16 October 2018

A level attainment increased for students at the end of 16-18 study in comparison to 2017. Applied general and tech level attainment decreased


Dist: Distinction

The average point score (APS) per entry for A level has increased each year since 2016. The APS per entry expressed as a grade remained stable for A levels (C+).

Attainment fell for applied general and tech level qualifications between 2017 and 2018. This coincided with the implementation of additional requirements for eligible vocational qualifications as part of vocational qualification reform.

Performance measures should not be directly compared across qualification types due to differences in entry patterns and grading structures between qualification types.

Level 2 attainment for students entering level 2 vocational qualifications remained stable

The number of students entering level 2 technical certificates, and the total number of level 2 vocational students (including those entering technical certificates), increased by $6.5 \%$ and $16.1 \%$ respectively compared to 2017.

The APS per entry for technical certificates and all level 2 vocational students remained stable at L2Merit- .

|  | Technical certificate students |  | Level 2 vocational students |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \text { Number } \\ & \text { of } \\ & \text { students } \end{aligned}$ | APS per entry | $\begin{aligned} & \hline \begin{array}{c} \text { Number } \\ \text { of } \\ \text { students } \end{array} \end{aligned}$ | APS per entry |
| 2017 <br> (provisional) | 39,233 | $\begin{gathered} 5.74 \\ \text { (L2Merit-) } \end{gathered}$ | 95,637 | $\begin{gathered} 5.69 \\ \text { (L2Merit-) } \end{gathered}$ |
| 2018 (provisional) | 41,770 | $\begin{gathered} 5.76 \\ \text { (L2Merit-) } \end{gathered}$ | 111,047 | $\begin{gathered} 5.72 \\ \text { (L2Merit-) } \end{gathered}$ |

English and maths progress increased for students who did not achieve at least GCSE grade 4 or equivalent at the end of key stage 4.

|  | Average progress |  |
| :--- | :--- | :--- |
|  | English | Maths |
| 2016 (provisional) | -0.09 | -0.11 |
| 2017 (provisional) | 0.00 | 0.02 |
| 2018 (provisional) | 0.08 | 0.07 |

In 2018, average progress is 0.08 and 0.07 for English and maths respectively. This means that on average, for students included in this measure, their point score was marginally higher at the end of 16-18 studies than at the end of KS4.

Average progress has increased each year since the measure was introduced in 2016, and this year was the first year that average progress was positive for both English and maths

## Contents

1. Introduction ..... 3
2. Changes since last year ..... 3
3. 16-18 attainment ..... 3
4. English and maths ..... 16
5. Accompanying tables ..... 22
6. Further information is available ..... 24
7. National Statistics ..... 25
8. Technical Information ..... 26
9. Get in touch ..... 26

## Note on provisional results

The provisional statistics in this release are based on the results data that awarding organisations supply to the department by August 2018. This includes the vast majority of all student results; however it does not include the small proportion of amendments that awarding organisations, schools or colleges may submit to the department after August. These amendments will be incorporated into the revised statisical publication due to be released in January 2019. A number of figures will change between the two releases; this is expected and occurs every year.

This year, the results for some qualifications in four sixth form colleges are missing from the provisional data. The impact of this missing data on these national-level statistics has been assessed as being very small. However, the missing data has a bigger effect at local authority level. The affected local authorities have been informed, and their data has been suppressed in the files published alongside this publication. We will publish an update for these local authorities, including the omitted data as soon as it is available.
Between provisional and revised publications it is usual for student numbers to drop, mainly due to the removal of students who should not be included. In 2017 the number of level 3 students decreased by $3.8 \%$ between the provisional and revised figures. In contrast, performance measures tend to improve but generally changes are not substantial and where relevant these will be highlighted in the revised publication. This is due to the combined effect of removals of students who should not be included and the outcomes of enquiries about results and the submission of late results by awarding organisations. This publication compares provisional results for 2018 to provisional results from 2017 to take account of the normal change in results between provisional and revised data.

## Note on comparisons over time

Due to government policy reforms and methodological changes to the 16-18 performance measures in 2016, it is not possible to directly compare all results since 2016 to those published in the previous ' $A$ level and other level 3 results' statistical publications, covering 2015 and earlier.

## In this publication

The following files are published alongside the text:

- National tables (excel .xls)
- English and maths tables (excel .xls)
- CSV files (CSV .csv)
- Local authority tables (excel .xls)
- Maths and sciences tables (excel .xls)
- Local authority maps (pdf)

A full list of the tables included in these files is shown in section 6 of the statistical publication.
The accompanying quality and methodology information document provides information on the data sources, their coverage and quality and explains the methodology used in producing the data.

## Feedback

We welcome feedback on any aspect of this document at Attainment.STATISTICS@education.gov.uk

## 1. Introduction

The 16-18 school and college performance headline measures changed in 2016, as a result of previously announced government reforms to the way schools and colleges are held to account for their performance. The headline measures from 2016 are: attainment; progress; English and maths, retention; and destinations. In 2016, they were reported across four different level 3 cohorts, which were determined by the qualifications taken by students: A levels, academic, applied general and tech levels. From 2017, these headline measures were extended to include level 2 vocational qualifications.

This release reports provisional information on 16-18 attainment measures and measures on English and maths. The revised publication, which incorporates updates and feedback collected during the checking exercise, includes the level 3 progress measure, and will be published in January 2019. Further 2018 data will be released in March 2019, covering the completion and attainment, and retention measures.

This statistical publication is part of a wider group of departmental publications on 16-18 accountability measures, which includes the 16-18 school and college performance tables (due to be updated with 2018 data in January 2019) and the student destinations statistical publications. You can find further links to relevant publications in section 6.

## 2. Changes since last year

New measures included for the first time in this year's provisional statistical publication are shown below:

## Level 3 vocational measures

New supporting measures showing the number of students entering level 3 vocational qualifications which count in the 16 to 18 performance tables as a proportion of the total number of students entering any level 3 vocational qualification are included in this statistical publication. The level 3 comparison group will include all level 3 vocational qualifications at least equivalent in size to one $A$ level ${ }^{1}$, including those which are not approved to count in the 16 to 18 performance tables. The measure will be shown separately for applied general qualifications and tech levels.

## English and maths progress

The existing headline measure (average progress) will be supplemented by data showing the proportion of students in scope for either the English and/or maths measures that enter an approved qualification. Students are 'in scope' if they are studying programmes of 150 hours or more and do not hold a GCSE grade 9 to 4 or $A^{*}$ to $C$, or equivalent qualification in maths and/or in English.

More details can be found in the department's 16-19 technical guide and the quality and methodology document published alongside this statistical publication.

## 3. 16-18 attainment

This section covers attainment for A level, academic, applied general, tech level, and level 2 vocational students who finished 16-18 study in 2017/18. The attainment measures show the results that students achieved by the end of $16-18$ study. They take into account results achieved in all qualifications recognised in the 2018 performance tables and during all years of 16-18 study.

Students are included in attainment measures if they:

- completed their studies at the end of the reporting academic year or are 18 at the start of the reporting year and have not been reported in the performance tables at their current allocated provider

[^0]
## and

- entered for at least one qualification in one or more of the qualification types listed below during their 16-18 studies

From 2016, the size for level 3 qualifications must be equivalent to at least 0.5 A levels (except for the extended project which is equivalent to 0.3 A levels).

Attainment in technical certificates and all eligible level 2 vocational qualifications were published in performance tables in 2017 for the first time. From 2019, only technical certificates will be recognised in the 16-18 performance tables. In order to give time for institutions to transition towards these qualifications it was agreed that a broader range of qualifications would also be reported in 2017 and 2018 tables. These include all level 2 vocational qualifications of size equivalent to at least two GCSEs (minimum 145 guided learning hours).

Results are reported separately for six cohorts of students depending on the types of qualifications taken: A level, academic, applied general, tech level, level 2 vocational and technical certificates.

A level: A/AS levels, applied single A/AS levels, applied double A/AS levels or combined A/AS level.
Academic qualifications: include qualifications in the A level group, as well as Pre-U, International Baccalaureate, Advanced Extension Award (AEA), Free Standing Maths, Extended Project (Diploma) qualifications and Core Maths at level 3.
Applied general: Applied general qualifications are rigorous level 3 qualifications that allow 16 to 19 year old students to develop transferable knowledge and skills. They are for students who want to continue their education through applied learning.
Tech level qualifications: Tech levels are rigorous level 3 technical qualifications on a par with A Levels and recognised by employers. They are for students aged 16 and over that want to specialise in a specific industry or prepare for a particular job.
Technical certificate qualifications: Technical certificates are rigorous intermediate (level 2) technical qualifications recognised by employers. They are for students aged 16 and over that wish to specialise in a specific industry or prepare for a particular job.
Level 2 vocational qualifications: These qualifications comprise vocational level 2 qualifications that are at least equivalent in size to 2 GCSEs. However, from 2019 we will only include those students studying technical certificates that are on the technical certificates list for that year.
The list of applied general, tech level and technical certificate qualifications that will count in the 2018 performance tables can be found here: vocational qualifications for 14 to 19 year olds.

