

SFR 05/2017, 19 January 2017

## Changes to this SFR

A new 16-18 school and college accountability system has been implemented in 2016, which includes new headline accountability measures and changes to the methodology for calculating 16-18 results. This publication provides an update on the provisional statistics published in October 2016, which reflected these accountability changes for the first time. More details can be found in section 2.

Level 3 attainment remains stable for students at the end of 16-18 study


Dist: distinction

The revised $A$ level average point score per entry is 31.79 (C+ grade), increased from 31.51 (C grade) in the 2015 shadow data, whereas the applied general and tech level grade remains unchanged. The revised data therefore confirms that level 3 attainment is broadly stable compared to 2015 . However, there are some small changes to the underlying figures since the provisional SFR e.g. the 2016 A level APS per entry was 31.52 (C grade) in the provisional data.
More details on the revisions to the data can be found overleaf and in section 3.

English and maths average progress remains negative for students still working towards qualifications below level 3

|  | Average progress |  |
| :--- | :---: | :---: |
|  | English | Maths |
| 2015 (shadow data) | -0.18 | -0.29 |
| 2016 (revised) | -0.10 | -0.13 |

In 2016, average progress is negative for those students still studying GCSE or stepping stone qualifications in English and maths, meaning on average a student's point score is lower at the end of $16-18$ studies than it was at the end of key stage 4.

A small proportion of 16-18 providers fell below the academic and applied general minimum standards

| State-funded mainstream providers |  |  |
| :--- | :---: | :---: |
|  | Assessed <br> against the <br> minimum <br> standard | Below the <br> minimum <br> standard |
| Academic | 2,190 | $85(3.9 \%)$ |
| Applied general | 1,628 | $60(3.7 \%)$ |

Of the total number of 16 to 18 providers assessed, $3.9 \%$ and $3.7 \%$ had value added progress scores that fell below the minimum standards set by the department for level 3 academic and applied general qualifications respectively, meaning these providers are seen as underperforming when compared nationally against other providers.

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## Note on revised results

The revised statistics in this release provide an update to the provisional figures published in October 2016 in SFR 49/2016. The revised figures incorporate the small proportion of amendments that awarding organisations, schools or colleges and local authorities submitted to the department after August 2016. A number of figures have changed between the two releases; this is expected and occurs every year.
Between provisional and revised SFRs it is usual for student numbers to drop, mainly due to the removal of students that should not be included. This year the number of level 3 students decreased by 3.0 per cent between the provisional and revised figures. This is the same level of decrease as in the 2015 publications. In contrast, performance measures tend to improve but generally changes are not substantial and where relevant these have been highlighted. This is due to the combined effect of removals of students that should not be included and the outcomes of enquiries about results and the submission of late results by Awarding Organisations.

## Note on comparisons over time

Due to government policy reforms and methodological changes to the statistics included in this SFR, it is not possible to directly compare all 2015/16 results to those published in the previous SFR series 'A level and other level 3 results'. Where a direct comparison with previously published statistics is not possible, we have instead made a comparison to 2015 'shadow' data calculated using the new methodologies. This provides a baseline against we can make some assessment of change over time, although it does not allow us to separate the extent to which this is due to schools and colleges changing their practices in response to government reforms, and what is due to change in the attainment of students.

## In this publication

The following files are published alongside the SFR text:

- National tables (excel .xls) • Local authority tables (excel .xls)
- Time series tables (excel .xls) • Maths and sciences tables (excel .xis)
- English and Maths tables (excel .xls) • local authority maps (pdf)

A full list of the tables included in these files is shown in section 8 of the SFR.
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 are changing how our releases look and welcome feedback on any aspect of this document at Attainment.STATISTICS@education.gov.uk

## 1. Introduction

The 16-18 school and college performance tables have changed this year, as a result of previously announced government reforms to the way schools and colleges are held to account for their performance. This includes a new set of headline measures which, for the first time, also cover GCSE and other below level 3 results in English and maths.

As a result, this Statistical First Release (SFR) series has been extended and now covers the level 3 results in the previous SFR series 'A level and other level 3 results in England" as well as level 1 and 2 English and maths results, which were previously published in 'Level 1 and 2 English and maths: 16 to 18 students'.

There are four main sections to this release:

1) Level 3 results
2) English and maths progress
3) A-level and below level 3 English and maths examination results
4) Level 3 value added minimum standards

Sections 1 to 3 provide an update to the provisional statistics that were published in October 2016. Section 4 includes new statistics that cover the number of schools and colleges whose academic or applied general performance is below the level expected by the department, known as the 'minimum standard'.

This SFR is part of a wider group of departmental publications on 16-18 accountability measures, which includes the 16-18 school and college performance tables (published with 2016 data in January 2017 and due to be updated with completion and attainment, and retention measures, in March 2017) and the student destinations SFRs. You can find further links to relevant publications in section 9.

## 2. Changes since last year

There have been a number of reforms to 2016 performance tables, which have had an impact on the way we calculate the statistics published in this SFR:

- The introduction of new performance measures
- Changes to the vocational qualifications that can count
- Changes to the points assigned to grades
- New rules for how students are included in measures
- New rules for how students are allocated to institutions

A summary is set out below and more detail can be found in the department's 16-19 technical guide and also the quality and methodology document published alongside this SFR.

## New performance measures

This SFR reflects the following main changes to performance tables measures:

- Level 3 results:
- average attainment is reported separately for students studying different types of qualifications. Last year, the SFR reported attainment for A level, academic and vocational students respectively. In 2016, the SFR continues to report attainment for A level and academic students, but vocational attainment is no longer reported. Instead, we report attainment separately for students studying applied general and tech level qualifications (see the next section for more details).
- average point score (APS) per entry measures continue to be reported but per student measures have been removed
- a new measure has been included showing the average point score and grade for a student's best 3 A levels
- There are a series of new tables reporting on English and maths progress for students without a good pass at key stage 4. This replaces the experimental level 1 and 2 English and maths experimental statistical release
- There are a series of new tables reporting on the level 3 value added minimum standards set for both level 3 academic and applied general qualifications. This replaces the interim minimum standards, which were previously based on average point scores and published in a separate data file on the 16-18 school and college performance tables


## Changes to the vocational qualifications that can count

In 2016, the recommendations from Professor Alison Wolf's Review of Vocational Education have taken effect for the first time in 16-18 performance tables and also in the calculation of the data underpinning this SFR.

This means that the measures only include vocational qualifications that are on the approved list of applied general or tech level qualifications.

Applied general qualifications: level 3 (advanced) qualifications that provide broad study of a vocational subject area e.g. a level 3 certificate/diploma in business or applied science.
Tech level qualifications: level 3 qualifications for students wishing to specialise in a technical occupation or occupational group e.g. a level 3 diploma in construction or bricklaying.

## Changes to the points assigned to grades

A new point score system has been used in both the 2016 performance tables and this SFR. The old system used a scale of 150-300 for A levels, where a grade A* was given 300 points and a grade E was equal to 150 points. The new system uses a simpler scale of $10-60$ points for $A$ levels, where a grade $A^{*}$ is given 60 points and a grade $E$ is given 10 points.
The new system reduces the size of the gap between a fail grade ( 0 points) and the lowest pass grade, which was previously much greater than the gap between other grades. This means that, considered in isolation of other changes to the data, fail grades do not have as large a negative impact on average point scores.

## New rules for how students are included in measures

A level, academic, applied general and tech level students
When reporting average attainment for students that study A level, academic, applied general or tech level qualifications, we only include students who have entered for qualifications at least a certain size. This ensures that the students included are broadly comparable.

Previously, students were only included if they had entered for at least one qualification the size of an A level in the reporting year. This meant that any students who had only entered for qualifications the size of half an A level e.g. an AS level, were not reported.

This year, in line with changes to performance tables, we have lowered the threshold for inclusion to the size of half an A level. This means we now include students who are at the end of 16-18 study and have studied for only an AS level (or similar sized vocational qualification).

