A level and other 16-18 results

Quality and methodology information

October 2017
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Introduction

This document provides an overview of the data used in the production of the ‘A level and other 16-18 results’ Statistical First Releases (SFRs) and the 16-18 school and college performance tables.

It describes the methodology used to calculate student attainment and progress measures in these publications. It provides information on the data sources, coverage, quality, and how the data is validated and processed.

The statistics published in this SFR and performance tables have been badged as National Statistics, which means they meet the highest standards of trustworthiness, quality and value set out in the Code of Practice for official statistics.

About the statistics

National and local authority (LA) information on the A level and other 16-18 results in England is published in statistical first releases (SFRs) available online. The provisional SFR is published in October 2017, and the revised SFR, which incorporates updates and feedback collected during the checking exercise, will be published in January 2018. Further 2017 data will be released in March 2018, covering the completion and attainment, and retention measures.

School and college level information for 16-18 students at the end of 16-18 study in England will be published in the 16-18 performance tables in January 2018.

Changes in 2017

The statistics published in the 16-18 SFR and 16-18 performance tables have changed since 2016, because of changes to education policy. In 2017, the 16-18 performance measures will expand further by:

- including students aged between 16 and 18 studying vocational qualifications at level 2
- applying students' disadvantage status to each performance tables headline measure to illustrate differences between how well disadvantaged students in a school or college do compared to non-disadvantaged students nationally. Further information on this change will be provided when the measures are published in January.
- publishing new additional measures including the level 3 maths measure, the tech certificate measure, the returned and retained for a second year measure and the retained and assessed measure.

More information on the reforms to 16-18 accountability policy can be found in the 16-19 accountability technical guide and the 2017 performance tables statement of intent.
Data sources

16-18 qualification entries and attainment

The awarding organisations (AOs) deliver entries and examination results for all qualifications reported in this SFR and 16-18 performance tables for students at the age of 16-18. The AOs hold information on their qualifications, the students who have entered them and the results awarded. The department collects data from AOs each year via an external contractor.

Key stage 4 prior attainment

The department collects key stage 4 attainment for pupils at the end of key stage 4 each year, also from AOs. The information is used to calculate level 3 Value Added (VA) to measure the progress students have made between the end of key stage 4 and the end of level 3 study. It is also used to calculate the English and maths progress measures, for those students who did not achieve A*-C\(^1\) by the end of key stage 4. For information on key stage 4 methodology and results, please see the GCSE results SFR. The majority of students at the end of 16-18 study in 2016/17 have key stage 4 prior attainment from the 2014/15 academic year.

Student level information

The provisional A level and other 16-18 results SFR publishes statistics by gender. Student information such as enrolment status and learning aim is collected through the department’s school census and the Individualised Learner Record (ILR) for state-funded schools and colleges.

The school census is a statutory termly data collection, during which schools/LAs send the department details of the pupils they have on their roll and their characteristics.

The following school types participate in the pupil level school census.

- Local authority-maintained schools: community, foundation, voluntary-aided, voluntary-controlled schools, Pupil Referral Units (PRUs) and special schools (including hospital schools)
- Academies, including alternative provision (AP) academies
- Free schools, including AP free schools
- Studio schools
- University Technical Colleges (UTCs)
- Non-maintained special schools

More detail is available from the following link: school census guidance

The ILR is an ongoing data collection run by the Education and Skills Funding Agency (ESFA) to collect data about learners and the learning they are undertaking, from learning providers in the

\[\text{---------------------------}\]

\(^{1}\) All students reported in the 2017 16 to 18 performance tables would have taken legacy GCSEs (A*-G) or equivalent during key stage 4.
Further Education (FE) and Skills sector. The ESFA is also responsible for funding the provision of 16 to 19 education and receives relevant ILR funding returns.

For independent schools, information on individual pupils is taken from the awarding organisation data, as it is not collected via a student level return.

**Institution characteristics**

Information on school or college type and phase of education is taken from ‘Get Information about Schools’ (GIAS). This is a register of educational establishments providing compulsory, higher and further education in England and Wales, maintained by the Department for Education. More information is available in the GIAS guidance.

The school and college types that are reported in the 2016/17 SFRs have been taken as at the start of the 2016/17 academic year. Any schools or colleges which converted to an academy before 12 September 2016 have been reported as an academy and those that have converted on or after this date have been treated as their predecessor school or college type.

**Information on where students studied**

In the 16-18 SFR and performance tables, each student is assigned to a school or college on the basis of where they are recorded as being on roll for the purpose of school or college funding each year. The examination results collected from awarding organisations only tell us at which institution a student took exams, not whether the student was also recorded as being on roll. In order to assign students we therefore use the spring school census for schools and, since 2016, the Individualised Learner Record (ILR) for colleges. These tell us where school students were on roll in each year of their 16-18 studies.

For the purposes of the 16-18 SFR and performance tables, the ESFA’s June ILR snapshot (SN10) is used to identify where students are on roll at a college. More detail on the ILR is available on gov.uk.

Where a student is not recorded on either the school census or the ILR, usually because they are attending an independent school, the awarding organisation data is used to assign them to a school. This is usually based on where they took the highest volume of their exams.

**Condition of funding exemptions**

The SFR tables on English and maths attainment during 16-18 studies (for those pupils who did not achieve A*-C in GCSE mathematics (or equivalent) by the end of key stage 4) are calculated using key stage 4 and 16-18 attainment data submitted from awarding organisations. However, in order to align with the ESFA’s condition of funding rules, the department also uses funding data from the autumn school census and the ILR that identifies students who are exempt from the

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2 All students reported in the 2017 16 to 18 performance tables would have taken legacy GCSEs (A*-G) or equivalent during key stage 4
requirement to retake English and maths during 16-18 study. This includes students who have learning difficulties and/or disabilities and those who have overseas qualifications that are equivalent to GCSE grade C or above.