The headline attainment measures are the average point score (APS) per entry and APS per entry expressed as a grade. APS per entry measures are reported separately for cohorts of students depending on the types of qualifications taken: A level, academic, applied general, tech level, technical certificate and level 2 vocational qualifications. It is calculated by dividing the total point score by the total size of entries. APS per entry gives an indication of the average result achieved per qualification taken and provides a comparison of achievement over time, regardless of the volume of qualifications taken.

We also report further attainment measures for A level students such as the 'best 3' measure (which looks at average attainment across a student's best 3 A levels), the percentage of students achieving $3 \mathrm{~A}^{*}-\mathrm{A}$ grades, and measures on the percentage of students achieving grades AAB or better. The performance measures for A level students apply to different subsets of students, depending on the coverage of the measure. The summary below sets out the students we include in each of the measures.

APS per entry: includes students who have entered for at least 1 qualification equivalent to at least 0.5 A levels and applies to each of A level, academic, applied general, tech levels and level 2 vocational cohorts.
'Best 3 ' measure, percentage achieving 3 A $^{*}$-A and percentage achieving AAB or better: includes students taking primarily A level qualifications. We identify these students using the following criteria: (a) students need to have entered for one or more full size A levels (including GCE A levels or applied A levels, not including AS levels, applied AS levels, general studies or critical thinking) and (b) if students have entered for less than three full size A levels, then they are only included in the measure if the total size of entries in other academic, applied general or tech level qualifications is less than the size of an A level.

Percentage achieving AAB or better (of which at least two are in facilitating subjects): includes students taking primarily A level qualifications, as set out above. In addition, it also excludes those students who have entered only applied A levels or applied AS levels.

Since similar trends are seen in the results for A level and academic students (over 98\% of academic students took A levels), information for academic students is not shown here. Data for academic students can be found in tables 1 a and b in the tables accompanying this document.

## National results

## Students at the end of 16-18 study by qualification type

In 2018 (the 2017/18 academic year), there were 335,401 students who completed their 16-18 studies and entered at least one level 3 qualification eligible for performance tables, down by $24.9 \%$ compared to 2017 provisional data. In contrast the potential number of 16-18 students (those who completed key stage 4 two years previously) has dropped by $1.7 \%$ compared to 2017 . The drop in level 3 students is mainly driven by the following effects: 1) a drop in AS level entries as result of A level reform; and 2) a drop in the number of students in tech level and applied generals following the implementation of the full requirements ${ }^{2}$ for applied general and tech level qualifications in 2018.

Figure 1: 16-18 students by cohort (table 1a,b)
(England, 2017 to 2018)


Source: 16-18 attainment data

1. The potential 16-18 students are those who completed key stage 4 two years previously.
[^1]The number of A level students dropped by $6.0 \%$ compared to 2017, which was a greater drop than that which would be expected based on the drop in the potential 16-18 cohort (1.7\%). The drop in A level students can be explained by the decrease in AS level entries as result of $A$ level reforms since September 2015. This is because students entering AS levels only are included in the A level cohort. The number of students taking primarily A level qualifications, as measured using the number of students included in the 'best 3 ' A levels measure), increased by $3.1 \%$, suggesting that the fall was primarily due to the fall in students taking AS levels only.

The number of applied general students and tech level students dropped by $63.8 \%$ and $82.0 \%$ respectively compared to 2017. The considerable drop in the number of applied general and tech level students coincides with substantial change in the list of tech level and applied general qualifications that are eligible for reporting in the performance tables: From 2018 onwards, all tech level and applied general qualifications must meet the full requirement to be reported in performance tables. Prior to 2018, qualifications could count in performance tables if they met interim requirements. As result, the list of eligible tech level and applied general qualifications changed significantly from 2017 to 2018 (Fig. 2). Over $90 \%$ of tech level and applied general qualifications eligible in 2017 were no longer eligible in 2018 (260 out of 284 for tech level and 97 out of 107 for applied general).

Technical certificates were less affected by the change in 2018 and the majority of eligible qualifications in 2017 were still eligible in 2018 (148 out of 162). The number of technical certificate students increased by $6.5 \%$ compared to 2017. The increase in the number of level 2 vocational and technical certificate students in 2018 may be partially explained by the drop in the number of students entering tech level and applied general. Students included in technical certificate and level 2 vocational cohorts were based on entries in qualifications counting in accountability measures. In cases where only ineligible level 3 qualifications were entered and level 2 vocational qualifications have also been entered, a student would be included in level 2 vocational cohort.

Figure 2: Number of tech level, applied general and technical certificate by year
England, 2017 and 2018

> Number of qualifications

| Qualification type | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ |  |  | 2017 only | 2018 only | Both 2017 <br> and 2018 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tech level | 284 | 182 |  | 260 | 158 | 24 |  |
| Applied general | 107 | 86 |  | 97 | 76 | 10 |  |
| Technical certificate | 162 | 173 |  | 14 | 25 | 148 |  |

## A level students

In 2018, the APS per entry for A levels, expressed as a grade, remained stable ( $\mathrm{C}+$ ) compared to 2017. The underlying point score is 33.05 in 2018, which increased slightly from 32.12 in 2017.
Although, as seen above, the number of potential 16-18 students fell, the number of students who took taking primarily A levels or applied A levels qualifications increased by $3.1 \%$. The average point score per entry in the best 3 A levels dropped slightly compared to 2017. The proportion of students who achieved 3 $A^{*}-A$ or better and AAB or better also dropped, at $12.5 \%$ and $20.6 \%$ respectively, compared to $13.0 \%$ and 21.8\% in 2017.

When we exclude those taking applied A levels; there were 232,620 A level students, an increase by $3.3 \%$ compared to 2017. The proportion of students who achieved AAB or better (of which at least two are in facilitating subjects) dropped from $16.6 \%$ in 2017 to $15.9 \%$ in 2018.

Facilitating subjects are identified by the Russell Group of universities as: maths and further maths; English (literature); physics; biology; chemistry; geography; history; languages (modern and classical). A full list of qualification numbers for facilitating subjects can be found in the technical guide.

Figure 3: A level attainment (table 1a)
England, 2016 to 2018

|  | All A level students |  | Students ${ }^{1}$ entered for one or more A levels or applied A levels |  |  |  | Students ${ }^{1}$ entered for one or more A levels |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of students | APS per entry (grade) | Number of students | APS per entry in best 3 A levels (grade) | \% <br> achieving <br> $3 \mathrm{~A}^{*}-\mathrm{A}$ <br> grades or better | \% achieving grades AAB or better | Number of students | \% achieving grades AAB or better, of which at least two are in facilitating subjects |
| 2016 <br> (provisional) | 333,392 | $31.52$ <br> (C) | 229,341 | $\begin{gathered} 34.64 \\ (\mathrm{C}+) \end{gathered}$ | 12.9 | 21.6 | 227,625 | 16.7 |
| 2017 <br> (provisional) | 326,687 | $\begin{gathered} 32.12 \\ (\mathrm{C}+) \end{gathered}$ | 226,397 | $\begin{gathered} 34.75 \\ (\mathrm{C}+) \end{gathered}$ | 13.0 | 21.8 | 225,174 | 16.6 |
| $2018$ <br> (provisional) | 307,154 | $\begin{gathered} 33.05 \\ (\mathrm{C}+) \\ \hline \end{gathered}$ | 233,356 | $\begin{gathered} 33.28 \\ (\mathrm{C}+) \\ \hline \end{gathered}$ | 12.5 | 20.6 | 232,620 | 15.9 |
| Change $(2017-2018)$ | -6.0\% | 0.93 | 3.1\% | -1.47 | -0.5 | -1.2 | 3.3\% | -0.7 |

Source: 16-18 attainment data

1. Excluding students taking $A$ levels as part of a mixed programme

In 2018 the number of students who entered $A$ level maths and science subjects by the end of 16-18 study increased across all subjects. Computer science saw the biggest proportional increase in the number of students entering ( $25.9 \%$ ) compared to 2017.

The number of A level students entering each of the A level maths and science subjects as a proportion of all A level students also increased across all subjects. The largest increase was in maths, where the proportion of students entering maths increased by 2.5 percentage points compared to 2017.
Figure 4: A level students entering for maths and science A levels (table 11)
England, 2016 to 2018

| Subjects | Number of students |  |  | \% A level students |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 2017 \\ \text { (provisional) } \end{gathered}$ | 2018 <br> (provisional) | Change | $\begin{gathered} 2017 \\ \text { (provisional) } \end{gathered}$ | 2018 <br> (provisional) | Percentage points Change |
| Maths | 79,858 | 82,631 | 3.5\% | 24.4 | 26.9 | 2.5 |
| Further maths | 14,302 | 14,342 | 0.3\% | 4.4 | 4.7 | 0.3 |
| Biology | 52,228 | 54,771 | 4.9\% | 16.0 | 17.8 | 1.8 |
| Chemistry | 44,622 | 46,895 | 5.1\% | 13.7 | 15.3 | 1.6 |
| Physics | 31,519 | 33,051 | 4.9\% | 9.6 | 10.8 | 1.2 |
| Computer science | 7,364 | 9,269 | 25.9\% | 2.3 | 3.0 | 0.7 |

## Applied general, tech level and technical certificate students

Changes to the accountability regime for vocational qualifications, as result of recommendations from Professor Alison Wolf's Review of Vocational Education, have taken effect since 2016. This significantly raised the quality threshold for qualifications to be included in the 16-18 performance measures. From 2018 onwards, qualifications have to meet the full set of characteristic requirements in order to count in performance. These include criteria relating to size, content and assessment, including a requirement that a proportion of the qualification's content is subject to external assessment. Prior to 2018, qualifications could count in performance tables if they met interim requirements. Information on the requirements can be found in the technical guidance for awarding bodies.