## Additional measures for A level students

The SFR reports additional average attainment measures for A level students, for example the average grade in a student's best 3 A levels and the proportion of students achieving AAB (in at least two facilitating subjects). These apply to a different subset of A level students. The AAB measure has changed since last year, and now only includes students that are on A level-only programmes. Students must have entered at
least one A level (not including applied A levels or AS levels), and not studied other substantial academic, applied or technical qualifications. More information can be found in section 4.

## New rules for how students are allocated to institutions

In addition, there are changes to how students are allocated to an institution for the purpose of reporting them in performance tables, which in turn feed through to the institution-type and local authority figures in the SFR. In previous years, a student was allocated to a single institution at the end of 16-18 study. This year, students at the end of 16-18 study can be reported against a maximum of three different institutions, depending on where they took their qualifications in each of the past three years. Students are included only once in the overall national and local authority results. More information on how we calculate aggregate results for different types of schools and colleges can be found in the quality and methodology document accompanying this SFR.

## 3. What is the impact of the reforms?

In the provisional Statistical First Release, the impact of reforms was assessed by comparing the provisional 2015 shadow data with 2015 provisional SFR data. This provided analysis and context to support the interpretation of results in 2016. See the corresponding section 3 for more details.

## Use of revised shadow data

Note that, in this SFR, we have used revised 2015 shadow data as a baseline in order to make some comparisons of attainment over time (where appropriate). However, there are some limitations to the extent of comparability. This is because the 2016 data has been checked by schools and colleges during the performance tables checking exercise ${ }^{1}$, and revised to include any approved amendments. In contrast, the 2015 shadow data was shared with schools and colleges for information only - they were not able to request amendments to any of the new students included as a result of methodology changes. This means that there are some students included in the 2015 shadow data that schools and colleges did not have the opportunity to check or amend.

Whilst we have applied all of the known amendments to the revised 2015 shadow data - including deferring students that schools or colleges told us were not yet at the end of 16-18 study during the 2015 checking exercise - the data cannot fully reflect the amendments schools and colleges may have requested if they had the opportunity to check all of the students included in the new measures. Care should therefore be taken when comparing results using revised shadow data.

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## 4. Level 3 participation

This section covers results for A level, academic, applied general and tech level students who finished 1618 study in 2015/16. This shows how well students performed across the whole of their 16-18 studies, according to the type of qualifications they entered.

From 2016, students are included in level 3 results if they entered for at least one qualification in one or more of the qualification types listed below during their 16-18 study, and completed their study at the end of the reporting academic year. The qualifications must be equivalent in size to at least 0.5 A levels ${ }^{2}$. Results are reported separately for four cohorts of students depending on the types of qualifications taken: A level, academic, applied general and tech level.

A level: A/AS levels, applied single A/AS levels, applied double A/AS levels or combined A/AS level.
Academic qualifications: includes A level qualifications listed above. In addition it includes Pre-U, International Baccalaureate, Advanced Extension Award (AEA), Free Standing Mathematics, Extended Project (Diploma) qualifications and Core Maths at level 3.
Applied general and tech level qualifications: From 2016, only high value level 3 vocational qualifications, which meet pre-defined characteristics, will be recognised in the 16-18 performance tables. The list of vocational qualifications that will count in the 2016 performance tables can be found here: vocational qualifications for 14 to 19 year olds.

Since similar trends are seen in the results for A level and academic students (the overwhelming majority of academic students take A level programmes), information for A level, applied general and tech level students only is shown here. Data for academic students can be found in tables 1 a and b .

## Number of Level 3 students

In 2016, there were 440,455 students that completed their 16-18 studies and entered at least one level 3 academic, applied general or tech level qualification, which is relatively stable compared to 2015 shadow data. In contrast the potential number of 16-18 students (those who completed key stage 4 two years previously) has dropped by 2.2 per cent compared to 2015.

[^1]Figure 1: Number of Level 3 students by cohort $^{1}$ (England, 2015 and 2016)


Source: 16-18 attainment data

1. All the A level student figures shown in figure 1 are based on the methodology introduced in the 2016 performance tables.
2. The potential 16-18 students are those who completed key stage 4 two years previously.

## A level students

The number of A level students dropped by 2.9 per cent compared to 2015, which is higher than the fall in the potential number of $16-18$ students of 2.2 per cent. This is different from that shown in the provisional Statistical First Release, where the drop ( 1.3 per cent) was lower than that for the potential $16-18$ students.

However, the difference in the pattern in the provisional and the revised SFR may be partly explained by a difference in the type, and number, of students removed from the revised data each year, following the school and college checking exercise. This is as a result of the reforms to the performance measures in 2016, which have changed the coverage of students reported in the checking exercise. For example, the number of A level students decreased by 3.0 per cent following the 2016 checking exercise, compared to 1.4 per cent in 2015. See section 3 for more background on interpreting revised shadow data.

## Applied general and tech level students

In contrast to A levels, the number of applied general and tech level students increased by 5.2 per cent and 7.0 per cent respectively between 2015 and 2016. The increase in applied general and tech level students may reflect changes to the qualifications offered by schools and colleges, to incentivise students to enter qualifications that are approved for inclusion in 2016 performance tables. This rule only came into effect in 2016, therefore the 2015 shadow data will reflect the fact that students were more likely to be entered for other vocational qualifications that were not on the approved list.

Note that, similar to the A level results, the numbers of applied general and tech level students are different to those reported in the provisional release. The increases to both cohorts of students between 2015 and 2016 are higher than the provisional release - from 4.7 per cent to 5.2 per cent for applied general students and from 3.7 per cent to 7.0 per cent for tech level students. This is also likely to be partly explained by changes to the coverage of measures, in particular to the vocational qualifications reported, which will have changed the profile of students that schools and colleges reviewed during the 2015 and 2016 checking exercises. For example, the number of applied general students decreased by 4.3 per cent following the 2016 checking exercise, compared to 4.7 per cent in 2015. Whereas, the number of tech level students decreased by 1.0 per cent after the 2016 checking exercise, compared to 4.0 per cent in 2015 . It should
also be noted that these cohorts include a much smaller number of students that the A level cohort, which may lead to more volatility in the figures.

## Number of students by gender

More female students participate in level 3 studies than males. In 2016, 52.2 per cent of level 3 students were female, compared to 48.7 per cent in the potential 16-18 cohort. This pattern has been relatively consistent since 2010.

Considering participation in different types of qualifications, female students are more likely to enter A level study than males. In 2016, 54.3 per cent of A level students were females. In contrast, male students are more likely to achieve tech level qualifications than females, where 58.2 per cent of the students were males. For applied general students, females and males each account for half of the population. This is slightly different to the pattern in the provisional release where 49.5 per cent of applied general students were female and 50.5 per cent were male.

Figure 2: Proportion of students by cohort and gender (Table 1a) England, 2016


Source: 16-18 attainment data

## 5. Level 3 results by type of qualification

The level 3 attainment measures show the results that students achieved by the end of advanced level study. They take into account results achieved in all level 3 qualifications recognised in the 2016 performance tables and during all years of 16-18 study.

Performance measures across A level, tech level and applied general qualifications should not be compared due to differences in entry patterns and differences in grading structures between qualification types.

## A level students

The performance measures for A level students apply to different subsets of students, depending on the coverage of the measure.

The average point score (APS) per entry is one of the headline measures in the 16-18 performance tables. 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. In addition to this, we also report further attainment measures such as the new 'best 3' measure (which looks at average attainment across a student's best 3 A levels), the percentage of students achieving $3 \mathrm{~A}^{*}$ - A grades and the
percentage of students achieving grades AAB or better. 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 AS level qualification. Previously students had to have entered for at least one A level to be included. In addition, the measure is now based on the new performance point system.
'Best 3 ' measure, percentage achieving $3 A^{*}$-A and percentage achieving AAB or better: includes students taking A level-only programmes. We identify these students using the following criteria: (a) students need to have entered for one or more full size A levels (including A levels or applied 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 they have not entered for other academic, applied general or tech level qualifications greater than the size of an A level.