**Student learning aims**

The 16-18 performance tables uses information on student 16-18 learning aims from the school census and ILR to calculate two new performance measures: the retention measure, and the completion and attainment measure. Due to data availability, these measures will not be produced in time for the provisional SFR or the revised SFR/performance tables and we plan to publish them in March 2018.

**How the statistics are created**

The entries and awards for qualifications at key stage 4 and 16-18 are submitted by awarding organisations to an external contractor, who processes the data and completes a set of quality checks on behalf of the department. This includes checks that the coverage is as expected and that the data does not contain inaccurate or missing values.

Once the latest entries and results data has been submitted to the contractor in August, this is matched to students’ characteristics and information on students’ prior attainment to calculate performance measures for each student. These student level performance measures are then aggregated to give the overall results for schools, colleges, local authorities, regions and England as a whole. A number of performance measures and other derived variables (see Annex B) are added during this process. This data is then used to produce the provisional SFR released in mid-October.

The data is checked with schools and colleges during the 16-18 performance tables checking exercise, which runs between September and October, and allows schools and colleges to request amendments to their data. This could include adding any missing results, supplying information on grade amendments following successful reviews of results, or deferring students who are not yet at the end of 16-18 study. The student attainment data is updated to take on board any accepted amendments (i.e. those where the school or college has supplied sufficient evidence for the change), and any late results submitted by awarding organisations. This updated data is used to produce the statistics published in the revised SFR and performance tables in January 2018. Following publication of the performance tables, there is a short errata process to allow updates in exceptional circumstances, for example as a result of outcomes of appeals or re-marks from awarding organisations that arrived too late for the checking exercise. Following this process, the performance tables’ data is finalised and the performance tables website updated in spring. The final data is used to update any time series in the data tables in the following year’s SFR.

The performance tables will also be updated in March with additional performance measures based on Individualised Learner Record (ILR) data from the October SN14 snapshot and post-16 learning aims data from the autumn school census. These will be used to calculate the new retention and combined completion and attainment measures, which require data on student learning aims and whether or not they have been recorded as complete by the relevant school or college. As the ILR and school census data will be supplied directly from schools and colleges
rather than a third party, and validated by the ESFA and Department for Education, it will not go through a separate performance tables checking exercise.

The diagram below summarises the main process for producing 16-18 performance statistics:

<table>
<thead>
<tr>
<th>Schools or colleges</th>
<th>External organisations: Education and Skills Funding Agency (ESFA), Awarding Organisations (AOs)</th>
<th>Department for Education</th>
<th>Published statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information about students on roll</td>
<td>School Census data collection and validation</td>
<td>ESFA Data matching and processing</td>
<td>October: Provisional Statistical First Release (SFR)</td>
</tr>
<tr>
<td>Key stage 4 and 16-18 exams or internal assessment</td>
<td>Individualised Learner Record (ILR) data collection and validation</td>
<td>AOs Marking and validation</td>
<td>Unamended data</td>
</tr>
<tr>
<td>Checking exercise</td>
<td>Results data</td>
<td>Late results data</td>
<td>Data matching and processing</td>
</tr>
<tr>
<td>Information about student learning aim</td>
<td>Schools request amendments and submit data</td>
<td>Amended data</td>
<td>January: Performance Tables; Revised SFR</td>
</tr>
<tr>
<td>Post errata data checking</td>
<td>ILR and Post 16 learning aims</td>
<td>Amended data</td>
<td>March: Performance Tables; Revised SFR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retention &amp; Completion and attainment</td>
<td>Final data</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Final Performance Tables</td>
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</tbody>
</table>
Relevance

This section describes the degree to which the statistics meet current and potential needs of the users.

Key users

The school and college performance statistics are used by a wide range of users, including:

- **Parents** - choosing a school or college for their child (or children), seeing how well the school or college their child (or children) attends is performing

- **Students** - choosing a school or college for post-16 study

- **Government organisations** - the Department for Education, Ofsted, Regional School Commissioners, and Local Authorities use performance statistics to hold schools and colleges to account for their performance and to support policy monitoring and decision-making

- **Other organisations** - research bodies, charities and other organisations use performance statistics for research, decision-making or to support the development of new products in the education sector

Key strengths and limitations of the data

The key strength of the data is that it is derived from an administrative data collection, and undergoes enhanced quality assurance. This means that it can supply accurate data down to small geographical areas and school and college level. In addition, the data is merged with other administrative data held by the department (the school census and Individualised Learner Record) to provide detailed information on sub-groups of the school/college population. Student level data from different key stages can also be merged so that we can produce precise measures of student progress between one key stage and another.

However, the student counts for some groups particularly at local authority or school/college level can be small. In these cases, data is suppressed to protect the confidentiality of individuals and this can limit the usefulness of the data. Users should be aware that, whilst the statistics cover a wide range of information with high coverage and quality, they do not cover every aspect of a school or college’s individual circumstances, or the full breadth of their activity. Performance tables users in particular may wish to look at other information published about a school or college, for example Ofsted reports.

Users should note that the 16-18 performance tables are not intended to provide a prediction of future performance. The results published each year are based on the most recent cohort of students to have finished the relevant key stage.

Timeliness

Timeliness refers to the lapse of time between the period to which the data refer and the publication of the statistics.