Measures in 16-18 performance tables only include vocational qualifications that are on the approved list of applied general, tech level and technical certificate qualifications (from 2019 for technical certificate).

In 2018 the number of students who took applied general and tech level qualifications by the end of 16-18 study dropped by $63.8 \%$ and $82.0 \%$ respectively compared to 2017. The APS per entry for applied general and tech level students also fell, by 7.38 and 3.91 respectively, compared to 2017. The drop in the APS per entry measure coincides with the change in requirements for eligible vocational qualifications.

The number of students who took level 2 vocational qualifications and technical certificates increased by $16.1 \%$ and $6.5 \%$ respectively compared to 2017. The APS per entry for level 2 vocational students and technical certificate students was broadly stable, at 5.72 and 5.76 respectively. The calculation of highest attainment by end of $16-18$ study used in this measure is based on the highest attainment qualifications counting in accountability measures. Some of the rise observed between 2017 and 2018 in level 2 vocational attainment as a student's highest qualification may be due to the fall in the number of students achieving approved applied general and tech level qualifications.

The performance points developed for the vocational qualifications at level 2 are on a different scale to those for qualifications at level 3 , so level 2 and level 3 measures cannot be compared directly.

Figure 5: Applied general, tech level and technical certificate attainment (table 1 a and b)
England, 2016 to 2018

|  | Level 3 qualifications |  |  |  |  |  | Level 2 qualifications |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Applied general students |  |  | Tech level students |  |  | Technical certificate students |  |  | Level 2 vocational students |  |  |
|  | Number of students | APS per entry | APS per entry as a grade | Number of students | APS per entry | APS per entry as a grade | Number of students | APS per entry | APS per entry as a grade | Number of students | APS per entry | APS per entry as a grade |
| $2016$ <br> (provisional) | 130,906 | 34.70 | Dist | 70,015 | 30.83 | Dist- | - | - | - | - | - | - |
| $2017$ <br> (provisional) | 131,471 | 35.64 | Dist | 66,333 | 32.24 | Dist- | 39,233 | 5.74 | L2Merit- | 95,637 | 5.69 | L2Merit- |
| $\begin{aligned} & 2018 \\ & \text { (provisional) } \end{aligned}$ | 47,553 | 28.26 | Merit+ | 11,944 | 28.33 | Merit+ | 41,770 | 5.76 | L2Merit- | 111,047 | 5.72 | L2Merit- |
| Change (2017-2018) | -63.8\% | -7.38 |  | -82.0\% | -3.91 |  | 6.5\% | 0.02 |  | 16.1\% | 0.03 |  |

Source: 16-18 attainment data

- Indicates data not available.


## Students entered for any vocational qualifications approved by section 96

Schools and colleges may offer qualifications that are not included in the performance tables, if approved for teaching to 16-19 year olds (also known as Section 96). An additional measure was introduced in 2017 showing the number of students that entered an approved technical certificate as a proportion of students whose highest attainment is a vocational level 2 qualification.

In 2018 new measures have been introduced showing the number of students entering level 3 vocational qualifications which count in the 16 to 18 performance tables, as a proportion of the total number of students entering any approved level 3 vocational qualification.

In 2018, the number of students entering any section 96 approved level 3 vocational qualifications (excluding tech levels) increased by 18.7\% compared to 2017. However, the proportion of these students entering applied general dropped by 64.0 percentage points compared to 2017 . The large drop in the proportion of students entering applied general is the result of the substantial change in the list of tech level and applied general qualifications that are eligible for reporting in the performance tables

Similar pattern is seen in tech level cohort, where the number of students entering any approved level 3 vocational qualifications (excluding applied generals) increased by 85.2\% compared to 2017. In contrast the proportion of the students entering tech levels dropped by 72.8 percentage points compared to 2017.

The number of students whose highest attainment was level 2 increased by $33.7 \%$ compared to 2017. The proportion of these students entering technical certificates dropped from $43.2 \%$ in 2017 to $38.3 \%$ in 2018.

Figure 6: Students entered for any vocational qualifications approved by section 96 (Tables 1 a and b)

|  | Number of students who entered any level 3 vocational qualifications approved by section 96 (excluding tech levels) | \% entering applied generals | Number of students who entered any level 3 vocational qualification approved by section 96 (excluding applied generals) | \% entering tech levels | Number of students whose highest attainment was level 2 | \% entering technical certificates |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2017$ <br> (provisional) | 154,137 | 90.2 | 82,590 | 80.6 | 77,244 | 43.2 |
| 2018 <br> (provisional) | 182,953 | 26.2 | 152,918 | 7.8 | 103,257 | 38.3 |
| Change $(2017-2018)$ | 18.7\% | -64.0 | 85.2\% | -72.8 | 33.7\% | -4.9 |

Source: 16-18 attainment data

## Vocational results by subject area

This section shows entries in applied general, tech level and technical certificate qualifications by broad subject area, for students who completed their 16-18 study in 2018. The full information about participation in vocational qualifications by detailed subject area can be found in the accompanying CSV files. It is important to note that each subject area has different numbers of available qualifications.

In 2018, the most popular subject area for applied general students was Business, Administration, Finance and Law, as in 2017. Health, Public Services and Care and Science and Mathematics were the next most popular subjects. The most popular subject area for tech level students became Health, Public Services and Care, while Arts, Media and Publishing was the most popular subject area in 2017.

The most popular subject area for technical certificate students in 2018 was Construction, Planning and the Built Environment, while Retail and Commercial Enterprise was the most popular in 2017.

Figure 7: Participation by subject area in applied general, tech level qualifications (Vocational student participation by subject CSV)
England, 2018

|  | Applied general |  |  | Tech level |  |  | Technical certificate |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ofqual sector subject area | Number of qualifications available | \% Applied general students | APS per entry | Number of qualifications available | \% Tech level students | APS per entry | Number of qualifications available | \% Technical certificate students | APS per entry |
| Health, Public Services and Care | 10 | 20.3 | 29.38 | 16 | 28.6 | 28.14 | 11 | 3.0 | 6.12 |
| Science and Mathematics | 14 | 14.9 | 25.67 | . | . | . | . | . | . |
| Agriculture, Horticulture and Animal Care | . | . | . | 29 | 10.9 | 25.48 | 33 | 11.4 | 6.00 |
| Engineering and Manufacturing Technologies | 4 | 1.8 | 23.83 | 34 | 9.9 | 31.22 | 24 | 9.2 | 5.60 |
| Construction, Planning and the Built Environment | 2 | 0.2 | 35.91 | 18 | 2.1 | 24.45 | 33 | 24.0 | 5.84 |
| Information and Communication Technology (ICT) | 8 | 11.5 | 25.09 | 16 | 22.0 | 28.02 | 6 | 13.5 | 5.12 |
| Retail and Commercial Enterprise | 1 | 0.3 | 24.60 | 36 | 7.9 | 22.70 | 36 | 22.9 | 5.99 |
| Leisure, Travel and Tourism | 12 | 10.2 | 27.11 | 7 | 8.3 | 34.03 | 9 | 6.0 | 5.62 |
| Arts, Media and Publishing | 16 | 13.2 | 30.52 | 21 | 8.6 | 28.26 | 7 | 3.9 | 4.79 |
| Social Sciences | 2 | 5.2 | 26.81 | . | . | . | . | . | . |
| Preparation for Life and Work | . | . | . | . | . | . | . | . | . |
| Business, Administration, Finance and Law | 17 | 39.8 | 28.88 | 5 | 2.3 | 27.48 | 14 | 7.1 | 6.28 |
| All subjects | 86 | 100.0 | 28.26 | 182 | 100.0 | 28.33 | 173 | 100.0 | 5.76 |

Source: 16-18 attainment data
. indicates not applicable

## Results by gender

## Students at the end of 16-18 study by qualification type

Female students are more likely to enter level 3 study during 16-18 study than males. In 2018, 54.5\% of level 3 students who were at the end of $16-18$ study were female, compared to $51.3 \%$ in the potential 16-18 cohort. Participation of female students in level 3 study has increased to $54.5 \%$ compared to $52.5 \%$ in 2017 (whilst the proportion of potential students who are female has remained stable at 48.7\%).

There continued to be more female than male A level students. In 2018, 54.4\% of A level students were females and $45.6 \%$ were male, a situation which remains stable compared to last year.

