



## School quality

**Impact Indicator 19: Teaching (of English, maths and science) by teachers with qualifications in a relevant subject.**

### About the indicator

This indicator shows the percentage of hours taught in secondary schools in a typical week (in November each year) to pupils in years 7-13 by teachers with a relevant post-A level qualification in each subject. The statistics for the indicator are shown separately for English, maths and science.

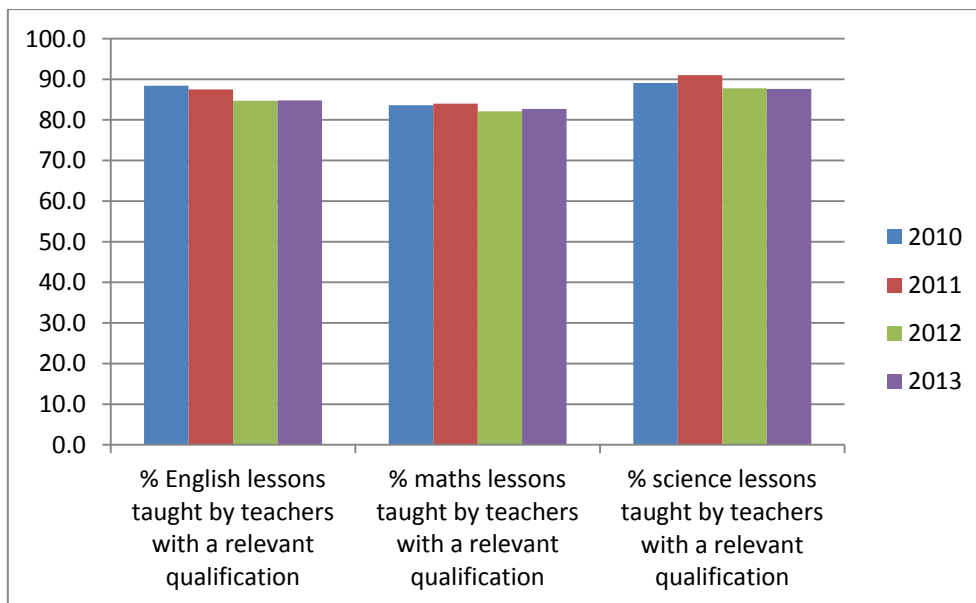
The statistics are derived from the annual School Workforce Census which gathers data on teachers including their post A level qualifications and (for a large sample of secondary school teachers only) the curriculum subjects they teach.

### Why we measure it

The Government wishes to monitor and promote the highest standards of education delivery to ensure every child has the best standard of education possible. To support this objective it is important to ensure that core subjects like English, maths and science are being taught to the highest of standards by professionally qualified teachers in the relevant subject areas.

## The data

Figure 1 – Percentage of lessons taught by teachers with a relevant qualification



Source: Annual School Workforce Census

Year	% English lessons taught by teachers with a relevant qualification	% maths lessons taught by teachers with a relevant qualification	% science lessons taught by teachers with a relevant qualification
2010	88.4	83.6	89.1
2011	87.5	84.0	91.0
2012	84.7	82.1	87.8
2013	84.8	82.7	87.6

## Further information

1. Statistics on teachers and the curriculum they teach are derived from the annual School Workforce Census. The November 2013 statistics are taken from the fourth census. The census collects data on the numbers and characteristics (including deployment, pay and qualifications) of teachers (as well as information on all other school staff) which are published in a National Statistics quality Statistical First Release. The latest data can be found at the following link:

<https://www.gov.uk/government/publications/school-workforce-in-england-november-2013>

2. Although the curriculum data is part of the School Workforce Census it is not a mandatory return for all schools. Curriculum data is only requested from secondary schools (including middle deemed secondary, all-through schools, and relevant academy schools) that use electronic timetabling software that interfaces with their local management information systems (that produces the census return). In addition, the qualifications data is not always as comprehensive as desired when combining with curriculum data (e.g. lack of detail on subjects taught) and this reduces the percentage of teachers that are included in the statistics. Consequently, Indicator 19 is based on sample data and the resultant statistics are estimates subject to sampling variation.
3. The number of schools providing curriculum data has improved over the four collections. The following table shows that in November 2010 curriculum data was received for nearly 2,500 secondary schools (representing 66% of teachers). The number of schools providing curriculum data from November 2011 to November 2013 has increased to over 2,800 secondary schools (representing 74% of secondary school teachers).
4. However, the teacher coverage pattern has changed between 2011 and 2013 with a slight dip for the November 2012 census.

	November 2010	November 2011	November 2012	November 2013
No. of schools providing curriculum data	2,493	2,762	2,738	2,849
Teacher coverage (%)	66%	79%	76%	81%
Effective %age of teachers covered		73%	71%	74%

5. The statistics for Indicator 19 are a subset of Table 13 (from the statistical release) and provide information on the percentage of teachers, and of hours taught by teachers, holding relevant post A level qualifications by subject taught. The Table records the highest qualification gained in each subject taught, rather than each qualification. A teacher's qualification was deemed as 'relevant' to the subject taught if the subject of their qualification, reported using the Joint Academic Coding System (JACS), appeared in the list of JACS codes in the Department's subject mapping. This was revised in

2011.

6. The subject of a qualification was not received for all the qualifications data submitted and in a small number of other cases the information was incomplete or incorrect. Overall, in November 2013, useable qualifications data was received from 96 per cent of teachers in schools submitting curriculum returns, and this was consistent across subjects. This is reflected in the above table by reduction from initial teacher coverage to the effective teacher coverage.
7. In the published statistics confidence intervals are calculated around the percentages of lessons taught by subject (to show the statistical accuracy of the data, and give a range within which we can be reasonably sure (95 per cent certain) that the true value actually lies) however these confidence intervals are only provided for the breakdown of the highest level of relevant qualification held and not the actual 'indicator 19' estimate.
8. As can be seen in the table below the 95% confidence intervals suggest that (allowing for the variations in sample sizes and teacher coverage) the differences seen between 2010 and 2013 are statistically significant i.e. in all three subjects the percentage of lessons taught by appropriately qualified teachers has reduced and is a real difference.

Year	% English lessons taught by teachers with a relevant qualification	% maths lessons taught by teachers with a relevant qualification	% science lessons taught by teachers with a relevant qualification
2010	88.4 +/- 0.5%	83.6 +/- 0.5%	89.1 +/- 0.5%
2011	87.5 +/- 0.6%	84.0 +/- 0.6%	91.0 +/- 0.6%
2012	84.7 +/- 0.4%	82.1 +/- 0.3%	87.8 +/- 0.4%
2013	84.8 +/- 0.5%	82.7 +/- 0.5%	87.6 +/- 0.4%

9. The provision of curriculum data is entirely dependent on schools using specific timetabling software that interfaces with their management information systems – and that can be uploaded to the Department's data collection tool. To increase the sample size, to reduce the impact of any bias, or to achieve a return for every secondary school in scope would require substantial changes. For example, it would require those schools currently not submitting data to change their timetabling software or local management information system, or their working practices – which could be financially prohibitive

Further information on this indicator and associated data can be found within the time series of Statistical Releases 'School Workforce in England'

<https://www.gov.uk/government/organisations/department-for-education/series/statistics-school-workforce>