The department quality assures the data, produces statistics and publishes the provisional ‘A level and other 16-18 results in England’ SFR after receiving the provisional data from the contractor. This process takes around four weeks to complete.
Revised 16-18 results and additional information such as mathematics and sciences results tables and breakdowns by school locations are published in January. These statistics include school level information that is released at the same time as the 16-18 performance tables.

A more detailed production timetable is shown below:

<table>
<thead>
<tr>
<th>May and June</th>
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</thead>
<tbody>
<tr>
<td>Main A level and AS level examinations are taken. (Vocational qualifications can be taken throughout the year.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>July and August</th>
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</thead>
<tbody>
<tr>
<td>The Joint Council for Qualifications (JCQ) collects results data from the awarding bodies. JCQ publish A level and AS level exam results in mid-August.</td>
</tr>
</tbody>
</table>

The department’s contractor collects attainment data from awarding organisations (data is collected throughout the year but the majority is collected in the summer).

<table>
<thead>
<tr>
<th>September</th>
</tr>
</thead>
<tbody>
<tr>
<td>The contractor matches the latest attainment data with other departmental data sources (school census and ILR). The department then receives unamended attainment (provisional) data from the contractor.</td>
</tr>
</tbody>
</table>

The schools and college 16-18 performance tables checking exercise takes place in late September/early October, providing schools and colleges with the opportunity to check and, where necessary, amend their results. In addition, institutions such as independent schools, which do not complete a student level return, can check that students assigned to them are on roll.

<table>
<thead>
<tr>
<th>October to December</th>
</tr>
</thead>
<tbody>
<tr>
<td>The department publishes the provisional A level and other 16-18 results SFR in mid-October based on unamended data.</td>
</tr>
</tbody>
</table>

Amendment requests from schools and colleges are scrutinised following the checking exercise.

The department normally receives three sets of revised data during November and December, which take account of changes made during the checking exercise, and any late results.

<table>
<thead>
<tr>
<th>January</th>
</tr>
</thead>
<tbody>
<tr>
<td>The department publishes the revised A level and other 16-18 results SFR and the 16-18 performance tables, based on the revised version of the data. The performance tables will include level 3 attainment results, the English and maths progress measures and Level 3 Value Added results. For the first time, the headline measures will include a disadvantaged and non-disadvantaged breakdown.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>January to February</th>
</tr>
</thead>
<tbody>
<tr>
<td>The errata period commences for schools and colleges. This provides a further opportunity to request limited additional amendments to the data.</td>
</tr>
</tbody>
</table>

The autumn school census learning aims data becomes available. This is matched alongside learning aims data from an autumn ILR snapshot, in order to calculate retention and completion and attainment measures.

<table>
<thead>
<tr>
<th>March to April</th>
</tr>
</thead>
<tbody>
<tr>
<td>The revised A level and other 16-18 results SFR and performance tables are updated with retention (including the new supporting retention measures) and completion and attainment measures.</td>
</tr>
</tbody>
</table>

The department receives final (post errata) data from the contractor and updates the performance tables with this data.

**Punctuality**

Punctuality refers to the time lag between the actual and planned dates of publication.

The proposed month of publication is announced on [gov.uk](http://gov.uk) at least twelve months in advance and precise dates are announced in the same place at least four weeks prior to publication. In the unlikely event of a change to the pre-announced release schedule, the change and the reasons for it will be announced.
Accuracy and reliability

Accuracy describes the closeness between an estimated result and the (unknown) true value.

Data coverage

The source data covers the eligible population for the SFR and 16-18 performance tables, as the department collects annual data on all results achieved by students. The eligible population for the qualification data collection is all 16 to 18 year old students who, by the end of the 2016/17 academic year have completed 16-18 studies (akin to a traditional school sixth form) in schools and colleges in England. Students who are not at the end of advanced level studies, or are doing re-sits, are excluded from the calculations. However, as these students cannot be identified centrally, the department applies a set of rules to identify students at the end of 16-18 study, namely they must have either:

a) taken approved qualifications at least the size of 2 A levels, or
b) been at a single institution for 2 years consecutively or
c) have reached academic age 18 and have not previously been included in performance tables results

During the September checking exercise schools and colleges may apply for students to be removed from their figures for a number of reasons, for example, the student is not at the end of 16-18 study, if the student is an external candidate and not on roll, or if the student is deceased.

Schools and colleges cannot remove students in certain circumstances, for example if the student is recorded as on roll at the school or college, or if they have already reached academic age 18.

Measurement error

Measurement error is the difference between the actual value of a quantity and the value obtained by a measurement.

Examination results

The following steps are taken to minimise measurement error in examination results.

Clear guidance is provided to schools and colleges regarding the administration of examinations, including instructions for keeping the exam materials secure prior to the exams and storage of completed scripts until they are collected for marking.

Once schools and colleges have completed 16-18 exams such as AS and A levels, they are required to send their exam materials and attendance registers to the awarding organisations for external marking and data capture.

The exam papers are externally marked by the awarding organisations to ensure that marking is consistent between institutions. Exam boards follow 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.
After marking, results are returned to schools and colleges. Data is then passed from the awarding organisations to the department’s contractor for use in the SFRs and 16-18 performance tables. If schools and colleges have concerns over the marking of an exam paper, they may request for it to be re-marked. Outcomes of reviews are not reflected in the provisional SFR data but are included in the revised data and performance tables.

Further information on the general regulations for schools and colleges and how exams are conducted and marked can be found on the JCQ website: Joint Council for Qualifications (JCQ) website.