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

Figure 3: A level cohort attainment (table 1a)
England, 2015 and 2016

|  | 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 | $\begin{gathered} \text { APS } \\ \text { per } \\ \text { entry } \end{gathered}$ | Number of students | APS per entry in best 3 A levels (grade) | achieving <br> $3 \mathrm{~A}^{*}-\mathrm{A}$ grades or better |  | Number of students | \% achieving grades AAB or better, of which at least two are in facilitating subjects |
| 2015 (shadow data, revised) | 332,865 | $\begin{gathered} 31.51 \\ \text { (C) } \end{gathered}$ | 231,744 | $\begin{gathered} 34.65 \\ (\mathrm{C}+) \end{gathered}$ | 13.2 | 21.8 | 229,855 | 17.0 |
| 2016 <br> (revised) | 323,273 | $\begin{gathered} 31.79 \\ (\mathrm{C}+) \\ \hline \end{gathered}$ | 225,732 | $\begin{gathered} 34.97 \\ (\mathrm{C}+) \\ \hline \end{gathered}$ | 13.2 | 22.1 | 224,100 | 17.0 |

Source: 16-18 attainment data

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

## Attainment in A levels

In 2016, the revised APS per entry is 31.79 (C+ grade), increased from 31.51 (C grade) in the 2015 shadow data. This is a different pattern to that shown in the provisional Statistical First Release, where the APS per entry was 31.52 (C grade) in 2016.

When looking at those taking A levels or applied A levels only (see definitions above), in 2016, there were 225,732 students. Among which, 13.2 per cent achieved $3 A^{*}$-A or better and 22.1 per cent achieved AAB or better. The average grade for the best 3 A level measure is a $C+$, which is unchanged since the 2015 shadow data.

When we exclude those taking applied A levels from this group, there are 224,100 students, 17.0 per cent of whom achieved AAB or better (of which at least two are in facilitating subjects). This is broadly stable compared to the 2015 shadow data.

Facilitating subjects are identified by the Russell Group of universities as: mathematics and further mathematics; English (literature); physics; biology; chemistry; geography; history; languages (modern and classical). A full list of facilitating subjects can be found at this link to the performance tables.

## Attainment by gender

Overall female students achieved a higher APS per entry in A levels, the same pattern as previous years.
A higher proportion of female A level students entered at least one A levels or applied A levels ( 72.3 per cent) than male students ( 66.9 per cent). Female students achieved higher grades for the best 3 measure (B-) compared to male students (C+). However, a higher proportion of male students achieved $3 \mathrm{~A}^{\star}-\mathrm{A}$ grades ( 14.3 per cent) or AAB grades or better ( 22.6 per cent) compared to females, at 12.4 percent and 21.7 percent respectively.

Similarly, more female students entered one or more A levels (71.7 per cent) compared to male students (66.6 per cent). A higher proportion of male students (19.1 per cent) achieved AAB grades or better, at least two of which are in facilitating subjects than female students (15.3 per cent).

Figure 4: A level cohort attainment by gender, 2016 (table 1a)
England, 2015 and 2016

|  | 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 | \% 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 | \% A level cohort | \% achieving grades AAB or better, of which at least two are in facilitating subjects |
| Female | 175,564 | 32.65 | C+ | 126,847 | 72.3 | $\begin{gathered} 35.48 \\ (\mathrm{~B}-) \end{gathered}$ | 12.4 | 21.7 | 125,796 | 71.7 | 15.3 |
| Male | 147,709 | 30.74 | C | 98,885 | 66.9 | $\begin{gathered} 34.32 \\ (\mathrm{C}+) \\ \hline \end{gathered}$ | 14.3 | 22.6 | 98,304 | 66.6 | 19.1 |

Source: 16-18 attainment data

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

## Attainment by type of institution

Independent schools have the highest A level APS compared to other institution types; a similar pattern to 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 still relatively small).

It is important to note that prior attainment at key stage 4 is not taken into account in these figures. The ability of the student intake may vary significantly across institution types and therefore 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.

Care should also be taken when comparing across institution types due to significant differences in cohort sizes: for example, there are very low numbers of students in free schools, 16-19 free schools, university technical colleges and studio schools compared with other institution types.

Figure 5: Average point score per entry for A level students by institution type ${ }^{1}$ (table 1a)
England, 2016


Source: 16-18 attainment data
1.The number of students in the A level cohort is shown in brackets

## Attainment by local authority and region

A map showing the APS per entry by local authority for A level students is published alongside the SFR. There are considerable differences in the number of A level students between local authority, as a result of the size of the authority and the number of schools and colleges offering 16-18 education. Care should be taken when comparing attainment at LA level.

At regional level, the South East and London regions have the highest number of A level students in statefunded institutions ( 18.5 per cent and 16.6 per cent of all A level students in state-funded institutions respectively) compared to North East and East Midlands which have the smallest number of A level students ( 4.2 per cent and 8.0 per cent respectively). The highest performing region is South East, while the lowest performing region is East Midlands.

At local authority (LA) level, the average point score (APS) per A level entry lies between a grade C- and C+ for 94.7 per cent of LAs. The highest performing local authorities are in South East and Outer London, a pattern that has remained the same as that in the 2015 shadow data. The poorest performing local authorities are in North West, Inner London and South East, while the lowest performing local authorities in 2015 shadow data are in North West, Outer London and North East.

## Mathematics and science participation

Overall, the percentage of A level students entered for mathematics, further mathematics, biology and computing has increased slightly ( $0.5,0.2,0.2$ and 0.3 percentage points respectively) compared to 2015 shadow data, while participation in chemistry and physics remained stable. This is slightly different from the provisional release where participation in chemistry and physics dropped only slightly compared to 2015.

A higher percentage of male students entered mathematics and science subjects than females, except in biology. The gender gap in mathematics, further maths and computing has widened since 2015.

Figure 6: Percentage of A level students entering for mathematics and science A levels by gender (Table 13a)
England, 2015 and 2016

|  | \% A level students |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Females |  | Males |  | All |  |
|  | 2015 (Shadow) | $\begin{gathered} 2016 \\ \text { (revised) } \end{gathered}$ | $2015$ <br> (Shadow) | $\begin{gathered} 2016 \\ \text { (revised) } \end{gathered}$ | 2015 <br> (Shadow) | $\begin{gathered} 2016 \\ \text { (revised) } \end{gathered}$ |
| Maths | 16.9 | 17.0 | 30.8 | 31.8 | 23.3 | 23.8 |
| Further Maths | 2.1 | 2.2 | 6.3 | 6.7 | 4.0 | 4.2 |
| Biology | 17.7 | 18.0 | 13.5 | 13.5 | 15.8 | 16.0 |
| Chemistry | 12.2 | 12.3 | 14.8 | 14.7 | 13.4 | 13.4 |
| Physics | 3.7 | 3.7 | 15.9 | 15.9 | 9.3 | 9.3 |
| Computing | 0.2 | 0.3 | 2.8 | 3.3 | 1.4 | 1.7 |

Source: 16-18 attainment data

## Applied general and tech level students

To be included in applied general or tech level results, students need to have been entered for at least one applied general or tech level qualification eligible for 2016 performance tables. The list of vocational qualifications that will count in the 2016 performance tables can be found here: vocational qualifications for 14 to 19 year olds. Only those qualifications on the list of applied general qualifications are recognised in the applied general category, and only those qualifications on the list of tech level qualifications are recognised in the tech level category.

## Average point score per entry

The APS per entry, expressed as a grade, remained stable at Distinction and Distinction- for applied general and tech level students, compared to 2015 shadow data.

Figure 7: Average point score per entry for applied general and tech level students (table 1a)
England, 2015 and 2016

|  | Applied general students |  |  | Tech level 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 |
| 2015 <br> (shadow data, revised) | 119,155 | 34.83 | Dist | 64,773 | 31.36 | Dist- |
| 2016 <br> (revised) | 125,325 | 34.69 | Dist | 69,318 | 30.77 | Dist- |

[^2]Source: 16-18 attainment data

## Attainment by gender

Female students achieved a higher APS per entry for both applied general and tech levels. For applied general qualifications, female students achieved a Distinction+ compared to a Distinction- for male students.

