

Technical Note - Level 1 and 2 attainment in English and maths by 16-18 students

1. Introduction

This experimental Statistical First Release (eSFR) provides information on the English and maths qualifications entered and achieved by 16-18 students who did not achieve a GCSE grade A* to C by the end of key stage 4 (KS4). National figures provide information on all students who did not achieve A* to C by the end of KS4, including those identified as part-time and work-based learners. Institution breakdowns only include full-time students in schools and colleges normally reported in 16-18 performance tables.

These statistics are provided as an interim indicator of level 2 English and maths in 16-18 students and will be replaced in 2016 by a level 2 English and maths progress measure, as announced in the government's [response](#) to the 16-19 accountability consultation. The figures should be treated with caution as this is only the second year for which such data has been produced.

This technical note provides further information on the methods used to produce this publication, including:

- Changes to the methodology
- At key stage 4 (KS4):
 - How we identify students that have achieved A* to C
 - English and maths qualifications that are included
- At 16-18 study:
 - How we identify students in 16-18 study
 - English and maths qualifications that are included
- How we allocate results to providers
- Providers included in this release
- Presentational changes
- Data sources

2. Change to coverage

Amendments have been made on last year's methodology to improve data quality and coverage which are described below. For this reason these statistics will not be comparable to last year's experimental release. Last year's data has therefore been re-run on this year's methodology to enable a comparison over time. These statistics are published alongside this release.

Definitions:

16-18: refers to a student's academic age at the beginning of the academic year, therefore it can include the age range 16 to 19, to the end of year 13 or 14.

Qualification levels

- **Level 3:** Equivalent to an A or AS level.
- **Level 2:** Equivalent to GCSE grades A* to C.
- **Level 1:** Equivalent to GCSE grades D to G.

3. Identifying students at the end of key stage 4 (KS4)

In the last experimental statistics, academic age was used as a proxy to identify students at the end of KS4. Instead of using a proxy, these experimental statistics identify the students at the end of KS4 in 2010/11 (those reported in the 2011 secondary school performance tables). These students were then matched to post-16 data using a pupil identifier.

Coverage: In the 2010/11 secondary school performance tables there were 627,093¹ students at the end of KS4. Approximately 92% of students identified in KS4 awarding body results data matched students identified in the School Census and matched published totals in the secondary school performance tables. The remaining 8% of students were from independent and hospital schools where the total number of students at school level (returned through the School Level Annual School Census (SLASC)) did not match the number of students DfE had received results data for. For these students, where possible a proxy has been used to identify at student level those at the end of KS4 based on age and year group, ensuring the provider has been published in the 2011 performance tables. A further 7.5% of students were identified using this method. Therefore, over 99% of students reported at the end of KS4 in 2010/11 have been identified for matching to post-16 data.

4. Qualifications included to identify students who achieved grades A* to C in GCSE English and maths by end of KS4

The same qualifications as those reported in the 2011 secondary performance tables have been used to identify students that achieved grades A* to C in GCSE English and/or maths in 2010/11 i.e their highest achievement in A levels, AS levels, GCSEs and regulated level 1/ 2 certificates (those qualifications on the EBacc list in 2010/11 that count as English and maths). However, the KS4 EBacc requirement to take GCSEs/level 1

¹ [GCSE and equivalent results in England, 2012 to 2013, Table 1a](#)

and 2 certificates in both English literature and English language does not apply. Therefore, results in English language will count as an English achievement if taken on its own. In addition, maths linked pairs do not both have to be achieved. Students achieving an A*-C (or a level 3 qualification) in these qualifications have subsequently been removed from those identified as at the end of KS4 in 2010/11 as they are out of scope for this publication.

5. Students identified as being in 16-18 study

Students are included in these statistics if they are identified as being in education in the two years from end of KS4, i.e. in 2011/12 and/or 2012/13. However, the denominator also includes students without A* to C who did not go on to enter education at 16-18.

Students must have been studying full-time at some point during the two year reporting period to be included in the institution level statistics. Outcomes are not reported at institutional level if students are only recorded against an institution in the second year (2012/13). Instead, outcomes for these students are deferred for reporting in next year's measures as they are deemed not to be at the end of their 16-18 study. This is in line with 16-18 performance tables practice.

Students identified as being deferred for reporting in last year's statistics (2011/12, based on the new methodology) have been included in the institutional breakdowns in the 2012/13 release.

Coverage: A small minority (<0.1%) of students identified as being at the end of KS4 had duplicate information and were removed.

6. Qualifications included to identify students entering and achieving English and maths qualifications post-16

These statistics recognise entries and attainment in level 2, level 1, and entry level English and maths qualifications. These are:

- AS levels
- GCSEs (full-courses)
- Regulated level 1/2 certificates
- Level 1 and level 2 Functional Skills and English for Speakers of other Languages (ESOL) qualifications²
- Level 1, level 2 and level 3 Free Standing Mathematics Qualifications (FSMQs)
- Level 1 and level 2 Key Skills and Basic Skills

² The Education Funding Agency (EFA) published the [list of qualifications](#) eligible to meet the condition of funding for English and maths in post-16 students from September 2014. Some of the additional qualifications included in this list, like ESOL, have been included in this release.

- Entry level qualifications

However, the KS4 EBacc requirement to take GCSEs or level 1/2 certificates in both English literature and English language does not apply. Therefore, results in English language will count as an English achievement if taken on its own.