Qualifications

Ofqual sets the standards and rules that awarding organisations need to meet when they design, deliver and award regulated qualifications. They monitor awarding organisations and qualifications to maintain standards. They are a risk-based regulator and concentrate their resources on where they are most needed. For example, they may discover that an awarding organisation’s processes need updating or that there are risks associated with connected to a qualification taken by thousands of students every year. Further guidance on the role of Ofqual can be found at How Ofqual regulate.

School census

The school census is a statutory data collection, which means that schools are obliged to provide the department with data on their pupils. School census returns are quality assured by the department to ensure that they contain data that is as accurate and complete as possible. The department acts to ensure the quality of this data in the following ways:

- Detailed technical guidance is provided to schools to support them in submitting full and accurate data to the department
- Management Information System suppliers build validation into the systems that they provide to schools. The department provides guidance on the types of validation it expects for school census purposes
- The department’s COLLECT web-based data collection tool automatically validates the data that schools and local authorities supply, providing error and query reports so that these can be investigated/fixed

More information on the school census can be found on gov.uk.

Individualised learner record (ILR)

The ILR is managed by the Education and Skills Funding Agency (ESFA), who undertake various activities to ensure the data returned by colleges is accurate and high quality:

- Detailed technical guidance and specifications are published by the ESFA to support colleges in providing the data that they must return
- Data submitted through the web-based data collection system is validated to check for errors or issues. Detailed validation guidance is available to colleges.

- As part of assurance work, the data reported through the ILR is monitored by the ESFA to ensure it is high quality and meets their published funding rules. A sample of colleges are also selected for external funding audit, part of which checks that ILR returns accurately reflect the learners on roll and the learning they receive.

More information on the ILR can be found on [gov.uk](http://gov.uk).

**Validation and quality assurance of source data**

**School and college checking exercise**

As a further check of the accuracy of the underlying data, the department collates the data into institution level information and shares this with schools and colleges, together with the underlying student level data, during the performance tables checking exercise in September/October. Schools and colleges are requested to check the data and notify the department of any students that are included in their school or college in error, or of any missing students. They can also notify us of any other potential errors in the data. Any changes requested are validated to ensure that they comply with the rules before being accepted. As a guide, in previous years approximately 75% of schools and colleges checked their data during this process.

Following the checking exercise, the revised data is supplied to the department through our contractors. This data takes account of accepted changes requested during the checking exercise, including successful marking reviews, late results and changes to number of students on roll. The data is then published in the revised SFR and in the 16-18 performance tables in January.

Following publication of the performance tables, some schools and colleges notify us of further changes required to the data. These should typically be changes that could not have been made earlier, such as notification of outcomes of appeals or re-marks from awarding organisations that arrived too late for the checking exercise. These changes are validated in the same way as those which are received during the checking exercise, and final data for the attainment, English and maths, retention, and completion and attainment measures is produced in April in the final performance tables, but is not updated in the SFR. However, the final data will be used to update any time series in the data tables in the following year’s statistical first release. The extent of change in the data is typically very small.

**Departmental quality assurance**

The department applies a set of internal quality protocols to ensure the published data is accurate. First, the data production process is subject to a ‘dry run’ during the summer. This involves producing a dummy dataset, which conforms to how the current year’s data will be supplied (e.g. if new subjects have been introduced, then dummy data would be added to last year’s data to simulate these). This dummy dataset is used to test the contractor’s systems and the department’s checking processes. This allows potential problems to be resolved prior to the receipt of the live data.
In addition, due to the scale of change to the 2016/17 performance tables, the new elements of the process were piloted with the contractor last year using 2015/16 data. This successfully tested that the data quality was sufficient for new measures in performance tables, as well as giving schools and colleges an opportunity to see how their data would look under the new measures. The use of both a pilot and dry run means that the 2016/17 process has been through two full rounds of testing to ensure that the department is confident in the quality of the outputs.

In addition, at every stage in the ‘live’ data cycle, the department checks all calculations used in the production of the figures by independently dual-running the methodologies at institution, local authority and national level. Further quality assurance is then carried out on the data produced for the SFR (see examples below). Any discrepancies in the data are discussed and resolved prior to publication.

**Examples of additional checks**

- Comparisons with previous figures to identify any large changes
- Comparisons with provisional data to identify any large changes (revised/final data only)
- Check totals are consistent across tables
- Check patterns in the data are as expected
- Check figures against those produced by our contractor for the performance tables
- Check the data format against specifications

**Disclosure Control**

The Code of Practice for Official Statistics requires us to take reasonable steps to ensure that our published or disseminated statistics protect confidentiality.

In the statistical first releases, an ‘x’ indicates that a figure has been suppressed due to small numbers. Values of 1 or 2 or a percentage based on 1 or 2 pupils who achieved, or did not achieve, a particular level are suppressed. Some additional figures may be suppressed to prevent the possibility of a suppressed figure being revealed. This suppression is consistent with the [departmental statistical policy on confidentiality](#).

In the school/college level data, any figures relating to a cohort of 5 pupils or fewer are suppressed.

**Reliability**

Reliability is the extent to which an estimate changes over different versions of the same data.

**Change between releases**

The figures published in the SFR may change between provisional and revised releases; however there tends to be a slight change in the headline national performance measures rather than any significant fluctuation in the statistics. This is due to the combined effect of removals of students that should not be included and due to re-marking and submission of late results by awarding organisations.

To highlight the level of changes that may be expected, data from the equivalent 2016 provisional and revised publications is given below. The size and impact of the updates made to 2016 A level
and other 16-18 results was low and, across all level 3 students, broadly comparable with previous years. Further details are below:

- The number of students dropped between the provisional and revised SFR. In 2016 the number of level 3 students decreased by 3.0% between the provisional and revised figures, the same as the change seen in the 2015 publications. However, there are some underlying changes to the pattern for different types of student. For example, following the methodology change in 2016, the drop in the number of A level students is higher than the fall seen in the 2015 data. In contrast, the number of A level, applied general and tech level students decreased by 3.0%, 4.3% and 1.0% respectively, compared to the decrease of 1.4% for A level students and 4.3% for vocational students in 2015.