Figure 8: Attainment by gender for applied general and tech level students (table 1a)
England, 2016

|  | Applied general students |  |  | Tech level students |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { students } \end{aligned}$ | APS per entry | APS per entry as a grade | Number of students | $\begin{aligned} & \text { APS } \\ & \text { per entry } \end{aligned}$ | APS per entry as a grade |
| Female | 62,736 | 36.69 | Dist+ | 28,968 | 31.84 | Dist- |
| Male | 62,589 | 32.58 | Dist- | 40,350 | 30.04 | Dist- |

Source: 16-18 attainment data
Dist: distinction

## Attainment by type of institution

72.0 per cent of tech level students are in FE sector colleges, excluding sixth form colleges. In contrast, applied general students are spread more widely across FE sector colleges, excluding sixth form colleges ( 40.1 per cent), converter academies ( 17.8 per cent) and sixth form colleges ( 15.2 per cent).

Local authority maintained mainstream schools have the highest APS for both applied general and tech level students compared to other institution types. FE sector colleges, excluding sixth form colleges, have the lowest APS per entry for both applied general and tech level students.

Figure 9: APS per entry ${ }^{1}$ for the applied general and tech level students by institution type ${ }^{2}$ (Table 1a) England, 2016



Source: 16-18 attainment data

1. Dist: distinction
2. The number of applied general and tech level students are shown in brackets

## Attainment by local authority and region

Maps showing the APS per entry by local authority for applied general and tech level students are published alongside the SFR. Similar variation in the number of students was also seen in tech level qualifications. Care should be taken when comparing attainment at LA level, as there can be considerable differences in the numbers of students, depending on the size and type of provision in the LA.

At local authority (LA) level, the highest performing local authorities for applied general students are in North West and outer London. The poorest performing local authorities are in Outer London and Inner London. For tech level students, the highest performing local authorities are in Inner London, South East and North West. The poorest performing local authorities are in South West and West Midlands.

## Participation by subject area

This section shows the participation in applied general and tech level qualifications by subject area, for those students that completed their 16-18 study in 2016. The proportion of students entering each applied general and tech level subject area are shown in Figure 10. It is important to note that each subject area has different numbers of available qualifications.

In 2016, Arts, media and publishing and Engineering and manufacturing technologies are the most popular subject areas for tech level students, as 32.0 per cent and 16.8 per cent of tech level students entered these subjects respectively. Business, administration and law, and Leisure, travel and tourism are the most popular subject areas for applied general students.

The numbers of underlying exam entries in 2016 by subject and gender for applied general and tech level qualifications can also be found in tables 6 and 7 of the accompanying SFR excel tables.

Figure 10: Percentage of students entering each subject area
England, 2016

| Subject area | Applied general students |  |  | Tech level students |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of qualifications available | Number of students | \% Applied general students | Number of qualifications available | Number of students | \% Tech level students |
| Agriculture, horticulture and animal care | 4 | 130 | 0.1 | 69 | 7,037 | 10.2 |
| Arts, media and publishing | 24 | 22,877 | 18.3 | 30 | 22,180 | 32.0 |
| Business, administration and law | 20 | 33,447 | 26.7 | 5 | 4,366 | 6.3 |
| Child development and well-being | 1 | 210 | 0.2 | 5 | 1,835 | 2.6 |
| Construction, planning and the built environment | 1 | 36 | 0.0 | 24 | 4,507 | 6.5 |
| Engineering and manufacturing technologies | 1 | 444 | 0.4 | 45 | 11,611 | 16.8 |
| Health, public services and care | 8 | 22,313 | 17.8 | 9 | 110 | 0.2 |
| Information and communication technology | 5 | 17,470 | 13.9 | 8 | 9,219 | 13.3 |
| Leisure, travel and tourism | 17 | 29,574 | 23.6 | 9 | 6,128 | 8.8 |
| Preparation for life and work | 2 | 964 | 0.8 | - | - | - |
| Retail and commercial enterprise | 2 | 73 | 0.1 | 26 | 3,087 | 4.5 |
| Science | 5 | 16,231 | 13.0 | - | - | - |
| Social sciences | 1 | 353 | 0.3 | - | - | - |

Source: 16-18 attainment data

## 6. English and maths progress measure

This section covers results for the new English and maths progress measure, which reports on students at the end of $16-18$ study who did not achieve $\mathrm{A}^{*}-\mathrm{C}$ in GCSE or equivalent English and maths qualifications by the end of key stage 4. These students are now required to continue studying GCSE English and maths, or other equivalent qualifications, at 16-18. The measure shows how much progress students have made, by looking at the average change in grade. More details on the coverage of the new measure are set out below.

## Which students are included in the measure

## English and maths condition of funding

The English and maths progress measure and the number of students referenced as in scope in this section of the SFR align closely with the condition of funding ${ }^{3}$ rules set out by the Education Funding Agency (EFA).

All students aged 16 to 18 starting or who had already started a new study programme of 150 hours or more on or after 1 August 2014 and who do not hold a GCSE grade 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. Students who meet this condition are included in the 2016 English and maths progress measure.

## Exemptions

Students are exempt from the 2016 English and maths progress measure if they are recorded as having learning difficulties or overseas qualifications equivalent to a GCSE grade C. In 2016, 2,667 and 2,816 students were exempt from the English and maths measure respectively.

## Students with GCSE grade D

From 1 August 2015, full time students starting their study programme that have a grade 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.

## How points are assigned to English and maths qualifications ${ }^{4}$

The English and maths progress measure is based on achievement of GCSEs and of approved stepping stone qualifications such as functional skills, free standing maths, English for speakers of other languages, and AQA use of mathematics.

Each student's exam results are assigned a capped point score, ranging from -1 to 8 points, depending on the type of qualification taken and the grade they achieved. For example, GCSE points range from 1 point for a grade $G$ up to 8 points for an $A^{*}$ grade. Stepping stone qualifications do not attract as many points as GCSEs and typically fall between GCSE grades on the points scale, for example, a level 1 functional skill qualification is equal to 2.5 points. A fail in any qualification is worth 0 points and students that do not enter any approved exams during 16-18 study automatically score -1 .

[^3]
## How 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.

Students in scope have their progress calculated by subtracting their best grades (point score) by the end of key stage 4 from those achieved by the end of $16-18$ study. A national average of this calculation is taken to produce the average change in point score (grade).

Note that a cap is applied to the measure so that a -1 grade is the maximum negative progress applied to an individual student.

## Comparison over time

As this is a new measure, we are only able to make comparisons with 2015 shadow data. These comparisons help assess change over time, but have some limitations. In particular, that the 2015 data includes students studying and taking exams in the 2012/13, 2013/14 and 2014/15 academic years, when the continued study of English and maths was not requirement of funding until 1 August 2014. As such, the cohort of students at the end of study in 2015 and 2016 are likely to have different levels of English and maths prior attainment.

Note: As the English and maths progress measure is a new measure for 2016, there was no comparison of the impact of methodology change in 2015 and the shadow data remains the same as used in the provisional SFR.

## National average progress

In 2016, the revised average progress measure is negative for both English ( -0.10 ) and maths ( -0.13 ), therefore on average a student's point score goes backwards during 16-18 studies when compared to the point score achieved at the end of key stage 4 (KS4). Note that the result has decreased slightly for both English (from -0.09 to -0.10 ) and maths (from -0.11 to -0.13 ) compared to the October provisional release.

There has also been a drop in the total number of students in scope in the measure, by 7\% for both English (from 157,048 to 145,524 ) and maths (from 170,119 to 157,452 ) respectively, compared to the provisional release. This decrease is due to the removal of students during the checking exercise, for example students who were deferred as they are not yet at the end of 16-18 study (see page 2 for more details). The rate of removal is higher for the English and Maths cohorts than the other cohorts reported in the SFR, which may reflect differences in the type of student reported in the English and Maths progress measures for example, the length of time taken to complete their 16-18 study programmes.