In 2018, more students entering applied general qualifications were female than male ( $52.3 \%$ vs $47.7 \%$ respectively) and the same was true of tech level qualifications ( $54.8 \%$ female vs $45.2 \%$ male). The proportion of tech level students who were male dropped by 10.6 percentage points compared to 2017, from 55.8\%.

The majority of technical certificate students are male. In 2018, $58.9 \%$ of technical certificate students were male, compared to $41.1 \%$ for female students. This pattern remained stable compared to 2017.

Figure 8: Proportion of students by gender (Table 1a)
England, 2016 to 2018

|  | Potential 16-18 students |  | Level 3 students |  |  |  |  |  |  |  | Technical certificate students |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Tech level students |  |  |  |
|  |  |  | All level 3 students | A level students |  | Applied general students |  |  |  |
|  | \%Female | \%Male |  |  | \%Female | \%Male | \%Female | \%Male | \%Female | \%Male | \%Female | \%Male | \%Female | \%Male |
| $2016$ <br> (provisional) | 48.7 | 51.3 | 52.0 | 48.0 | 54.2 | 45.8 | 49.5 | 50.5 | 42.3 | 57.7 | - | - |
| $2017$ <br> (provisional) | 48.7 | 51.3 | 52.5 | 47.5 | 54.2 | 45.8 | 50.3 | 49.7 | 44.2 | 55.8 | 41.8 | 58.2 |
| $2018$ <br> (provisional) | 48.7 | 51.3 | 54.5 | 45.5 | 54.4 | 45.6 | 52.3 | 47.7 | 54.8 | 45.2 | 41.1 | 58.9 |
| Percentage points change (2017-2018) | 0.0 | 0.0 | 2.0 | -2.0 | 0.2 | -0.2 | 2.1 | -2.1 | 10.6 | -10.6 | -0.6 | 0.6 |

Source: 16-18 attainment data

## A level students

Overall female students achieved a higher APS per entry in A levels, but a higher proportion of male students achieved top grades. This is the same pattern as previous years.

A higher proportion of female level 3 students entered one or more A levels or applied A levels (77.9\%) than male students (73.6\%). Both female students and male students achieved grades C+ in 2018. However, a higher proportion of male students achieved 3 A*$^{*}$-A grades or better ( $13.8 \%$ ) and AAB grades or better ( $21.2 \%$ ) compared to females, at $11.5 \%$ and $20.1 \%$ respectively. The gender gap in these measures dropped to 2.3 percentage points and 1.1 percentage points in 2018, compared to 2.7 percentage points and 1.7 percentage points in 2017 respectively, but remained wider than in 2016.

Similarly, more female students entered one or more A levels (77.6\%) compared to male students (73.5\%), but a higher proportion of male students (17.8\%) achieved AAB grades or better, at least two of which are in facilitating subjects, than female students ( $14.4 \%$ ). The gender gap in this measure is at its lowest since 2016. It dropped to 3.4 percentage points in 2018, compared to 4.2 percentage points in 2017.

Figure 9: A level attainment by gender, 2018 (table 1a)
England, 2018

|  | All A level students |  | Students ${ }^{1}$ entered for one or more A levels or applied A levels |  |  |  |  | Students ${ }^{1}$ entered for one or more A levels |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of students | $\begin{aligned} & \text { APS } \\ & \text { per } \\ & \text { entry } \end{aligned}$ | Number of students | \% <br> A level cohort | APS per entry in best 3 A levels (grade) | \% achieving $3 A^{*}-A$ grades or better | \% achieving grades AAB or better | Number of students | \% <br> A level cohort | \% achieving grades AAB or better, of which at least two are in facilitating subjects |
| Female | 167,081 | $\begin{gathered} 33.69 \\ (\mathrm{C}+) \end{gathered}$ | 130,220 | 77.9 | $\begin{gathered} 33.75 \\ (\mathrm{C}+) \end{gathered}$ | 11.5 | 20.1 | 129,628 | 77.6 | 14.4 |
| Male | 140,068 | $\begin{gathered} 32.28 \\ (\mathrm{C}+) \\ \hline \end{gathered}$ | 103,134 | 73.6 | $\begin{gathered} 32.70 \\ (\mathrm{C}+) \\ \hline \end{gathered}$ | 13.8 | 21.2 | 102,990 | 73.5 | 17.8 |

Source: 16-18 attainment data

1. Excluding students taking $A$ levels as part of a mixed programme

The number of students entering A level maths and science by the end of 16 -18 study increased for females across all subjects compared to 2017. The number of male students entering these subjects increased except in further maths. There was higher percentage change in the number of female students than male students in all subjects.

Figure 10: A level students entering for maths and science A levels by gender (Table 11)
England, 2017 and 2018

| Number of students |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Female |  |  | Male |  |  |
| 2017 (provisional) | 2018 (provisional) | Change | $\begin{gathered} 2017 \\ \text { (provisional) } \end{gathered}$ | 2018 (provisional) | Change |
| 31,502 | 32,854 | 4.3\% | 48,356 | 49,777 | 2.9\% |
| 3,991 | 4,107 | 2.9\% | 10,311 | 10,235 | -0.7\% |
| 32,351 | 34,756 | 7.4\% | 19,877 | 20,014 | 0.7\% |
| 22,674 | 24,753 | 9.2\% | 21,948 | 22,141 | 0.9\% |
| 6,727 | 7,316 | 8.8\% | 24,792 | 25,734 | 3.8\% |
| 691 | 1,084 | 56.9\% | 6,673 | 8,185 | 22.7\% |

Source: 16-18 attainment data

## Applied general, tech level and technical certificate students

Female students achieved a higher APS per entry for applied general qualifications, as in 2017. For tech levels, male students achieved a higher APS per entry (28.82) than female students (27.96) in 2018. This is a different pattern from 2017 where female students achieved a higher APS per entry.

For both level 2 vocational qualifications and technical certificates, female students achieved higher APS per entry than male students. This is the same pattern as 2017.

Figure 11: Applied general, tech level students and technical certificate attainment by gender (table 1a)
England, 2018

|  | Level 3 qualifications |  |  |  |  |  | Level 2 qualifications |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Applied general students |  |  | Tech level students |  |  | Technical certificate students |  |  | Level 2 vocational students |  |  |
|  |  | APS per entry | APS per entry as a grade | Number of students | APS per entry | APS per entry as a grade | Number of students | APS per entry | APS per entry as a grade | $\begin{aligned} & \hline \text { Number } \\ & \text { of } \\ & \text { students } \end{aligned}$ | APS per entry | APS per entry as a grade |
| Female | 24,891 | 29.65 | Merit+ | 6,544 | 27.96 | Merit+ | 17,178 | 5.95 | L2Merit | 49,924 | 5.81 | L2Merit- |
| Male | 22,662 | 26.66 | Merit | 5,400 | 28.82 | Merit+ | 24,591 | 5.64 | L2Merit- | 61,095 | 5.66 | L2Merit- |

Source: 16-18 attainment data

## Results by institution type

## A level students

Independent schools have the highest A level APS compared to other institution types, the same pattern as previous years. University technical colleges and studio schools have the lowest APS per A level entry (although it should be noted that their cohorts are relatively small $-1,531$ and 376 students respectively).

Care should also be taken when comparing across institution types due to significant differences in cohort sizes and number of schools. For example, in 2018 there were 376 A level students in studio schools compared to 127,838 students in converter academies, and 20 free schools (16-18) with students at the end of level 3 study, compared to 1,091 converter academies.

It is important to note that prior attainment at key stage 4 is not taken into account in these figures. The prior attainment may vary significantly across institution types and therefore have an impact on the patterns seen in the results. For example, sponsored academies may have lower prior attainment due to their background as typically underperforming schools that are taken over by a sponsor.

Figure 12: Average point score per entry for A level students by institution type ${ }^{1}$ (table 1a)
England, 2018


1. Number of students shown in brackets

## Applied general, tech level and technical certificate students

The number of applied general and tech level students in FE sector colleges (including other FE sector colleges and sixth form colleges) dropped by $85.5 \%$ and $88.3 \%$ respectively compared to 2017. In contrast, the number of students in state-funded schools dropped by $29.8 \%$ and $55.4 \%$ respectively. As result, the proportion of all applied general and tech level students who studied in FE sector colleges dropped to $25.3 \%$ and $53.4 \%$ in 2018 respectively, compared to $63.4 \%$ and $82.1 \%$ in 2017. The larger fall in FE sector college than in state-funded schools is possibly because schools are more heavily incentivised by performance tables measures and the associated changes in eligible qualifications.

APS per entry dropped for applied general and tech level students compared to 2017. State-funded schools saw bigger drop in APS per entry in both applied general (-10.54) and tech levels (-7.17), compared to FE sector colleges (-7.63 and -5.24).