- Performance measures improved for A level students but dropped slightly for applied general and tech level students between the provisional and revised SFR in 2016. The average point score per entry for A level students increased by 0.27 points from 31.52 (C grade) to 31.79 (C+ grade) between provisional and revised data, while the average point score per entry for applied general and tech level students dropped slightly from 34.70 to 34.69 and from 30.83 to 30.77 respectively. This is different to the pattern in previous years where average point score per entry for vocational students increased slightly between the provisional and revised releases.

**Comparability of SFR and performance tables**

The SFR and performance tables use the same data sources, and where they both reference the same performance measures, will use the same methodology for calculation. In addition, the SFR includes further A level and other examination results based on a single year of academic study. The SFR also includes further tables on English and maths progress for those students who did not achieve A*-C by the end of key stage 4 – these use the same methodology as the performance tables measure.
Accessibility and Clarity

Accessibility is the ease with which users are able to access the data. It also relates to the format(s) in which the data are available and the availability of supporting information.

Clarity is the extent to which easily comprehensible metadata are available, where these metadata are necessary to give a full understanding of the statistical data.

The SFR text is published in pdf format so that it is accessible to all users irrespective of their choice of software. Care is taken to ensure that the document meets accessibility guidelines. Key figures are highlighted in the SFR text, which draws out the key messages such as changes over time and differences between groups of pupils. Small tables or charts illustrating key figures are included in the text.

Each SFR is accompanied by formatted excel tables with clear titles which allow general users to find more detail than can be provided in the SFR text. Any important limitations or inconsistencies in the data are mentioned in footnotes so that users do not have to refer to the text or this document. Where there are large numbers of tables, these are split into manageable sections (for example, national tables in one file, LA tables in a separate file) so that users do not need to download larger files than necessary for their needs.

The performance tables website has been reviewed and improved, incorporating user feedback to make it easier to navigate. There are a number of ways of searching for schools or colleges of interest (for example, by name of school/college, by town, within x miles of a postcode or all schools and colleges within an LA area) and data is presented as simply as possible so that a range of users can find what they need.

Users can download the data for all schools and colleges in either excel or csv format. Comprehensive metadata is provided for these files.

Any user wishing to conduct more detailed research or analysis may request an anonymised pupil/student level extract of the National Pupil Database.
Coherence and comparability

Coherence is the degree to which the statistical processes, by which two or more outputs are generated, use the same concepts and harmonised methods. Comparability is the degree to which data can be compared over time, region or other domain.

We use the same methodology to produce the data within our SFRs and the performance tables. We also use a dataset produced at the same time for the performance tables and the revised SFR. As a result, the national and LA figures included in both the revised SFR and the performance tables will match.

The Department for Education and other organisations publish similar statistics. There are key differences to note, as summarised below.

Joint Council for Qualifications (JCQ)

The figures in the SFR and 16-18 performance tables differ from those published by JCQ in August 2017. JCQ figures relate to the outcome of all students in England, Wales and Northern Ireland in the latest academic year, regardless of their age. The examination results published in this SFR are for the 2016/17 academic year and include the performance of students aged 16, 17 or 18 taking these examinations in England only. We also publish SFR statistics that relate to students aged 16, 17 or 18 who are at the end of 16-18 study in 2016/17, which will include results taken by these students in previous academic years.

Wider UK education data

Wales

The Welsh Government publishes the results of external examinations taken by students aged 15 or 17, available at Welsh government statistics and research

They also publish information about individual schools at My Local School

Northern Ireland

The Department for Education Northern Ireland (DENI) publishes AS and A level headline statistics at Department for Education Northern Ireland (DENI)

Scotland

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

Changes over time

In 2016, there were a number of changes to 16-18 attainment measures due to educational policy reforms. As such, there are difficulties with making comparisons to data published in 2015 or earlier in the headline performance measures. The impact of the 2016 reforms was assessed in the 2016 A level and other 16-18 results provisional release.

Where measures are being published for the first time, for example level 2 vocational measures, we are not making comparisons over time.
Other statistics from the Department for Education

The statistics shown below are produced by the Department for Education but provide different information to that published in the 16-18 SFR and performance tables.

<table>
<thead>
<tr>
<th><strong>Destination measures</strong></th>
<th>Figures for young people who went into education, employment or training destinations the year after they completed key stage 4 or key stage 5. The department publishes statistics including information from a data source, which gives more complete coverage of participation in employment than the earlier ‘experimental’ destinations data.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 2 and 3 attainment at 16-18</strong></td>
<td>Statistics on the attainment of young people aged 19, based on matched administrative data.</td>
</tr>
<tr>
<td><strong>Participating in education, training and employment by 16 18 year olds in England</strong></td>
<td>Estimates of participation in education, training and employment and those who are not in education, employment or training (NEET) for 16, 17 and 18 year olds in England.</td>
</tr>
<tr>
<td><strong>Key stage 4</strong></td>
<td>GCSE and equivalent results for key stage 4.</td>
</tr>
<tr>
<td><strong>Key stage 2</strong></td>
<td>National curriculum assessments and review outcomes at key stage 2 (KS2), including measures of progress between KS1 and KS2.</td>
</tr>
<tr>
<td><strong>Key stage 1</strong></td>
<td>National curriculum assessments at key stage 1 and phonics screening check results.</td>
</tr>
<tr>
<td>Category</td>
<td>Contact Details</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>If from the media</td>
<td>Press Office News Desk, Department for Education, Sanctuary Buildings, Great Smith Street, London SW1P 3BT. 020 7783 8300</td>
</tr>
<tr>
<td>If non-media</td>
<td>Tingting Shu, Education Data Division, Department for Education, 53-55 Butts Road, Earlsdon Park, Coventry CV1 3BH. 0114 2742117, <a href="mailto:attainment.statistics@education.gov.uk">attainment.statistics@education.gov.uk</a></td>
</tr>
</tbody>
</table>
Annex A: Further detail on institution characteristics

This section provides further detail on the school/college characteristics.