However, the average progress in both English and maths are an increase to the progress shown in 2015, with English progress on average higher than maths in 2015 and 2016. (All references to 2015 data in this section of the SFR relate to shadow measure data only).

For English and maths, $21 \%$ and $22 \%$ of students in each subject respectively did not enter an approved English or math qualification during 16-18 studies and subsequently received a score of -1 in the measure. The number of students not entering an approved qualification, is therefore a contributing factor behind national progress currently being negative.

Figure 11: English and maths headline measure (tables 15a and 15b)
England, 2015 and 2016

|  | English |  |  |  | Maths |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of students in scope | Average progress total | Average progress males | Average progress females | Number of students in scope | Average progress total | Average progress males | Average progress females |
| $2015$ <br> (shadow data) | 158,462 | -0.18 | -0.19 | -0.16 | 161,528 | -0.29 | -0.30 | -0.28 |
| 2016 <br> (revised) | 145,524 | -0.10 | -0.11 | -0.08 | 157,452 | -0.13 | -0.14 | -0.11 |

Source: 16-18 attainment data

Males and females represent $64 \%$ and $36 \%$ respectively of the total students in scope for the English measure, whereas males and females represent $52 \%$ and $48 \%$ respectively of the total students in scope for the maths measure.

Females in scope for this measure, continue to outperform males in 2016 with a higher national average progress score in both English and maths, as shown in figure 11.

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

The highest proportion of students entered 16-18 studies with a prior attainment score of 4 (GCSE equivalent of grade D), with $54 \%$ in English and $40 \%$ in maths, as shown in figure 12.

Students with the very lowest prior attainment, between 0 and 0.8 points (mostly students with fail grades or entry level qualifications), made positive progress, whilst almost all other prior attainment groups made negative progress on average. In 2015, a similar pattern was shown for English, however in maths in 2015 only students with a prior attainment score of 0 made positive progress on average.

Figure 12: Average progress and number of students by prior attainment point score in English ${ }^{1}$ and maths (tables 15a and 15b) ${ }^{2}$
England, 2016

| English |  |  |
| :---: | ---: | ---: |
| Prior attainment <br> point score | No. Students | Average progress |
| 0 | 2,359 | 0.44 |
| 0.4 | 3,149 | 0.31 |
| 0.8 | $\mathrm{~N} / \mathrm{A}$ | $\mathrm{N} / \mathrm{A}$ |
| 1 | 4,155 | 0.01 |
| 1.5 | x | -0.42 |
| 1.7 | $\mathrm{~N} / \mathrm{A}$ | $\mathrm{N} / \mathrm{A}$ |
| 2 | 13,688 | -0.17 |
| 2.5 | 3,293 | -0.17 |
| 3 | 40,604 | -0.15 |
| 4 | 78,270 | -0.10 |
| All | $\mathbf{1 4 5 , 5 2 4}$ | $\mathbf{- 0 . 1 0}$ |


| Maths |  |  |
| :---: | ---: | ---: |
| Prior attainment <br> point score | No. Students | Average progress |
| 0 | 10,271 | 0.37 |
| 0.4 | 3,967 | 0.03 |
| 0.8 | 17 | 0.08 |
| 1 | 18,588 | -0.11 |
| 1.5 | 75 | 0.63 |
| 1.7 | 46 | -0.34 |
| 2 | 25,136 | -0.14 |
| 2.5 | 3,488 | -0.37 |
| 3 | 33,335 | -0.26 |
| 4 | 62,529 | -0.13 |
| All | $\mathbf{1 5 7 , 4 5 2}$ | $\mathbf{- 0 . 1 3}$ |

Source: 16-18 attainment data

1. There is no data for prior attainment scores 0.8 and 1.7 in English because there are currently no qualifications which acquire these scores.
2. ' $x$ ' in the table refers to figures that have been suppressed due to small numbers

## Average progress breakdown by institution type

FE sector colleges on average perform more negatively than all other institution types, although it should be noted that around $80 \%$ of students who are in scope for the English and maths measure during 16-18 studies are studying at FE sector colleges, as shown in figure 13.
Figure 13: Average progress in English and maths by institution type (tables 16a and 16b) England, 2016

English



Source: 16-18 attainment data

Institution types which have lower numbers of students in scope for both the English and maths measure, such as, sixth form colleges, university technical colleges and converter academies have positive average progress. In particular, for both English and math sixth form colleges on average make the highest progress.

However, free schools, which had the smallest number of students in scope for both the English and maths measure, with 87 and 62 students respectively, have shown negative progress.

Care should also be taken when comparing across institution types due to significant differences in cohort sizes: for example, there are very low numbers of students in free schools, 16-19 free schools, university technical colleges and studio schools compared with other institution types.

## 7. A level and below level 3 English and math examination results

This section differs from sections 2 to 6, as it covers entries and grades for exams taken in the 2015/16 academic year by all students aged 16-18, irrespective of whether they are at the end of 16-18 study. This gives an overview of the very latest national exam results and how this has changed over time.

In contrast, the cohort performance measures shown in previous sections were based on the results for students at the end of their 16-18 study only.

Note: Removal of deferred students in the 2015 shadow data (see section 3) does not have impact on the exam level results since results in this section cover exams by all students aged 16-18, regardless of whether they were at the end of $16-18$ study. Therefore, the exam results in the 2015 shadow data have not changed between the provisional and revised SFR.

This section also includes 2015/16 examination results for below level 3 English and maths qualifications, which are included in this SFR series for the first time this year.

## A level results

## Changes to methodology

From 2016, for accountability purposes results are allocated to the provider where the student has enrolled to take their main programme of study, recorded in the school census or Individual Learner Record (ILR). The ILR has been used as additional data source for the first time this year, and this leads to very small differences in the student exam results included. For example, the number of A level entries in 2015 was 758,625 using 2015 methodology, compared to 758,565 entries in 2016 methodology, a difference of 60 entries.

## A level exam results

There were 744,161 A level entries in 2016, down by 1.9 per cent compared to 2015 shadow data. This is lower than the potential cohort of students at the end of 16 -18 study (likely to be those in year 13) which showed a decrease of $2.2 \%$ (see section 4). The pass rate, and the proportion of exam entries that were grade $A^{*}-A$ and $A^{*}-B$, all remain stable.

Figure 14: A level examinations results (Table 2a)
England, 2015 and 2016

|  | Number of <br> entries | \%A*-E | \%A*-A | \%A*-B |
| :--- | :---: | :---: | :---: | :---: |
| 2015 revised | 758,625 | 98.8 | 26.7 | 53.5 |
| 2015 <br> (shadow data) <br> 2016 <br> (revised) | 758,565 | 98.7 | 26.5 | 53.4 |

Source: 16-18 attainment data

## A level results by gender

More female students entered A level exams than males, a similar pattern to previous years. In 2016, 55.2 per cent of $A$ level entries were by female students, compared to 44.8 per cent by male students.
A higher proportion of entries awarded top $A^{*}$-A grades ( 55.3 per cent), $A^{*}$ - $B$ grades ( 56.8 per cent) and $A^{*}$ E pass rates ( 55.3 per cent) are by female students compared to male students, the same pattern as in previous years.

Figure 15: Percentage of A level examination entries by gender (Table 2a) England, 2016


Source: 16-18 attainment data

## Exam entries in facilitating subjects

In 2016, 50.6 per cent of A level entries are in facilitating subjects, a slight drop compared to 50.8 per cent in 2015 shadow data.

Note: The same list of facilitating subjects applies here as those defined in cohort results (see page 10).

Figure 16: A level exam entries in facilitating and non-facilitating subjects (Table 2a) England, 2015 to 2016

|  | Number of entries |  |  | \% A level entries |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Facilitating subjects | Nonfacilitating subjects | Total | Facilitating subjects | Nonfacilitating subjects |
| $2015$ <br> (shadow data) | 385,063 | 373,502 | 758,565 | 50.8 | 49.2 |
| $2016$ <br> (revised) | 376,457 | 367,704 | 744,161 | 50.6 | 49.4 |

Source: 16-18 attainment data
A higher percentage of entries by male students were in facilitating subjects, whereas for females the opposite is true. In 2016, 55.9 per cent of entries by male students were in facilitating subjects, compared to 46.3 per cent for females. This pattern of entries is relatively unchanged from 2015 shadow data, when equivalent figures were 56.0 per cent for males and 46.4 per cent for females.

