2011.

- 2012 – a grammar, punctuation and spelling assessment was introduced at Key Stage 2.

- 2013 - in response to ministerial decisions with regard to the 2013 national accountability measures for primary schools, an overall English level is no longer calculated.

Key Stage 4

Recommendations adopted from Professor Alison Wolf’s Review of vocational education, the introduction of an early entry policy and changes in GCSE examination structure have had an impact on the 2014 Key Stage 4 results. The changes should

5 For more information on the Pupil Premium, see www.education.gov.uk/schools/pupilsupport/premium/b00231348/pupil-premium-information-for-schools-and-ap-settings.
be taken into account when considering results alongside those of previous years, as neither direct comparisons nor production of three-year trends are possible.

The changes affect results nationally and have varying impact on schools, depending upon their entry pattern. DfE analyses\(^6\) show that the proportion of pupils in state-funded schools attaining 5+ grades A*-C including English and mathematics (5ACEM) in 2014 (55.9%) at national level is almost 5 percentage points (pp) lower than in 2013 (60.6%). On average, at national level, about 2pp of this change are due to early entry rules, 2pp to Wolf rules and 1pp to changes in examination structure and entry behaviour.

The impact at school level will vary greatly depending on previous curriculum offer and examination entry pattern and the extent to which the school has changed these in response to performance table rule changes. Since 2013, the proportion making expected progress in state-funded schools has risen by 0.5pp (to 70.9%) in English and fallen by 5.5pp (to 65.3%) in mathematics (with about 2pp due to early entry rules and 3pp to other factors including examination structure).

In the School Data Dashboard, the national figures differ slightly from those in the DfE analyses because they include state-funded mainstream and special schools and non-maintained special schools. However, they show similar changes since 2013. In the dashboards, the national figure for 5ACEM is 55% in 2014 and was 60% in 2013, and the percentages making expected progress are 70% in English and 65% in mathematics in 2014, and were 69% and 70% respectively in 2013.

**Expected progress**

Expected progress is a measure of school performance across a key stage. The measure of expected progress between Key Stage 2 and Key Stage 4 is built on the principle that pupils achieving a Level 4 in English or mathematics by the end of Key Stage 2 should be expected to achieve at least a C grade at GCSE in that subject by the end of Key Stage 4.

The highest standardised points are used to calculate the expected progress measure. For example, if a pupil at the end of Key Stage 4 has taken a GCSE in English and gained a grade A, and also taken a GCE AS level in English and gained a grade D, the standardised points of the GCSE (52) will be used rather than the standardised points of the GCE AS level (45). Where AS levels are counted in place of GCSEs, those pupils with grade D and above are deemed to have made expected progress.

Pupils who have not been entered for a GCSE in English or mathematics or those who are ungraded are deemed to not have made expected progress. Pupils are

---

excluded from the expected progress measure if they do not have a valid test result
or teacher assessment at Key Stage 2 (for example, as a result of absence, inability
to access the test, lost test).

Further information on the calculation of expected progress between Key Stage 2
and Key Stage 4 can be found in the methodology section of the DfE website:

http://www.education.gov.uk/schools/performance/secondary_14/documents.html

**Attainment**

Data provide information on the attainment of pupils as measured against a GCSE
(or equivalent examinations) headline measure and also as measured against some
English Baccalaureate (Ebacc) subjects. Key Stage 4 attainment data require the
pupil to have achieved the benchmark grade of A* to C in exams. Pupils with missing
or invalid results are not included in the calculations.

Overall attainment is calculated using GCSE and equivalent examinations, with the
benchmark being five A* to C grades including mathematics and English.

The single measures of English, mathematics and science cover only the EBacc
qualifications of GSCEs and regulated iGCSEs. The benchmark here is also grade A*
to C. It is important to note that the calculation of English and mathematics
attainment is based on the whole cohort, while for science the calculation is based
on those who entered for examination."

To pass EBacc science a pupil is required to do one of the following:

- get an A* to C pass in core and additional science
- take three single sciences (from biology, chemistry, computer science and
physics) and get an A* to C pass in two of them
- get A* to C passes in the science double award.

**Attendance**

Overall attendance is the percentage of sessions (a session is defined as morning or
afternoon) attended by all pupils in the school and is calculated as:

$$\text{Attendance} = 100\% - \% \text{ of overall absence.}$$

The measure of overall absence that underlies this calculation is based on two terms
of school level absence data, collected via the School Census, which are then

-----------------------------------------

7 A full list of qualifications included in the EBacc can be accessed here:
www.education.gov.uk/schools/teachingandlearning/qualifications/englishbac/a0075975/theenglishbac
baccalaureate.
combined. It should be noted that attendance figures are at school level and therefore not specific to any key stage.

Closing the gap between advantaged and disadvantaged pupils

Disadvantaged pupils are defined as:

- children looked after: pupils who have been looked after continuously for six months (183 days or more) during the year and are aged five to 15. The data do not cover those children looked after under respite care. Data are collected on the standardised SSDA903 return, which provides the Department for Education with data on looked after children in England.

- pupils who were eligible for free school meals at any point during the last six years.

Other pupils are defined as those who are not children looked after or pupils eligible for free school meals.

The closing the gap section looks at expected progress, which is the percentage of pupils achieving expected progress in English and also in mathematics by disadvantaged and other pupil status.

Key Stage 4 issues

- 2011 – changes to the methodology underlying attainment in science (EBacc) mean that, from 2011, the data are calculated as a percentage of exam entries. Prior to this, data were calculated as a percentage of the cohort.  

- 2012 – closing the gap measures were changed in 2012 to encompass both children looked after and pupils eligible for free school meals in line with the revised definition of pupils in receipt of the Pupil Premium. Data have been updated for 2011.

- 2014 – Recommendations adopted from Professor Alison Wolf’s Review of vocational education, the introduction of an early entry policy and changes in GCSE examination structure have had an impact on the 2014 Key Stage 4 results.

---

8 A full list of qualifications included in the EBacc can be accessed here: www.education.gov.uk/schools/teachingandlearning/qualifications/englishbac/a0075975/theenglishbac
calaureate.

9 For more information on the Pupil Premium, see www.education.gov.uk/schools/pupilsupport/premium/b00231348/pupil-premium-information-for-
schools-and-ap-settings.