Figure 13: APS per entry for applied general students by institution type (Table 1a)
England, 2018

|  | Applied general |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of students |  |  | APS per entry |  |  |
| Institution type | 2017 | 2018 | Change | 2017 | 2018 | Change |
| FE sector colleges | 83,318 | 12,045 | -85.5\% | 33.51 | 25.88 | -7.63 |
| FE sector colleges excluding sixth form colleges | 59,891 | 7,347 | -87.7\% | 31.95 | 24.81 | -7.14 |
| Sixth form colleges | 23,427 | 4,698 | -79.9\% | 38.49 | 28.30 | -10.19 |
| Independent schools | 1,451 | 583 | -59.8\% | 39.07 | 30.44 | -8.63 |
| State funded schools | 50,058 | 35,154 | -29.8\% | 39.55 | 29.01 | -10.54 |
| Studio schools | 388 | 271 | -30.2\% | 35.80 | 29.13 | -6.67 |
| University Technical Colleges - UTCs | 501 | 537 | 7.2\% | 36.36 | 29.98 | -6.38 |
| Free schools 16-19 | 386 | 84 | -78.2\% | 34.91 | 33.24 | -1.67 |
| Free schools | 141 | 77 | -45.4\% | 38.42 | 26.09 | -12.33 |
| Converter academies - mainstream | 22,546 | 17,580 | -22.0\% | 39.84 | 29.13 | -10.71 |
| Sponsored academies - mainstream | 11,648 | 7,628 | -34.5\% | 39.02 | 28.80 | -10.22 |
| Local authority maintained mainstream schools | 14,078 | 8,901 | -36.8\% | 39.83 | 28.93 | -10.9 |
| England ${ }^{1}$ | 131,471 | 47,553 | -63.8\% | 35.64 | 28.26 | -7.38 |

Source: 16-18 attainment data

1. Figures for institution type may not add up to England total. This is because the discounting rule was applied at school/college level for institution type and at national level for England results. More information can be found in the 'technical guide' document.

Figure 14: APS per entry ${ }^{1}$ for tech level students by institution type (Table 1a)
England, 2018

|  | Tech level |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of students |  |  | APS per entry |  |  |
| Institution type | 2017 | 2018 | Change | 2017 | 2018 | Change |
| FE sector colleges | 54,445 | 6,378 | -88.3\% | 31.10 | 25.86 | -5.24 |
| FE sector colleges excluding sixth form colleges | 46,977 | 6,049 | -87.1\% | 30.24 | 25.45 | -4.79 |
| Sixth form colleges | 7,468 | 329 | -95.6\% | 37.54 | 32.69 | -4.85 |
| Independent schools | 204 | 29 | -85.8\% | 36.77 | 24.90 | -11.87 |
| State funded schools | 12,531 | 5,587 | -55.4\% | 38.60 | 31.43 | -7.17 |
| Studio schools | 222 | 128 | -42.3\% | 33.67 | 27.77 | -5.9 |
| University Technical Colleges - UTCs | 1,205 | 709 | -41.2\% | 36.73 | 30.03 | -6.7 |
| Free schools 16-19 | 113 | 6 | -94.7\% | 33.14 | 36.19 | 3.05 |
| Free schools | 125 | 33 | -73.6\% | 43.92 | 38.72 | -5.2 |
| Converter academies - mainstream | 4,851 | 2,433 | -49.8\% | 38.94 | 32.29 | -6.65 |
| Sponsored academies - mainstream | 2,643 | 1,118 | -57.7\% | 38.32 | 30.79 | -7.53 |
| Local authority maintained mainstream schools | 3,217 | 1,146 | -64.4\% | 39.43 | 31.38 | -8.05 |
| England ${ }^{1}$ | 66,333 | 11,944 | -82.0\% | 32.24 | 28.33 | -3.91 |

1. Figures for institution type may not add up to England total. This is because the discounting rule was applied at school/college level for institution type and at national level for England results. More information can be found in the 'technical guide' document.

For both level 2 vocational qualifications and technical certificates, over $95 \%$ of students are in FE sector colleges. In particular, around $90 \%$ of students are in FE sector colleges excluding sixth form colleges. This is the same pattern seen in 2017. The number of level 2 vocational and technical certificate students increased in both FE sector colleges and state-funded schools compared to 2017. The FE sector colleges saw a bigger increase in level 2 vocational students (15.6\%) than technical certificate students (5.7\%). In contrast, there was a larger increase in the number of technical certificate students than in level 2 vocational students for state-funded schools. Attainment for level 2 vocational and technical certificate students was relatively stable in both FE sector colleges and state-funded schools.

Figure 15: APS per entry ${ }^{1}$ for level 2 vocational students by institution type (Table 1b)
England, 2018

|  | Level 2 vocational qualification |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of students |  |  | APS per entry |  |  |
| Institution type | 2017 | 2018 | Change | 2017 | 2018 | Change |
| FE sector colleges | 92,099 | 106,501 | 15.6\% | 5.7 | 5.73 | 0.03 |
| FE sector colleges excluding sixth form colleges | 86,302 | 99,395 | 15.2\% | 5.7 | 5.72 | 0.02 |
| Sixth form colleges | 5,797 | 7,106 | 22.6\% | 5.63 | 5.83 | 0.2 |
| Independent schools | 310 | 291 | -6.1\% | 5.9 | 5.85 | -0.05 |
| State funded schools | 6,613 | 7,002 | 5.9\% | 5.57 | 5.6 | 0.03 |
| Studio schools | 47 | 101 | 114.9\% | 5.64 | 5.82 | 0.18 |
| University Technical Colleges - UTCs | 104 | 116 | 11.5\% | 5.13 | 5.41 | 0.28 |
| Free schools 16-19 | 62 | 61 | -1.6\% | 5.28 | 5.62 | 0.34 |
| Free schools | 43 | 54 | 25.6\% | 5.78 | 5.64 | -0.14 |
| Converter academies - mainstream | 2,974 | 3,690 | 24.1\% | 5.58 | 5.66 | 0.08 |
| Sponsored academies - mainstream | 1,152 | 1,136 | -1.4\% | 5.68 | 5.54 | -0.14 |
| Local authority maintained mainstream schools | 2,187 | 1,796 | -17.9\% | 5.52 | 5.50 | -0.02 |
| England ${ }^{1}$ | 95,637 | 111,047 | 16.1\% | 5.69 | 5.72 | 0.03 |

Source: 16-18 attainment data

1. Figures for institution type may not add up to England total. This is because the discounting rule was applied at school/college level for institution type and at national level for England results. More information can be found in the 'technical guide' document.

Figure 16: APS per entry ${ }^{1}$ for technical certificate students by institution type (Table 1b)
England, 2018

|  | Technical certificate |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of students |  |  | APS per entry |  |  |
| Institution type | 2017 | 2018 | Change | 2017 | 2018 | Change |
| FE sector colleges | 38,529 | 40,716 | 5.7\% | 5.75 | 5.77 | 0.02 |
| FE sector colleges excluding sixth form colleges | 37,292 | 39,111 | 4.9\% | 5.75 | 5.76 | 0.01 |
| Sixth form colleges | 1,237 | 1,605 | 29.7\% | 5.70 | 5.86 | 0.16 |
| Independent schools | 22 | 19 | -13.6\% | 6.06 | 6.00 | -0.06 |
| State funded schools | 1,255 | 1,414 | 12.7\% | 5.57 | 5.60 | 0.03 |
| Studio schools | 7 | 2 | -71.4\% | 5.26 | $x$ | $x$ |
| University Technical Colleges -UTCs | 29 | 30 | 3.4\% | 4.80 | 4.69 | -0.11 |
| Free schools 16-19 | 14 | 16 | 14.3\% | 5.86 | 6.00 | 0.14 |
| Free schools | 8 | 14 | 75.0\% | 5.76 | 4.86 | -0.9 |
| Converter academies - mainstream | 607 | 684 | 12.7\% | 5.61 | 5.65 | 0.04 |
| Sponsored academies - mainstream | 295 | 367 | 24.4\% | 5.68 | 5.73 | 0.05 |
| Local authority maintained mainstream schools | 283 | 286 | 1.1\% | 5.44 | 5.43 | -0.01 |
| England ${ }^{1}$ | 39,233 | 41,770 | 6.5\% | 5.74 | 5.76 | 0.02 |

x indicates figure has been suppressed where underlying numbers are small (ie 1 or 2 )

1. Figures for institution type may not add up to England total. This is because the discounting rule was applied at school/college level for institution type and at national level for England results. More information can be found in the 'technical guide' document.

## Results by local authority and region

Maps showing the APS per entry by local authority (LA) for A level, applied general and tech level students are published alongside the statistical publication. There are considerable differences in the number of students in each cohort by local authority, partly as a result of the size of the authority and the number of schools and colleges offering 16-18 education. Care should therefore be taken when comparing attainment at LA level.

This year, the results for some qualifications in four sixth form colleges are missing from the provisional data. The impact of this missing data on these national-level statistics has been assessed as being very small. However, the missing data has a bigger effect at local authority level. The affected local authorities have been informed, and their data has been suppressed in the files published alongside this publication. We will publish an update for these local authorities and affected regions, including the omitted data as soon as it is available.