School Admission Basis

Changes to the definition this year

Schools can be grouped on the basis of whether they select their pupils by ability. State-funded school admission basis has historically been taken from ‘Get information about schools’ as per the following definitions:

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive schools</td>
<td>Takes all pupils, usually regardless of their ability, aptitude or whether they have been selected for a place at a selective school. Includes schools operating pupil banding admission arrangements.</td>
</tr>
<tr>
<td>Modern schools</td>
<td>Takes pupils regardless of their ability or aptitude, including those who have not been selected for a place at a local selective school.</td>
</tr>
<tr>
<td>Selective schools</td>
<td>Admits pupils wholly or mainly with reference to ability. These schools are formally designated as grammar schools.</td>
</tr>
</tbody>
</table>

However, this information is self-declared by each school and may not necessarily be a true reflection of a school’s admissions policy. From 2017, we have therefore moved to an alternative classification, which is a more accurate reflection of the current admissions basis of a school.

This groups schools into **selective schools, non-selective schools in highly selective areas**, and **all other non-selective schools**. The selective group covers the same schools as in the previous grouping. Non-selective schools in highly selective areas cover all other schools in local authorities where 25% or more of state-funded secondary places are in state-funded selective schools. The all other non-selective schools group includes schools in local authorities with some selection, as well as those with no selection.

We first trialled using both the old and new methodology in the 2016 revised SFR, and asked for feedback on the change. We have made this change of definition as a result of this feedback.

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3 These local authorities are Bexley, Buckinghamshire, Kent, Lincolnshire, Medway, Poole, Slough, Southend-on-Sea, Sutton, Torbay, Trafford and Wirral.
## Institution Type

The institution types are taken from Get Information about Schools (GIAS) and are given at 12th September at the start of the academic year. They are defined as follows:

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academy Sponsor Led</td>
<td>Sponsored academies are all-ability, state-funded schools established and managed by sponsors from a wide range of backgrounds, including high performing schools and colleges, universities, individual philanthropists, businesses, the voluntary sector, and the faith communities.</td>
</tr>
<tr>
<td>Academy Converter</td>
<td>Schools that have chosen through Governing Body Resolution and application to the Secretary of State to become an academy under the Academies Act 2010.</td>
</tr>
<tr>
<td>Free School</td>
<td>Free schools are funded by the government but are not run by the local council. They have more control over how they do things. They are ‘all-ability’ schools, so cannot use academic selection processes like a grammar school. Free schools can, set their own pay and conditions for staff, change the length of school terms and the school day and they do not have to follow the national curriculum.</td>
</tr>
<tr>
<td>Further Education (FE) colleges</td>
<td>An FE College is an educational institution, eligible for the receipt of public funding through the Skills Funding Agency, which deals with the delivery of a full range of full and part-time vocational and academic provision, principally to those students above key stage 4.</td>
</tr>
<tr>
<td>Studio School</td>
<td>Studio schools are all-ability and mixed sex state funded schools, independent of local authorities. They are an innovative new model of educational provision, delivering mainstream qualifications through practical project-based learning. They are not extensions or conversions from existing provision, but are new 14-19 academies, typically with around 300 pupils.</td>
</tr>
<tr>
<td>University Technical College (UTC)</td>
<td>UTCs are all-ability and mixed sex state funded schools, independent of local authorities. UTCs specialise in subjects that need modern, technical, industry-standard equipment, such as engineering and construction, and teach these disciplines alongside business skills and a broad, general education. Pupils integrate academic study with practical learning, studying core GCSEs alongside technical qualifications.</td>
</tr>
<tr>
<td><strong>City Technology College (CTC)</strong></td>
<td>CTC's are independent all-ability, non-fee-paying schools offering students and pupils the opportunity to study a curriculum geared, with the help of private sector sponsors, towards the world of work.</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>LA maintained school</strong></td>
<td>Schools fully or partially under LA control that are state-funded, mainly by the Dedicated Schools Grant. These include community schools, foundation schools, voluntary aided school and voluntary controlled schools and also LA maintained special schools.</td>
</tr>
<tr>
<td><strong>Registered independent school</strong></td>
<td>Any school which provides full time education for 5 or more students which is not state-funded or a non-state-funded special school.</td>
</tr>
<tr>
<td><strong>Independent special school</strong></td>
<td>Approved by the Secretary of State for Education. They are run on a not-for-profit basis by charitable trusts and normally cater for children with severe and/or low incidence special educational needs.</td>
</tr>
<tr>
<td><strong>State-funded school</strong></td>
<td>Includes LA maintained schools, academies, free schools, city technology colleges and state-funded special schools (excluding hospital schools, pupil referral units, alternative provision and independent schools).</td>
</tr>
<tr>
<td><strong>State-funded mainstream schools</strong></td>
<td>Includes LA maintained mainstream schools, academies, free schools, city technology colleges (excluding all special schools, pupil referral units, alternative provision and independent schools).</td>
</tr>
<tr>
<td><strong>State-funded special schools</strong></td>
<td>Includes LA maintained special schools, academy sponsor led special schools, academy special schools and special free schools.</td>
</tr>
<tr>
<td><strong>All independent</strong></td>
<td>Includes independent schools and independent special schools.</td>
</tr>
</tbody>
</table>
| **Non-maintained special schools (NMSS)** | NMSS are schools for children with special educational needs that the Secretary of State for Education has approved under section 342 of the Education Act 1996. They:  
- teach students with special educational needs  
- are independent of local authority control  
- operate on a not-for-profit basis |
| **Pupil referral unit (PRU)** | A PRU is established and maintained by a local authority which is specially organised to provide education for children who are excluded, sick or otherwise unable to attend mainstream school and is not a special or other type of school |
| **Alternative provision (AP)** | Education arranged by local authorities for pupils who, because of exclusion, illness or other reasons, would not otherwise receive suitable education; education arranged by schools for pupils on a fixed period exclusion; and pupils being directed by schools to off-site provision to improve their behaviour. |
Annex B: Derived variables