One reason that female students enter a lower proportion of facilitating subjects compared to males is that they make up a higher number of entries in psychology, arts and design, and sociology, none of which are classified as a facilitating subject, while more male students entered mathematics and physics.

Figure 17: Percentage of A level exam entries in facilitating and non-facilitating subjects by gender (Table 2a) England, 2015 and 2016


Source: 16-18 attainment data

## Exam entries in Maths and sciences subjects

Overall, the proportion of exam entries in these subjects has remained broadly stable. Maths (11.0 per cent) and further maths ( 1.9 per cent) have increased slightly compared to 2015 shadow data ( 10.8 per cent in maths and 1.8 per cent in further maths). The proportion of entries in science subjects remained the same except for computing, which increased slightly from 0.6 per cent to 0.8 per cent of entries.

Maths ${ }^{5}$ is the most popular A level subject with 81,533 entries in 2016, which accounted for 11.0 per cent of all A level entries, up from 10.8 per cent in 2015 shadow data. A higher percentage of male students entered mathematics and science subjects than females, except in biology. The gender gap has widened for mathematics and science subjects except for chemistry and physics.

Figure 18: Percentage of A level exam entries in maths and science subjects by gender (Table 2a)
England, 2015 and 2016

|  |  | Number of exam entries |  | Proportion of A level entries |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 2015 \\ \text { (shadow) } \end{gathered}$ | $\begin{gathered} 2016 \\ \text { (revised) } \end{gathered}$ | $\begin{gathered} 2015 \\ \text { (shadow) } \end{gathered}$ | $\begin{gathered} 2016 \\ \text { (revised) } \end{gathered}$ |
| Mathematics | Females | 31,824 | 31,494 | 7.6 | 7.7 |
|  | Males | 50,189 | 50,039 | 14.7 | 15.0 |
|  | All | 82,013 | 81,533 | 10.8 | 11.0 |
| Further Mathematics | Females | 3,809 | 3,863 | 0.9 | 0.9 |
|  | Males | 9,878 | 10,185 | 2.9 | 3.1 |
|  | All | 13,687 | 14,048 | 1.8 | 1.9 |
| Biology | Females | 33,422 | 33,207 | 8.0 | 8.1 |
|  | Males | 21,729 | 21,098 | 6.4 | 6.3 |
|  | All | 55,151 | 54,305 | 7.3 | 7.3 |
| Chemistry | Females | 22,932 | 22,709 | 5.5 | 5.5 |
|  | Males | 23,686 | 22,725 | 6.9 | 6.8 |
|  | All | 46,618 | 45,434 | 6.1 | 6.1 |
| Physics | Females | 6,803 | 6,652 | 1.6 | 1.6 |
|  | Males | 25,113 | 24,396 | 7.4 | 7.3 |
|  | All | 31,916 | 31,048 | 4.2 | 4.2 |
| Computing | Females | 418 | 530 | 0.1 | 0.1 |
|  | Males | 4,416 | 5,069 | 1.3 | 1.5 |
|  | All | 4,834 | 5,599 | 0.6 | 0.8 |

Source: 16-18 attainment data

## AS level results

As part of ongoing reforms, AS qualifications are being separated ("decoupled") from A levels so that their marks do not count towards the A level and they become stand-alone qualifications. New AS and A levels have been taught in schools and colleges in England from September 2015, meaning the first results for the new AS levels were awarded in 2016, and the first results for new A levels will be awarded in 2017. Further subjects will be introduced over the following two years.

Please note the AS level results reported in this section exclude AS entries by students who also entered an A level in the same subject in the same year. This is because we apply performance tables 'discounting' rules ${ }^{6}$, which ensure that a student's learning is not double-counted in performance measures. In 2016, 14.8 per cent of AS entries were excluded compared to 12.5 per cent of entries excluded in 2015 shadow data. The distribution of AS level grades will also reflect the impact of these discounting rules, as those students who take an AS level and then go on to take the A level are likely to be those with relatively higher attainment.

[^4]There were 893,624 AS level entries in 2016, down by $17.8 \%$ compared to 2015 . This pattern is largely driven by the decoupling of 13 AS levels from A levels this year (so that the AS no longer counts towards the full A level).

The 13 AS levels that have been revised and decoupled in 2016 are art and design, biology, business, chemistry, computer science, economics, English literature, English language, English language and literature, history, physics, psychology and sociology. The full time table for AS and A level reform can be found at Get the facts: AS and A level reform.

The figures for 'decoupled subjects' in this section of the SFR refer to those subjects where exams were taken in the new decoupled AS levels for the first time in 2016. The 2016 results in these subjects include both new and previous AS level specifications (because some students will have re-sat previous specifications in summer 2016). The 2015 results in these subjects only include previous specifications, as the new decoupled versions were not available in 2015.

Entries in other subjects refer to AS levels where the reforms have not yet come into effect. The results only include existing specifications, as students have not yet taken decoupled AS exams.

The overall AS pass rate (A-E) has increased slightly to 87.7 per cent, up 0.2 percentage points compared to 2015.

Entries in decoupled subjects by 16 year olds (those most likely to be taking the new AS levels rather than re-sitting previous specifications) dropped by 24.0 per cent compared to 2015. Their A-E pass rates in these subjects were also broadly stable in 2016-however it is not possible to make a true like-for-like comparison due to the reformed nature of the AS qualifications.

Figure 19: AS level exam entries and results (Tables 3)
England, 2015 and 2016

|  | All subjectsby $16-18$ year olds |  |  |  | De-coupled subjects by 16 -year olds ${ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of entries | \%A-E | \%A | \%A-B | Number of entries | \%A-E | \%A | \%A-B |
| 2015 revised | 1,086,804 | 87.5 | 17.4 | 36.7 | - | - | - | - |
| $\begin{aligned} & \hline 2015 \\ & \text { (shadow data) } \end{aligned}$ | 1,087,337 | 87.5 | 17.5 | 36.8 | 566,260 | 87.9 | 16.9 | 36.9 |
| $\begin{aligned} & 2016 \\ & \text { (revised) } \\ & \hline \end{aligned}$ | 893,624 | 87.7 | 18.0 | 36.8 | 430,161 | 87.8 | 16.7 | 35.4 |

Source: 16-18 attainment data

1. Covers students aged 16 at the start of the 2015/16 academic year, ie 31 August 2015.

## Entries in decoupled subjects

Overall entries in decoupled subjects have decreased by 24.2 per cent since 2015, compared to 8.6 per cent across all other non-decoupled subjects. Independent schools showed smaller decreases in A level entry, while state-funded institutions showed larger decreases in AS entries to decoupled subjects (26.2 per cent and 23.3 per cent for schools and FE sector colleges respectively) compared to non-decoupled subjects ( 7.7 per cent and 9.0 per cent).

Figure 20: AS level exam entries in decoupled and non-decoupled subjects by institution type
England, 2015 and 2016

|  | Decoupled subjects |  |  |  | Non-decoupled subjects |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Independent schools | All statefunded schools | FE sector college | All schools and FE sector colleges | Independent schools | All statefunded schools | FE sector college | All schools and FE sector colleges |
| $2015$ <br> (shadow data) | 46,956 | 403,765 | 192,188 | 642,910 | 39,403 | 278,039 | 126,979 | 444,427 |
| $2016$ <br> (revised) | 41,620 | 298,095 | 147,432 | 487,165 | 34,189 | 256,736 | 115,521 | 406,459 |
| change | -11.4\% | -26.2\% | -23.3\% | -24.2\% | -13.2\% | -7.7\% | -9.0\% | -8.5\% |

Source: 16-18 attainment data
The largest change in de-coupled subjects was for art and design where entries fell by 36.0 per cent, while the smallest was for computing where entries fell by 11.4 per cent.