At regional level, the South East has the highest number of A level students in state-funded institutions ( $18.0 \%$ of all state-funded students), while the North East has the smallest number of students (4.2 \% of all state-funded students). This is primarily driven by population size rather than participation in level 3 study. The highest performing region for A level students is the South East, while the lowest performing region is the West Midlands. The four colleges with missing qualifications are in South East, West Midlands and North West. Care should be taken when comparing figures at region level. We will update figures for these affected regions in tables published alongside this publication.

At local authority level, the average point score (APS) per A Level entry lies between a grade C- and C+ for over $90 \%$ of LAs. The highest performing local authorities are Reading, Sutton and Buckinghamshire with APS per entry of $40.48,38.51$ and 37.94 respectively. The poorest performing local authorities are Knowsley, Islington and Sandwell with $21.28,23.85$ and 24.15 respectively.

For applied general students, the highest performing local authorities are York, Birmingham, and Harrow with APS per entry of $34.29,32.92$ and 32.63 respectively. The poorest performing local authorities are South Tyneside, Portsmouth, and the County of Herefordshire with 19.55, 20.10 and 20.36 respectively.

For tech level students, the highest performing local authorities are North Tyneside, Gateshead, and Darlington where APS per entry are $43.75,39.30$ and 36.78 respectively. The poorest performing local authorities are Tower Hamlets, North East Lincolnshire and Richmond upon Thames with 8.93, 14.75 and 16.15 respectively. However, the number of students in these local authorities are relatively small so care should be taken when making inferences.

## 4. English and maths

Since August 2014 all students aged 16 to 18 on study programmes of 150 hours or more that do not hold a GCSE grade 9 to 4 or A $^{*}$ to C (or equivalent qualification) in maths and/or in English, are required to be studying these subjects as part of their study programme in each academic year. This section covers results for the English and maths progress measure, which reports on students at the end of 16-18 study who did not achieve 9 to 4 or $\mathrm{A}^{*}$-C in GCSE or equivalent English and maths qualifications by the end of key stage 4.

The additional level 3 maths measure which shows the percentage of students who achieved GCSE maths grade 4 or above (or equivalent) by the end of key stage 4 that subsequently go on to achieve an approved level 3 maths qualification, is also reported in this section.

## English and maths progress measure

The English and maths progress measure shows how much progress students have made between the end of KS4 and the end of 16-18 study by looking at the average change in points. More details on the coverage of the measure are set out below.

## Which students are included in the measure

## English and maths condition of funding

The English and maths progress measure in this section of the publication align closely with the condition of funding rules set out by the Education and Skills Funding Agency (ESFA). Students who meet this condition are included in the English and maths progress measure.

## Exemptions

Students are exempt from the English and maths progress measure if they are recorded as having special educational needs or overseas qualifications equivalent to a GCSE grade 4 above. In 2018, 2,270 and 2,560 students were exempt from the English and maths measure respectively.

## Students with GCSE grade 3 or D ${ }^{3}$

From 1 August 2015, full time students starting their study programme that have a grade 3 or D GCSE or equivalent qualification in maths and/or English must be enrolled on a GCSE rather than an approved stepping stone qualification during 16-18 studies.
Students that have below a grade 3 or D GCSE or equivalent qualification can study either a GCSE or an approved stepping stone qualification during 16-18 studies.

## How student progress is measured

The English and maths progress measure is made up of two distinct measures, one for maths and the other for English, and an individual student can be in scope for one, both or neither measure depending on their achievement in English and maths by the end of key stage 4 (KS4).
Students in scope have their progress calculated by subtracting their best grade (point score) by the end of key stage 4 from the best grade (point score) achieved by the end of 16-18 study. A national average of this calculation is taken to produce the average change in point score. Average progress scores can take the following broad categories:
Positive progress score - on average students' point scores increased during 16-18 studies when compared to the point scores achieved at the end of KS4
Negative progress score - on average students' point scores decreased during 16-18 studies when compared to the point scores achieved at the end of KS4
Progress score is zero - on average students' point scores stayed the same during 16-18 studies when compared to the point scores achieved at the end of KS4
Note that a cap is applied to the measure so that - 1 is the maximum negative progress applied to an individual student in the calculation of their institution's progress measures.

## National average progress

## How points are assigned to English and maths qualifications

English and maths progress measure is based on a capped point score, ranging from 0 to 8 points, depending on the type of qualification taken and the grade they achieved. For example, points for reformed GCSEs range from 1 point for a grade 1 up to 8 points for a grade 9 . The points these qualifications attract have been set to ensure that students are treated fairly whether they have results in either legacy or reformed GCSEs. Students that do not enter any approved exams during 16-18 study automatically score 1 for the progress measure. Further information about the list of English and maths qualifications and their capped points can be found at: English and Maths progress measure qualifications: 2017 to 2018.

The average progress in English and maths continued to increase in 2018. In 2018 provisional data, the average progress measure is 0.08 for English, compared to 0.00 in 2017. The average progress for maths is 0.07 , compared to 0.02 in 2017. This means that for the first time since the measures were introduced in 2016, on average students' point scores were positive during 16-18 studies in both English and maths.

The proportion of students who entered an approved English (82.1\%) or maths (84.5\%) qualification increased since 2016, and consequently fewer students received a score of -1 in the measure due to nonentry. This may reflect institutions' increasing understanding of the measure and how students' entries in different qualifications affect their progress scores. The proportion of students who improved their grade during 16-18 in English and maths has continued to increase since 2016. In 2018, 37.2\% and 38.6\% improved their grade (point score) in English and maths respectively, which increased by 2.8 and 1.3 percentage points compared to 2017.

Figure 17: English and maths progress (tables 13a and 13b)
England, 2016 to 2018

|  | English |  |  |  | Maths |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of students in scope | Average progress | \% entering an approved English qualification | \% made positive progress | Number of students in scope | Average progress | \%entering an approved English qualification | \% made positive progress |
| $2016$ <br> (provisional) | 157,048 | -0.09 | 79.5\% | 30.0\% | 170,119 | -0.11 | 78.9\% | 32.4\% |
| $2017$ <br> (provisional) | 130,700 | 0.00 | 80.3\% | 34.4\% | 160,706 | 0.02 | 82.0\% | 37.3\% |
| $2018$ <br> (provisional) | 128,496 | 0.08 | 82.1\% | 37.2\% | 161,237 | 0.07 | 84.5\% | 38.6\% |

The number of students in scope for the English measure decreased by $1.7 \%$ compared to 2017. This is in line with the drop in the number of the potential level 3 students. The number of students in scope for maths progress measure remained relatively stable. This may be partially explained by a fall in the proportion of students achieving $A^{*}-C$ in maths qualifications the end of key stage 4 during 2015 and 2016 academic years.

## English and maths progress by gender

The majority of students who did not achieve 9 to 4 or $\mathrm{A}^{*}-\mathrm{C}$ in GCSE or equivalent in English qualifications by the end of key stage 4 were male students. In 2018, males and females represented $64.3 \%$ and $35.7 \%$ respectively of the total students in scope for the English measure, compared to $51.3 \%$ of male students and $48.7 \%$ of female students in the potential 16-18 students.

Both female and male students improved progress in English and maths in 2018 compared to 2017. However, female students continued to make more progress in English during 16-18 than male students. In 2018, the average progress in English was 0.13 and 0.06 for female and male students respectively. A higher proportion of female students ( $38.7 \%$ ) made positive progress than male students ( $36.4 \%$ ).
Of all students who were eligible for maths progress measure, $51.8 \%$ were male students and $48.2 \%$ were female students. This is in line with the gender distribution in the potential 16-18 students. Male students and female students made similar progress in maths during 16-18.

Figure 18: English and maths progress by gender (tables 14a and 14b)
England, 2017 to 2018

|  | English |  |  |  |  |  |  | Maths |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of students |  |  | Average progress |  | \% positive progress |  | Number of students |  |  | Average progress |  | \% positive progress |  |
|  | All | \% female | \%male | Female | Male | Female | Male | All | \% female | \%male | Female | Male | Female | Male |
| $2017$ <br> (provisional) | 130,700 | 35.9\% | 64.1\% | 0.04 | -0.02 | 35.7\% | 33.7\% | 160,706 | 48.6\% | 51.4\% | 0.03 | 0.00 | 37.9\% | 36.7\% |
| 2018 (provisional) | 128,496 | 35.7\% | 64.3\% | 0.13 | 0.06 | 38.7\% | 36.4\% | 161,237 | 48.2\% | 51.8\% | 0.07 | 0.06 | 38.5\% | 38.7\% |

Source: 16-18 attainment data

## National average progress breakdown by key stage 4 prior attainment

The highest proportion of students in scope for the English and maths measure entered 16-18 studies with GCSE equivalent of grade just below 4 or C (eg, grades 3 or D), with $54.5 \%$ in English and $47.3 \%$ in maths. They made more progress in both English and maths ( 0.12 and 0.10 respectively) than the average progress for all students ( 0.08 and 0.07 respectively).