A number of derived variables are produced in response to changes in education policy and statistical methodology. The following derived variables are added to calculate student level results in the 2017 16-18 SFR and performance tables.

Examination point score and size

Points are allocated to each of a student’s 16-18 exam results using a scoring system. You can find the full point scores and guidance on how they are calculated in the 16-19 technical guide.

The point scores for level 3 qualification are assigned for each qualification by calculating GCE A level size equivalence using the Guided Learning Hours (GLH) from the Ofqual register and the base points for each grade from the level and grade structure.

This enables the calculation of average level 3 point scores for 16 to 18 year old students at the end of advanced level studies.

New performance points have been developed for the vocational qualifications at level 2, reported for the first time in 2017 16-18 performance tables. The performance points at level 2 have been designed to have the following properties:

- as per level 3 performance points, larger qualifications attract more points (size is measured relative to 1 GCSE equivalent);
- differences in reported headline attainment measures (average point score per entry, average grade) make intuitive sense; for most qualifications an improvement of one grade throughout an institution would translate into an improvement of one unit (APS per entry) or one grade (average grade)

Point scores – English and maths progress measures

The English and maths progress measures use a distinct point score system, ranging from 0-8 points for those qualifications in scope. It is used to assign points to both a student’s prior attainment at key stage 4 and their attainment by the end of 16-18 study, for the purpose of calculating the progress they have made.

In 2017, English and maths results will include reformed GCSEs graded on a 1-9 scale for the first time. These points have been mapped to the 0-8 scale to ensure that students are treated fairly whether they have results in either legacy of reformed GCSEs. Points used for these measures will be reviewed again ahead of the 2018 performance tables.

You can find the full English and maths point scores in the 16-19 technical guide.

Eligible students

Students are eligible to be reported in this SFR and the 2017 16-18 performance tables if they were aged 16, 17 or 18 on 31 August 2016 and had completed 16-18 study. A student is considered to have completed 16-18 study in 2017 if they meet one of the following criteria:
In addition, as part of the performance tables checking exercise, institutions are able to request that their students’ results be deferred from the performance tables if they have not reached the end of 16-18 study. A student cannot be deferred at academic age 18 as they will be outside the scope of performance tables the following year. If a student has reached academic age 18, they are automatically reported in performance tables.

Qualifications reported

**Level 3 Academic:** Results reported only cover qualifications accredited by Ofqual and approved under Section 96 of the Learning and Skills Act (2000). Other qualifications or learning provisions such as Graded Exams or work-based learning are not included.

**Technical and applied:** From 2016 onwards, the vocational qualifications that can count are restricted to those that are on the approved list of applied general or tech level qualifications. The 2017 list is available on [gov.uk](http://gov.uk). This change is the result of policy reforms to encourage schools and colleges to offer qualifications that help prepare students for further study or employment. The background to the reforms can be found in the [Wolf review of vocational education](http://wolf-review.gov.uk). As a result, the ‘vocational’ cohort measures published in the SFR and performance tables have been broken down into the ‘applied general’ and ‘tech level’ cohorts, reflecting the approved qualifications included in these categories.

**Below level 3 English and maths:** The 16-18 SFR and performance tables have reported attainment in below level 3 qualifications in the English and maths progress measures since 2016. Qualifications included are only those English and maths qualifications that are approved for either prior attainment or progress purposes, according to the condition of funding rules.

You can find the full list of qualifications included in the condition of funding on [gov.uk](http://gov.uk)

**Level 2 vocational qualifications:** These include all level 2 vocational qualifications of size equivalent to at least two GCSEs (minimum 145 guided learning hours). From 2019, only technical certificates will be recognised in the 16-18 performance tables. The level 2 vocational qualifications are reported in 2017 and will be reported in the 2018 performance tables in order to give time for institutions to transition towards these qualifications.

**Technical certificates:** Technical certificates are a subset of the level 2 vocational category. The lists of qualifications that count in 2017 and 2018 performance tables can be found here: [performance tables: technical and vocational qualifications](http://performance-tables.gov.uk).

The SFR and performance tables include statistics for different cohorts of pupils, depending on the type of study programme they took. Since 2016, students need to have entered a qualification at least the size of 0.5 of an A level or equivalent to be included in a cohort.
• A level students: students entered for an AS or A level, applied single award AS or A level or applied double award AS or A level during 16-18 study
• Academic students: students entered for an advanced level academic qualification at least the size of 0.5 of an A level during 16-18 study. The academic cohort includes A level cohort students
• Applied general students: students entered for an approved applied general qualification at least the size of 0.5 of an A level during 16-18 study
• Tech level students: students entered for an approved tech level qualification at least the size of 0.5 of an A level during 16-18 study
• Level 2 vocational students: students entered for an level 2 vocational qualifications of size equivalent to at least two GCSEs during 16-18 study
• Technical certificate students: students entered for an approved technical certificate qualification during 16-18 study

More details of qualifications recognised in the 2017 performance tables data for each cohort can be found in the [16-19 technical guidance](#).