Figure 21: Exam entries in decoupled AS levels by subjects
England, 2015 and 2016

|  | 2015 <br> (shadow data) | 2016 <br> (revised) | \% Change |
| :--- | :---: | :---: | :---: |
| Art and Design | 55,443 | 35,482 | -36.0 |
| English language and literature | 15,647 | 10,448 | -33.2 |
| History | 63,933 | 44,790 | -29.9 |
| English literature | 56,952 | 40,144 | -29.5 |
| English language | 28,582 | 21,278 | -25.6 |
| Psychology | 88,277 | 67,644 | -23.4 |
| Biological Sciences | 79,447 | 61,717 | -22.3 |
| Chemistry | 67,099 | 52,360 | -22.0 |
| Economics | 37,644 | 29,988 | -20.3 |
| Physics | 50,897 | 40,562 | -20.3 |
| Sociology | 49,441 | 40,731 | -17.6 |
| Business Studies | 38,101 | 31,880 | -16.3 |
| Computing | 11,447 | 10,141 | -11.4 |
| Total | 642,910 | 487,165 | -24.2 |

Source: 16-18 attainment data

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

Since the introduction of the condition of funding requirement in August 2014 (see section 6) entries in GCSE English and maths increased by $37 \%$ and $53 \%$ respectively when comparing figures from $2015^{7}$ to 2016. Whereas, other entry level, level 1 and level 2 qualifications in English and maths saw a decrease in entries by between $11 \%$ and $54 \%$. This shift reflects the requirement that those with a grade D at key stage 4 must continue to take GCSEs instead of other stepping stone qualifications. This year's results are the first since this rule came into effect. See accompanying tables 8a and 8b (available on the department's statistics website) for further 2016 figures.

The increasing number of entries in GCSE English and maths may in part explain the drop in overall pass rate (achieving $A^{*}-G$ ), which decreased from $95.7 \%$ and $95.3 \%$ by 4.7 and 6.5 percentage points respectively when compared to 2015 . This is also demonstrated by the fact that the $\mathrm{A}^{*}-\mathrm{C}$ pass rate for $16-$ 18 year olds is much lower than the age 16 cohort, which includes the whole range of low to high attainers ${ }^{8}$, whereas the 16-18 cohort is more likely to be made up of low attainers (i.e. students who did not achieve $\mathrm{A}^{*}$-C during key stage 4).

Note: Entries and subsequent pass rates in English and maths covers all 16-18 students regardless of their achievement in English or maths during key stage 4.

Figure 22: Pass rates in English and maths qualifications at 16-18, 2015 and $2016{ }^{1}$ (tables 8a and 8b)
England, 2015 and 2016


Source: 16-18 attainment data

1. Due to an improvement in methodology for 2016 the number of entries and subsequent pass rates for 'other level 1 ' and 'other level 2' qualifications has been impacted.
[^5]
## Pass rates by gender

Females have outperformed males with a higher pass rate in GCSE A*-C in English, whereas males outperformed females in passing GCSE $\mathrm{A}^{*}-\mathrm{C}$ in math, as shown in figure 23.

Figure 23: Pass rates in GCSE English and math at 16-18 by gender, 2016 (tables 8a and 8b)
England, 2016

|  | English |  | Math |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Females | Males | Females | Males |
| GCSE (A* to C) (level 2) | 26.1 | 20.5 | 20.9 | 24.0 |
| GCSE (D to G) (level 1) | 66.2 | 69.6 | 69.1 | 63.6 |
| GCSE ( $\mathrm{A}^{*}$ to G ) | 92.3 | 90.1 | 90.0 | 87.6 |

Source: 16-18 attainment data

## 8. Academic and applied general minimum standards

The Department for Education applies 16 to 18 minimum standards to the performance of state-funded mainstream schools and colleges, to assess whether or not each institution is performing at the minimum expected level set by the department.

From 2016, the minimum standards have changed ${ }^{9}$ from attainment based standards to progress based standards. Using the level 3 value added measure, eligible providers are assessed separately on their value added scores for both level 3 academic and applied general qualifications. Providers will also be assessed on their completion and attainment scores for tech level qualifications in March 2017, when the data becomes available.

The level 3 value added measure ${ }^{10}$ shows the progress each student makes between key stage 4 and graded level 3 qualifications (excluding tech Levels) compared with the progress made by students nationally who had the same level of attainment at key stage 4. Students are compared with other students studying the same qualification nationally before being aggregated to give an overall value added score for a provider. This value added score is expressed as a proportion of a grade above or below the national average, e.g. students achieve half a grade lower than the national average.

## Definition of minimum standards for level 3 value added

A 16 to 18 provider is seen as underperforming and below the 2016 minimum standard if:

1. Its value added score is statistically significantly below the national average, i.e. both its upper and lower confidence intervals are below zero; and
2. It has a value added score below the threshold set by the Department for Education. The threshold for academic qualifications is -0.5 and -0.75 for applied general qualifications.
[^6]
## 16 to 18 providers below the minimum standard

In 2016, 2,190 and 1,628 state-funded mainstream schools and colleges were assessed against the academic and applied general minimum standard respectively. Of those, $3.9 \%$ (85) and $3.7 \%$ (60) fell below the minimum standard for level 3 academic and applied general qualifications respectively, therefore these providers are seen as underperforming when compared nationally against other providers.

Figure 24: 16 to 18 providers that are below the minimum standard (tables 19a and 19b)
England, 2016

|  |  |  |
| :--- | :---: | :---: |
|  | Number of <br> providers | \% of providers |
| Academic qualifications | 85 | 3.9 |
| Applied general qualifications | 60 | 3.7 |

Source: 16-18 attainment data

## 16 to 18 providers below the minimum standard by region

The North West has the highest proportion of underperforming schools and colleges in level 3 academic qualifications in 2016 (7.9\%), whereas the East Midlands has the lowest proportion (1.5\%).

However, the West Midlands has the highest proportion of underperforming schools and colleges in level 3 applied general qualifications in $2016(6.3 \%)$, whereas the South West has the lowest proportion ( $0.6 \%$ ).

Figure 25: Percentage of providers below the minimum standard (and total number of providers assessed) by region, 2016 (table 19c and 19d)
England, 2016


Source: 16-18 attainment data

## 16 to 18 providers below the minimum standard by institution type

Similar proportions of state-funded mainstream schools and FE sector colleges fall below the minimum standard for both level 3 academic and applied general qualifications. For further breakdowns of institution types see accompanying tables 19e and 19 f (available on the department's statistics website).
Care should also be taken when comparing across institution types due to significant differences in cohort sizes: for example, there are very low numbers of students in free schools, 16-19 free schools, university technical colleges and studio schools compared with other institution types.

Figure 26: Percentage of providers below the minimum standard by institution type, 2016 (table 19e and 19f)
England, 2016

|  | Academic |  | Applied general |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number of providers assessed | Number of providers below the minimum standard | Number of providers assessed | Number of providers below the minimum standard |
| All state-funded mainstream schools | 1,948 | 76 (3.9\%) | 1,323 | 49 (3.7\%) |
| FE sector colleges | 242 | 9 (3.7\%) | 305 | 11 (3.6\%) |
| All state-funded mainstream providers | 2,190 | 85 (3.9\%) | 1,628 | 60 (3.7\%) |

## 9. Accompanying tables

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

## National tables:

## Student level results

1a Attainment of level 3 students aged 16-18 by institution type, cohort and gender
1b Attainment of level 3 state-funded school students aged 16 to 18 by admissions basis, cohort and gender
1c Attainment of level 3 state-funded school students aged 16 to 18 by selective institution status, cohort and gender

## A and AS level examination results

2a A level results by subject, grade and grade
$2 b$ A level results by institution type, grade and gender
2c A level results by subject, grade and institution type
2d A level results of state-funded school students by admissions basis, grade and gender
2e A level results of state-funded school students by selective institution status, grade and gender
3a AS level results of all students by subject, grade and gender
3b Decoupled AS level results of 16 year old students by subject, grade and gender
Applied A/AS level examination results
4a Applied single A level results by subject, grade and gender
4b Applied single AS level results by subject, grade and gender
5a Applied double A level results by subject, grade and gender