Students with fail grades or entry level qualifications on average made the most progress among all students ( 0.47 and 0.39 in English and maths respectively), whilst students with below grade 3 or D for GCSE or level 1 qualifications made negative progress ( -0.01 for English and -0.06 for maths respectively).
Figure 19: Average progress and number of students by prior attainment band in English and maths (tables $13 a$ and 13 b$)^{3}$
England, 2017

| English |  |  | Maths |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Prior attainment | Students | Average progress | Prior attainment | No Students | ogress |
| Entry level or fail ${ }^{1}$ | 5,835 | 0.47 | Entry level or fail ${ }^{1}$ | 17,498 | 0.39 |
| Below grade 3 or D for GCSE or equivalent (level 1) ${ }^{2}$ | 52,646 | -0.01 | Below grade 3 or D for GCSE or equivalent (level 1 ) ${ }^{2}$ | 67,493 | -0.06 |
| Grade 3 or D for GCSE or equivalent (level 2) ${ }^{3}$ | 70,015 | 0.12 | Grade 3 or D for GCSE or equivalent (level 2$)^{3}$ | 76,246 | 0.10 |
| ALL | 128,496 | 0.08 | ALL | 161,237 | 0.07 |

1. Includes students whose highest prior attainment in English or maths were entry level qualifications or fail grades. The prior attainment points are 0 or 0.4 . Information on how grades are assigned point scores can be found in the 16 to 18 technical guidance.
2. Includes students whose highest prior attainment in English or maths were below grade 3 or D for GCSE or equivalent qualifications. This includes level 1 functional skills, free standing maths and ESOL.Their prior attainment points are between 0.8 and 3.
3. Include students whose highest prior attainment were grade 3 or D for GCSE or equivalent qualifications. This includes level 2 functional skills, free standing maths and ESOL. Their prior attainment points are 4.0.

## Average progress breakdown by institution type

Around $90 \%$ of students who were in scope for the English and maths measure during 16-18 studies were studying at FE sector colleges. FE sector colleges on average have greater negative progress than the majority of other institution types ( -0.10 and -0.12 for progress in English and maths respectively). This may be due to the large number of students in scope and the prior attainment profile of these students (students in scope for this measure at FE colleges typically have lower starting prior attainment compared to students in scope at other institution types). This may affect the motivation of students and the level of challenge to improve their English and maths attainment during 16-18 studies.

However, in 2018 FE sector colleges increased their progress scores, from -0.18 to -0.10 in English, and -0.18 to -0.12 in maths, compared to 2017.

Of these institution types, local authority maintained schools made the highest average progress in English and sixth form college made the highest average progress in maths. Care should be taken when comparing across institution types due to significant differences in the number of students in scope and prior attainment; for example, there were very low numbers of students in free schools, 16-19 free schools, university technical colleges and studio schools compared with other institution types.

Figure 20: Average progress in English and maths by institution type (tables 14a and 14b) England, 2018

|  | English |  |  | Maths |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Institution type | No. Students | Average prior attainment | Average progress | No. Students | Average prior attainment | Average progress |
| FE sector colleges excluding sixth form colleges | 116,682 | 3.25 | -0.10 | 139,712 | 2.73 | -0.12 |
| Sixth form colleges | 7,879 | 3.53 | 0.46 | 12,281 | 3.27 | 0.42 |
| Independent schools | 1,283 | 3.49 | -0.24 | 1,249 | 3.28 | 0.06 |
| Studio schools | 341 | 3.42 | 0.23 | 420 | 2.98 | -0.05 |
| University Technical Colleges - UTCs | 500 | 3.72 | 0.43 | 402 | 3.49 | 0.33 |
| Free schools 16-19 | 168 | 3.68 | 0.18 | 276 | 3.39 | 0.20 |
| Free schools | 151 | 3.61 | 0.40 | 161 | 3.43 | 0.05 |
| Converter academies - mainstream | 7,205 | 3.61 | 0.53 | 12,095 | 3.38 | 0.38 |
| Sponsored academies - mainstream | 3,857 | 3.53 | 0.34 | 5,748 | 3.22 | 0.14 |
| Local authority maintained mainstream schools | 4,210 | 3.56 | 0.54 | 6,994 | 3.32 | 0.36 |
| England ${ }^{1}$ | 128,496 | 3.28 | 0.08 | 161,237 | 2.83 | 0.07 |

Source: 16-18 attainment data

1. Figures for institution type may not be add up to England total. This is because progress was calculated at school/college level for institution type and at national level for England results. More information can be found in the 'technical guide' document.

## Level 3 maths measure

The level 3 maths measure reports on students at the end of 16-18 study who achieved a 9-4 or $\mathrm{A}^{*}$-C grade in GCSE maths (or equivalent) by the end of key stage 4 and go on to achieve an approved ${ }^{3}$ level 3 maths qualification during 16-18 studies. Students who achieve grades 9-4 in GCSE maths or an equivalent qualification, and are included in either the level 2 or level 3 headline attainment cohorts, are in scope for the measure. Students are not included in the measure if they reach the 9-4 standard during post-16 study, rather than by the end of key stage 4 . Those students who had already achieved an approved level 3 maths qualification by the end of key stage 4, but do not achieve another approved level 3 maths qualification during 16-18 study are excluded from the measure.

## Attainment in level 3 maths

In 2018, 340,186 students were in scope for the measure, and $28.4 \%$ of those achieved an approved level 3 maths qualification during 16-18 study.

Figure 21: Level 3 maths cohort attainment by gender (table 1d)
England, 2018

| Students at end of 16-18 studies |  |  |
| :---: | :---: | :---: |
|  | Number who achieved grades 9-4 or equivalent in GCSE maths/other maths qualifications by the end of key stage 4 | Percentage who achieved an approved level 3 maths qualification |
| Male 2018 | 164,853 | 34.3 |
| (2017) | $(201,197)$ | (28.3) |
| Female 2018 | 175,331 | 22.9 |
| (2017) | $(204,767)$ | (19.6) |
| Total 2018 | 340,186 | 28.4 |
| (2017) | $(405,964)$ | (23.9) |

[^2]More female students were in scope of the measure than male, 175,331 compared to 164,853, respectively. A higher proportion of male students (34.3\%) achieved an approved level 3 maths qualification than female ( $22.9 \%$ ). The gender gap of those who achieved an approved level 3 maths qualification has increased to 11.4 percentage points in 2018 from 8.7 percentage points in 2017.

## Below level 3 English and maths results by all 16-18 year olds

This section covers entries and subsequent pass rates in English and maths qualifications below level 3 by all 16-18 students, regardless of their achievement in English or maths during key stage 4 or whether they are at the end of 16-18 study. In contrast, the English and maths progress measure in previous sections was based on results achieved by the end of 16-18 study for students who did not achieve at least GCSE grade 4 or equivalent at the end of key stage 4.

GCSEs in English language, English literature and maths were reformed from 2017. In 2018, there were no entries in legacy English and only 214 entries in legacy maths for 16-18 students. Since the introduction of the condition of funding ${ }^{4}$ requirement in August 2014, total entries in GCSE qualifications have increased year on year, and this continued in 2018. Total entries in GCSE English qualifications, by all 16 to 18 students, increased by $28.9 \%$ respectively when comparing figures from 2017 to 2018 . Of those entries in the reformed (9-1) GCSE in English in 2018; 91.9\% achieved a pass, an increase of 2.5 percentage points compared to 2017. $31.4 \%$ entries in 2018 achieved $9-4$ grades, an increase by 1.9 percentage points compared to 2017.

Total entries in GCSE maths qualifications, from all 16-18 students, increased slightly by $1.0 \%$ respectively compared to 2017. Of those exam entries in the reformed (9-1) GCSE maths in 2018, 91.1\% achieved a pass, an increase of 4.9 percentage points compared to 2017. However, the proportion of entries achieving $9-4$ grades in the reformed (9-1) GCSE maths dropped by 4.6 percentage points compared 2017, to $20.5 \%$.

In contrast, entries in other entry level, level 1 and level 2 qualifications in English and maths dropped by $40.6 \%$ and $4.9 \%$ respectively compared to 2017.This shift may reflect the condition of funding requirement that those with a grade D at key stage 4 must continue to take GCSEs instead of other stepping stone qualifications. See accompanying tables 8 a and 8 b (available on the department's statistics website) for further 2018 figures.

[^3]Figure 22: Pass rates ${ }^{1}$ in English and maths qualifications at 16-18 (tables 8a and 8b)
England, 2017 to 2018


Source: 16-18 attainment data

1. The number of entries in some qualification types are relatively small so care should be taken when making inferences. For example, entries in level 1/2 certificates dropped from 3,606 in 2017 to 40 in 2018

## 5. Accompanying tables

The following tables are available in Excel format on the department's statistics website.