**Institutions reported**

The performance of schools and colleges is in scope for reporting purposes but other education and training provider types, such as independent training provides, are not(see annex A for further information).

In the 16-18 performance tables, special schools are not automatically reported but they may opt to have their results published. However, for aggregated results at national level in both the performance tables and SFR, special schools are included.

**Discounting flags**

Discounting is used to ensure that, when a student takes two or more qualifications in the same subject area and where there is significant content overlap, the performance measures only give credit once for teaching a single course of study. For example, where a student has gained an AS level but then went onto complete an A level in the same subject, only the A level result will count (i.e. the AS is ‘discounted’ as it is in the same subject as the A level, and the smaller qualification). However, if a student fails to obtain a pass grade at A level, the AS pass grade would be reported in the SFR. For further information on discounting rules, please see the [16-19 technical guidance](#).

The discounting principles for level 3 qualifications remain the same for 2017 as they were in 2016. New discounting rules have been developed for level 2 vocational qualifications. In summary:

a) Where a student entered a qualification in the same subject at level 3, the level 2 qualification is discounted
b) Where a student has entered qualifications in the same subject in different sizes, the larger qualification is counted and the smaller qualification is discounted
c) Where a student has more than one qualification of the same size, the qualification with the highest point score will be selected and other qualifications will be discounted
d) If there are still two or more qualifications that could be counted the one with the latest award date will be selected.

By applying discounting, the number of examination entries and results reported as A levels in this SFR are different from the figures reported by JCQ.

**Allocation of students to institutions**

Since 2016, students are allocated to institutions on an annual basis, for the reporting year (for this release, 2016/17) and the two years prior to this. This means they can be reported at up to three institutions if they moved during 16-18 study. Previously, a student was reported against a single institution only, regardless of whether they had moved during their 16-18 studies.

Results will continue to be published at the end of the 16-18 study phase; usually when the student is academic age 17\(^4\) (year 13). However, students can be reported up to academic age 18, which might mean that some results are published three years after the end of key stage 4.

The allocation methodology ensures that the results more accurately reflect where a student has studied and the patterns of movement between different schools and/or colleges.

**Handling of duplicate students in institution-type breakdowns**

The change to allocation rules in 2016 has an impact on the calculations for the national institution-type breakdowns reported in the SFR. In 2015 and earlier years, these statistics were calculated by aggregating school and college results by type of institution e.g. academy converter, studio school, FE college. However, taking the same approach this year would result in double counting because students may be included in more than one institution.

As such, we have amended the methodology to remove duplicate records for students within each school type. This means, for example, that:

- if a student is recorded at two FE colleges, they are counted only once within the aggregate FE college results
- if a student is recorded at both a sponsored academy and an FE college, they are counted once within the aggregate sponsored academy results and once within the aggregate FE college results. Only the exam results taken at the sponsored academy are included in the aggregate sponsored academy results and only the exam results taken at the FE college are included in the aggregate FE college results
- if a student is recorded at two sponsored academies and an FE college, they are counted once in the sponsored academy results and once in the FE college results. Only the exam results taken at the two sponsored academies are included in the aggregate sponsored academy results and only the exam results taken at the FE college are included in the aggregate FE college results

Students continue to be reported only once in national and local authority results.

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\(^4\) Aged 17 at the start of the academic year, i.e. 31\(^{st}\) August 2016 for the 2016/17 SFR and performance tables.
Performance measures

The following headline measures are published in the A level and other 16-18 results SFR:

- **Progress**: The progress of students is the main focus of the new accountability system. This measure is a value added progress measure for academic and Applied General qualifications, and a combined completion and attainment measure for Tech Level and level 2 vocational qualifications.
- **Attainment**: The attainment measure shows the average point score per entry, expressed as a grade and average points. Separate grades are shown for level 3 academic (including a separate grade for A level), Applied General, Tech Level and level 2 vocational qualifications, including a separate grade for Tech Certificate qualifications.
- **English and maths progress** (for those students who have not achieved A*-C in 2016 and earlier years, or 9-4 from 2017): This measure shows the average change in grade separately for English and maths, with students who do not enter an English or maths qualification as applicable, being given a score of -1. The methodology for the measure is closely aligned with the condition of funding rules, which means that students that do not achieve the standard by the end of key stage 4 are required to continue to study English and/or maths at post-16.
- **Retention**: As the participation age has increased to 18, it is increasingly important that all young people are given suitable education and training opportunities that they see through to completion. The retention measure therefore shows the proportion of students who are retained to the end of their main programme of study.

The following additional attainment measures are also published alongside the headline measures:

- **Best 3 A levels**
- **AAB including at least 2 facilitating subjects**
- **Tech Bacc**
- **Technical certificate**
- **Level 3 maths**
- **Returned and retained for a second year (to be published in March 2018)**
- **Retained and assessed (to be published in March 2018)**

More details on how the performance measures are calculated can be found in the [16-19 technical guidance](#).

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5 Note that these measures are not published in the provisional SFR. Level 3 value added results will be published in January 2018. The retention measure (and the new supporting retention measures), and completion and attainment measure (the progress measure for tech level students), will be published in March 2018 once the data is available.