This year, some amendments have been made to increase the reliability and coverage of eligible English and maths qualifications at 16-18, including:

- Removing the requirement to achieve both maths linked pair qualifications
- Removal of GCSE in Digital Communication
- Inclusion of AQA/WJEC Level 1/ 2 certificates in English
- Inclusion of AQA Level 2 Certificate in Further Mathematics
- Inclusion of the AQA Level 1/2 Certificate in Use of Mathematics
 - This qualification has a grading structure like a GCSE, where A* to C is a level 2 result and D-G is a level 1 result. Entry to this qualification has been included under 'maths at level 2'; achievement at grades A* to C have been included under 'maths at level 2' and achievement at grades D to G under 'maths at level 1'.

In this release, GCSEs (including regulated level 1/2 certificates) are presented separately from other qualifications at level 1 and 2. For the purposes of describing these qualifications they will be grouped together under other qualifications at level 2, level 1, and entry level.

A minority of students have entered and achieved an AS level qualification but have not entered and achieved a GCSE (40 students for English and 204 students for maths). These are included in GCSE entries, attainment at A* to C and for individual grade breakdowns with A* (as in 2012/13 the performance points for a grade E at AS level was higher than A* at GCSE).

7. Allocating results to providers

In the previous experimental statistics, students were allocated to providers based on where the source data (see below) recorded they took their exam in English and/or maths. A number of rules were applied when a student had entered for exams at more than one provider.

To improve consistency with 16-18 performance tables, the methodology has changed slightly in these statistics. If the student already had results reported in the 2013 16-18 performance tables, the English and/or maths result has been assigned to this provider. For the remaining students, the same methodology as in last year's experimental statistics was applied.

To allocate results to providers (where student not reported in 2013 16-18 performance tables):

Where there was more than one possible choice of institution:

- Allocate to the institution with the highest volume of entries, this approach is consistent with the methodology used in the performance tables.

Where the institutions cannot be separated based on volume of entries:

- Allocate to the institution where English or maths GCSE has been sat. Where competing institutions both have English or maths GCSE entries, then allocate to where the best, most recent result was achieved.

Where the institutions cannot be separated based on volume of entries and there are no GCSE English or maths entries; based on the first condition that is true:

- If the student has been recorded against the same institution in both years of the reporting period, then allocate to this school or college.
- If the student is identified as full-time in a college, then allocate to that college. If part-time in a college but full time in a school, then allocate to the school.
- Where there is a choice between an institution in the first year of the reporting period and a different institution in the second, allocate to the most recent school or college.

Students that are allocated to a school or college type not included in the 16-18 performance tables are included under 'other providers'. For example, these institutions could include hospital schools. Independent schools are not included in these statistics as they do not complete pupil level School Census and therefore there is no mechanism to accurately determine who is on roll at these institutions.

8. Providers presented in this release

Tables 1 to 4 contain a number of institution types.

- State funded mainstream schools – includes all maintained mainstream schools and mainstream academies and free schools
- Local authority mainstream schools – includes all maintained mainstream schools (excluding academies and free schools).
- Sponsored academies – these are all-ability, state-funded schools established and managed by sponsors from a wide range of backgrounds, including high performing schools and colleges, universities, individual philanthropists, businesses, the voluntary sector, and the faith communities.
- Other academies and free schools – includes converter academies (schools who have chosen through Governing Body Resolution and application to the Secretary of State for Education, to become an Academy under the Academies Act 2010) and free schools (state-funded schools that have greater freedoms than

local authority maintained schools. They are run by teachers and have freedom over the length of the school day and term, the curriculum and how they spend their money).

- Sixth Form Colleges – 16-18 institutions which typically offer academic qualifications such as A levels or GCSEs.
- Other FE sector colleges – these include general further education, agriculture and horticulture, art, design and performing arts, specialist designated and tertiary colleges.
- Special schools – these include community, foundation and non-maintained special schools.

9. Presentational changes

There continue to be two types of indicators in this release: threshold measures (tables 1-4) and matrices bringing together prior attainment by the end of KS4 and subsequent attainment at 16-18 (tables 5-7). A number of changes from last year have been made:

To how the threshold measures are presented (at national and institution level):

- Entries and attainment of GCSEs, other level 2, level 1 and entry level qualifications have been brought together into the same table;
- Additional information on whether students achieve a higher/same/lower level of learning (see table 1).

To how the matrices are presented (at national level):

- For GCSE grade breakdowns by the end of KS4, additional information on students entering and achieving qualifications including a higher/same/lower level of learning (see table 1).

Table 1: Level of learning hierarchy

Ranking:		Qualification	Level
Highest	1	GCSE A*-C	Level 2
↓	2	Other level 2 qualifications	Level 2
	3	GCSE D-G	Level 1
	4	Other level 1 qualifications	Level 1
Lowest	5	Entry level qualifications	Entry level

10. Data Sources

In order to gather information on 16-18 students studying at schools and colleges several data sources were matched together at student level:

- School Census database containing information on the participation and personal characteristics of pupils in all maintained schools, academies, free schools, studio schools, university technical colleges (UTCs), and non-maintained special schools, collected by DfE.
- Awarding Organisation exam results data collected as part of the school and college performance tables exercise.
- Vocational Qualifications database containing information on student vocational achievements at all institutions, collected from awarding organisations.
- Individualised Learner Record (ILR) database covering participation and qualifications obtained in Further Education (FE) and Work-based Learning (WBL), collected by the Skills Funding Agency from learning providers.

Further information on these datasets, including data quality and coverage, is available in [DfE's Statement of Administrative Sources](#).

The number of eligible qualifications not recorded in the datasets is considered to be minimal. The level of matching between data sources is very high.

11. Contact Us

If you have any comments or feedback on the methodology used in this release, please let us know: Joanna.EDGELL@education.gsi.gov.uk