5b Applied double AS level results by subject, grade and gender

## Applied general results

6 Applied general entries by subject and gender

## Tech Level results

7 Tech level entries by subject and gender

## Below level 3 English and math results

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

8b GCSE mathematics and other below level 3 mathematics qualification entries and results by subject, grade and gender

## Local authority tables

9a Attainment of level 3 state-funded students aged $16-18$ by gender, local authority and region
9b Attainment of level 3 state-funded school students aged 16-18 by gender, local authority and region
10a Number of A level examination entries by state-funded students by subject, local authority and region

## Subject time series

11 A level results by subject, grade and gender
12 AS level results by subject, grade and gender

## Mathematics and sciences tables

13a Time series of students entered for mathematics and science A level subjects by gender
13b Students entered for mathematics and science A levels by gender and institution
13c State-funded students aged 16 to 18 entered for mathematics and science $A$ levels by gender, local authority and region
14a Time series of students entered for mathematics and science A level subjects by number of subjects and gender
14b Time series of A level students taking more than one mathematics and science A level by subject combination and gender
Progress in English and mathematics tables
15a Matrix of prior attainment and progress point scores in GCSE English and other English qualifications by students at the end of 16-18 studies

15b Matrix of prior attainment and progress point scores in GCSE mathematics and other mathematics qualifications by students at the end of 16-18 studies
16a Progress in GCSE English and other English qualifications by students at the end of 16-18 studies, by institution type and gender

16b Progress in GCSE mathematics and other mathematics qualifications by students at end of 16-18 studies, by institution type and gender

## School and college location tables

Table 17 Attainment of level 3 students aged 16 to 18 by degree of rurality and region of school or college location

Table 18 Attainment of level 3 students aged 16 to 18 by local authority district and region of school or college location

## Minimum standards tables

19a 16-18 eligible providers achieving the minimum standard for level 3 academic qualifications
19b 16-18 eligible providers achieving the minimum standard for level 3 applied general qualifications

19c Number of 16-18 eligible providers below the level 3 academic minimum standard for each local authority and region

19d Number of 16-18 eligible providers below the level 3 applied general minimum standard for each local authority and region
19e Number of 16-18 eligible providers below the level 3 academic minimum standard by institution type
$19 f$ Number of 16 -18 eligible providers below the level 3 applied general minimum standard by institution type

## Maps (pdf format)

Average point score per entry for A level students Average point score per entry for applied general students

Average point score per entry for tech level students

When reviewing the tables, please note that:

The criteria we use to include students (tables 1a-c, 9a-b, 13a-c, 14a-b, 17 and 18)

Students will be included if they were aged 16, 17 or 18 on 31 August 2015 and had completed 16-18 study. A student is considered to have completed 16-18 study in 2016 if they meet one of the following criteria:

1. has entered for level 3 qualifications at least the size of 2 A levels
2. has attended the same institution for 2 years in a row
3. has reached academic age 18 and has not previously been included in performance tables results

Approved qualifications only

How we avoid double counting subjects

The range of level 3 qualifications reported in this SFR covers all those approved (a) under Section 96 of the Learning and Skills Act (2000) and (b) by the Secretary of State for Education for inclusion in performance tables.

Approved qualifications at level 3 and their point scores can be found at Ofqual Register website
The list of applied and technical qualifications that count in 16-18 performance tables can be found on gov.uk

To avoid double counting results, qualification discounting is applied where, for example, if a student achieves an AS en route to achieving an A level in the same subject, only the A level pass is included.

We preserve confidentiality
The Code of Practice for Official Statistics requires us to take reasonable steps to ensure that our published or disseminated statistics protect confidentiality.
The Department has a set of statistical policies in line with the Code of Practice for Official Statistics: Standards for official statistics published by the Department for Education
so we suppress some figures,

Any numbers less than three (1 to 2 inclusive) have been suppressed and have been replaced by an ' $x$ '. An ' $x$ ' has also been used where secondary suppression has been applied.
Percentages have been shown to one decimal place but where the numerator is between 1 and 2 inclusive, they have been suppressed.
Where a number is shown as zero (0), the original figure submitted was zero.
adopt symbols to help identify this

Symbols are used in the tables as follows:
. not applicable
x publication of that figure would be disclosive
and round percentages

Percentages in this SFR are given to one decimal place. Totals may not add to $100 \%$ due to rounding.

## 10. Further information is available

| Performance tables | Data for institutions can be seen within the school and college <br> performance tables. The 16-18 performance tables were updated with <br> 2015/16 data in January 2017. |
| :--- | :--- |
| Key stage 4 | GCSE and equivalent results for key stage 4 can be found at GOV.UK - <br> Statistics: GCSEs (key stage 4). |
| Key stage 2 | Statistics on national curriculum assessments and review outcomes at key <br> stage 2 (KS2), including measures of progress between KS1 and KS2, <br> can be found at GOV.UK - Statistics: key stage 2. |
| Key stage 1 | Statistics on national curriculum assessments at key stage 1 and phonics <br> 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 <br> key stage 5 students can be found at GOV.UK - Statistics: destinations of <br> key stage 4 and key stage 5 pupils. |


| Level 2 and 3 attainment at <br> $16-18$ | Statistics on the attainment of young people aged 19, based on matched <br> administrative data can be found at GOV.UK - attainment at 19 years. |
| :--- | :--- |
| Level 1 and 2 attainment in <br> English and maths at 16-18 | Experimental statistics on level 1 and 2 English and maths by students <br> aged 16 to 18 who failed to achieve $\mathrm{A}^{*}$ to C by the end of key stage 4 can <br> be found at GOV.UK - attainment at 19 years. Note that this release has <br> now 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 |

Information published by Ofqual

Since 2010 Ofqual have used a process known as "comparable outcomes" to guide awarding decisions for AS and A levels. Awarding organisations predict AS and level outcomes for each subject based on prior attainment of the cohort. The aim is that, in normal circumstances, roughly the same proportion of students will achieve each grade in a given subject as in previous years. 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

The 2017 performance tables will include further changes as part of previously announced reforms to 16-19 accountability. This includes additional performance measures for below level 3 students and further information on student characteristics, such as disadvantage. Further technical guidance on these changes has been published on gov.uk.

## 11. 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 Official 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 Official Statistics.

## 12. Technical Information

A quality and methodology information document accompanies this SFR. 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.

## 13. 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
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tel: $\quad 02073407712 \quad$ Email: Attainment.STATISTICS@education.gov.uk
download Statistics: 16 to 19 attainment
Reference: SFR 05/2017

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[^0]:    ${ }^{1}$ See the Quality and Methodology document published alongside this SFR for more information.

[^1]:    ${ }^{2}$ The only exception is the extended project qualification, which has a size lower than 0.5 A levels.

[^2]:    Dist: distinction

[^3]:    ${ }^{3}$ Information on the condition of funding is published by Education Funding Agency.
    ${ }^{4}$ Information on point score structure can be found in the annex of the 16-19 technical guidance. References to the value added English and maths methodology are not applicable in this SFR.

[^4]:    ${ }^{5}$ Covers mathematics, pure mathematics, use of mathematics, mechanics and statistics. Excludes further mathematics. Figures for further mathematics are shown separately.
    ${ }^{6}$ You can find more information about 16-18 discounting on gov.uk

[^5]:    ${ }^{7} 2015$ figures can be found in the Level 1 and level 2 English and maths experimental statistical first release.
    ${ }^{8}$ See the 2015/16 GCSE and equivalent results in England Statistical First Release for more information on attainment by pupils at the end of key stage 4

[^6]:    ${ }^{9}$ For more information on the 16 to 18 minimum standards regarding changes to methodology from 2015 and the 2016 coverage, please see the 16 to 18 minimum standards guidance published by the Education Funding Agency.
    ${ }^{10}$ For more information on the level 3 value added measure and the definition of confidence intervals and how they are used in the Level 3 value added minimum standards please see the 16-18 technical guidance.