## National tables:

## Student level results

1a Level 3 attainment of students at the end of 16-18 study by institution type and cohort
1a Females: Level 3 attainment of female students at the end of 16-18 study by institution type and cohort

1a Males: Level 3 attainment of male students at the end of 16-18 study by institution type and cohort
1 Level 2 attainment of students at the end of 16-18 study by institution type, cohort and gender
1c Level 3 attainment of state-funded school students at the end of $16-18$ study by selective institution status, cohort and gender
A and AS level examination results
2a A level results of all students aged 16 -18 by subject and grade

2a Females: A level results of female students aged 16-18 by subject and grade

2a Males: A level results of male students aged 1618 by subject and grade
2b Decoupled A level results of all 17 year old students by subject and grade
2 b Females: Decoupled A level results of all 17 year old students by subject and grade
2 b Males: Decoupled A level results of all 17 year old students by subject and grade
2c A level results of all students aged 16-18 by institution type and grade
2c Females: A level results of all students aged 16-18 by institution type and grade
2c Males: A level results of all students aged 16-18 by institution type and grade
2d A level results of state-funded school students aged 16-18 by selective institution status, grade and gender

3a AS level results of all students aged 16-18 by subject, grade and gender
3a Females: AS level results of all students aged 1618 by subject, grade and gender
3a Males: AS level results of all students aged 16-18 by subject, grade and gender
3b Decoupled AS level results of 16 year old students by subject and grade

3b Females: Decoupled AS level results of 16 year old students by subject and grade
3b Males: Decoupled AS level results of 16 year old students by subject and grade

## Applied A/AS level examination results

4a Applied single A level results of all students aged 16-18 by subject, grade and gender
4b Applied single AS level results of all students aged $16-18$ by subject, grade and gender

5a Applied double A level results of all students aged $16-18$ by subject, grade and gender
5b Applied double AS level results of all students aged 16-18 by subject, grade and gender
Applied general and Tech level results
6 Applied general and tech level entries of all students aged 16-18 by subject and gender

## Level 2 vocational and Technical certificate results

7 Level 2 vocational and technical certificate entries of all students aged 16-18 by subject and gender

## Below level 3 English and maths results

8a GCSE English and other below level 3 English qualification entries and results by qualification type, grade and gender
8b GCSE maths and other below level 3 maths qualification entries and results by qualification type, grade and gender

## Local authority and regional level tables

9a Level 3 attainment of all state-funded students at the end of 16-18 study by local authority and region
9a Females: Level 3 attainment of all state-funded students at the end of 16-18 study by local authority and region

9a Males: Level 3 attainment of all state-funded students at the end of 16-18 study by local authority and region
9b Level 3 attainment of all state-funded school students at the end of 16-18 study by local authority and region

9b Females: Level 3 attainment of all state-funded school students at the end of 16-18 study by local authority and region

9b Males: Level 3 attainment of all state-funded school students at the end of 16-18 study by local authority and region
10 Level 2 attainment of state-funded students aged 16-18 by local authority, region and gender

## Maths and Science subject time series

11 Time series of students entered for maths and science A levels by subject and gender
12 Time series of students entered for maths and science A levels by number of subjects and gender

## English and maths tables

13a Matrix of prior attainment and progress point scores in GCSE English and other English qualifications by students at the end of 16-18 studies

13b Matrix of prior attainment and progress point scores in GCSE maths and other Maths qualifications by students at the end of 16-18 studies

14a Progress in GCSE English and other English qualifications by students at the end of 16-18 studies, by institution type and gender
14b Progress in GCSE maths and other maths qualifications by students at end of 16-18 studies, by institution type and gender

14c English and maths progress of students at end of 16-18 studies by duration of course
15 Attainment of Level 3 maths qualifications by students at the end of 16-18 studies, by institution type and gender

## Maps (pdf format)

Average point score per entry for the A level cohort Average point score per entry for the applied general cohort
Average point score per entry for the tech level cohort

## CSVs (csv format)

A and AS level exam results subject time series csv
A level exam results by institution type csv
A level exam results by LA and region csv
A level student participation by subject csv
Vocational student participation by subject csv

When reviewing the tables, please note that:
$\left.\begin{array}{ll}\begin{array}{l}\text { The criteria we use to include } \\ \text { students } \\ \text { (tables 1a-b, 9a-b) }\end{array} & \begin{array}{l}\text { Students will be included if they were aged } 16,17 \text { or } 18 \text { on } 31 \text { August } 2017 \text { and } \\ \text { had completed 16-18 study. A student is considered to have completed } 16-18 \\ \text { study in } 2018 \text { if they meet one of the following criteria: } \\ \text { 1. has entered for level } 3 \text { qualifications at least the size of } 2 \text { A levels }\end{array} \\ & \begin{array}{l}\text { 2. has attended the same institution for } 2 \text { years in a row }\end{array} \\ \text { 3. has reached academic age } 18 \text { and has not previously been included in } \\ \text { performance tables results }\end{array}\right]$

## 6. Further information is available

| Performance tables | Data for institutions can found in the school and college performance tables. The <br> $16-18$ performance tables will be updated with data for the 2017/18 academic year <br> in January 2019. |
| :--- | :--- |
| Key stage 4 | GCSE and equivalent results for key stage 4 can be found at GOV.UK - Statistics: <br> GCSEs (key stage 4). |
| Key stage 2 | Statistics on national curriculum assessments and review outcomes at key stage 2 <br> (KS2), including measures of progress between KS1 and KS2, can be found at <br> GOV.UK - Statistics: key stage 2. |


| Key stage 1 | Statistics on national curriculum assessments at key stage 1 and phonics screening check results can be found at GOV.UK - Statistics: key stage 1 |
| :---: | :---: |
| Destination measures | Statistics on educational or employment destinations of key stage 4 and key stage 5 students can be found at GOV.UK - Statistics: destinations of key stage 4 and key stage 5 pupils. |
| Level 2 and 3 attainment at 1618 | Statistics on the attainment of young people aged 19, based on matched administrative data can be found at GOV.UK - attainment at 19 years. |
| Level 1 and 2 attainment in English and maths at 16-18 | Experimental statistics on level 1 and 2 English and maths by students aged 16 to 18 who failed to achieve $A^{*}$ to $C$ by the end of key stage 4 can be found at GOV.UK - attainment at 19 years. Note that this release has been discontinued. |
| Results for the rest of the UK | The Welsh Assembly publishes the results of external examinations taken by pupils aged 15 or 17 , available at: Welsh assembly statistics and research |
|  | The Department for Education Northern Ireland (DENI) published AS and A level statistics, available at: <br> Department for Education Northern Ireland (DENI) |
|  | The publication 'Summary statistics for attainment, leaver destinations and healthy living' is published by the Scottish Government and is available at: The Scottish Government website |
| Information published by Ofqual | Ofqual follows the principle that if the cohort of students taking a subject is similar to previous years, then the proportions of students at each grade will be similar. A key piece of evidence in determining if the cohort is the same is prior attainment at GCSE for AS and A level qualifications. Background on the methodology and history of setting and maintaining exam standards can be found on GOV.UK setting GCSE and A level grade standards |
|  | Ofqual have also published information on variability in AS and A level results for schools and colleges which is available at GOV.UK - variability in AS and A level results |

## 7. National Statistics

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Statistics.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

The Department has a set of statistical policies in line with the Code of Practice for Statistics.

## 8. Technical Information

A quality and methodology information document accompanies this statistical publication. This provides further information on the data sources, their coverage and quality, and explains the methodology used in producing the data, including how it is validated and processed.

## 9. Get in touch

## Media enquiries

Press Office News Desk, Department for Education, Sanctuary Buildings, Great Smith Street, London SW1P 3BT.

Tel: 02077838300

## Other enquiries/feedback

Tingting Shu, Education Data Division, Department for Education, 53-55 Butts Road, Coventry, CV1 3BH
Tel: 02073407712 Email: Attainment.STATISTICS@education.gov.uk
© Crown copyright 2018
This publication (not including logos) is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

To view this licence:
visit www.nationalarchives.gov.uk/doc/open-government-licence/version/3
email psi@nationalarchives.gov.uk
write to Information Policy Team, The National Archives, Kew, London, TW9 4DU
About this publication:
enquiries Tingting Shu, Education Data Division, Department for Education, 5 Quinton Road, Cheylesmore House, Coventry, CV21 2WT
Tel: 02073407712 Email: Attainment.STATISTICS@education.gov.uk
download Statistics: 16 to 19 attainment

Follow us on Twitter: @educationgovuk

Like us on Facebook: facebook.com/educationgovuk


[^0]:    ${ }^{1}$ The size of an A level is equivalent to guided learning hours between 325 hours and 414 hours. More information about how GCSE size equivalence and GCE A level size equivalence can be found at: https://www.gov.uk/government/publications/performance-points-a-practical-guide-to-key-stage-4-and-5-points

[^1]:    ${ }^{2}$ Before 2018 qualifications could count in performance tables if they met interim requirements. Characteristics for interim requirements include declared purpose, size and recognition. From 2018 qualifications must also meet additional requirements to be eligible for performance tables. The additional requirements include appropriate content, appropriate assessment, synoptic assessment, grading and employer involvement. Information on the requirements can be found in the technical guidance for awarding bodies.

[^2]:    ${ }^{3}$ Approved qualifications will be those that count in the TechBacc. A full list of these qualifications can be found in annex $J$ in the 16-19 technical guidance.

[^3]:    ${ }^{4}$ Information on the condition of funding is published by Education and Skills Funding Agency.

