



Department
for Education

A level and other 16-18 results

Quality and methodology information

October 2016

Contents

Introduction	3
About the statistics	4
Changes in 2016	4
Data sources	4
How the statistics are created	7
Relevance	8
Key users	9
Timeliness	10
Punctuality	11
Accuracy and reliability	12
Data coverage	12
Measurement error	12
Validation and quality assurance of source data	14
Disclosure Control	15
Reliability	16
Accessibility and Clarity	17
Coherence and Comparability	18
Joint Council for Qualifications (JCQ)	18
Wider UK education data	18
Changes over time	19
Other statistics from the Department for Education	21
Got a query? Like to give feedback?	22
Annex A: Further detail on institution characteristics	23
School Admission Basis	23
Institution Type	23
Annex B: Derived variables	26

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 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 level 3 results in England is published in statistical first releases (SFRs) available [online](#). The provisional SFR is published in October 2016, and the revised SFR will be published in January 2017.

School and college level information for 16-18 students at the end of level 3 study in England can be found on the 16-18 [performance tables](#) (note: this currently reflects 2015 results and will be updated with 2016 results in January 2017, with further 2016 data released in March 2017).

Changes in 2016

The statistics published in the 16-18 SFR and 16-18 performance tables are changing this year, as a result of changes to education policy, including:

- new performance measures
- changes to the vocational qualifications that can count
- new rules for reporting student results against schools and colleges
- a new system for assigning points to grades

As a result of these, it means that two additional new data sources will be used to produce 16-18 performance statistics this year: post-16 learning aims data from the autumn school census and the Individualised Learner Record. It also means that, for the first time, the SFR reports information on English and maths progress for students who did not achieve a good pass at key stage 4. This replaces the previous [level 1 and 2 English and maths](#) experimental release, which was published for the last time in May 2016.

More information on the reforms to 16-18 accountability policy can be found in the [16-19 accountability technical guide](#) and the [2016 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 the level 3 Value Added (VA) to measure the progress students have made between the end of key stage 4 and the end of advanced level 3 study. It is also used to calculate the new English and maths progress measures, for those students that did not achieve a good pass by the end of key stage 4. For information on key stage 4 methodology and results, please see the [GCSE results SFR](#).

Pupil characteristics

The A level and other 16-18 results SFR publishes statistics by gender. Information on pupil characteristics, such as gender, is collected through the department's school census and the Individualised Learner Record (ILR). The ILR is being used in the 16-18 performance tables and SFR for the first time this year.

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 Skills Funding Agency (SFA) to collect data about learners and the learning undertaken by them from learning providers in the Further Education (FE) and Skills sector. The Education Funding Agency (EFA) is responsible for funding the provision of 16 to 19 education and receives relevant ILR funding returns from the SFA.

For independent schools, information on individual pupils is taken from the awarding organisation data, as it is not collected via the school census.

Institution characteristics

Information on school or college type and phase of education is taken from Edubase. 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 [Edubase guidance](#).

The school and college types that are reported in the 2015/16 SFRs have been taken as at the start of the 2015 academic year. Any schools or colleges which converted to an academy on or before 12 September 2015 have been reported as an academy and those that have converted 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 on roll. In order to assign students we therefore use the spring school census for schools and, for the first time in 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 EFA'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 exams.

Student learning aims

In 2016, for the first time, the 16-18 performance tables will use information on student 16-18 learning aims from the school census and ILR to calculate two new performance measures: retention, and combined completion and attainment. Due to data availability, these measures will not be produced in time for the provisional SFR or revised SFR/performance tables and we plan to publish them in March 2017.

Condition of funding exemptions

The new SFR tables on English and maths attainment during 16-18 studies (for those pupils who did not achieve a good pass at 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 Education Funding Agency'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 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.

How the statistics are created

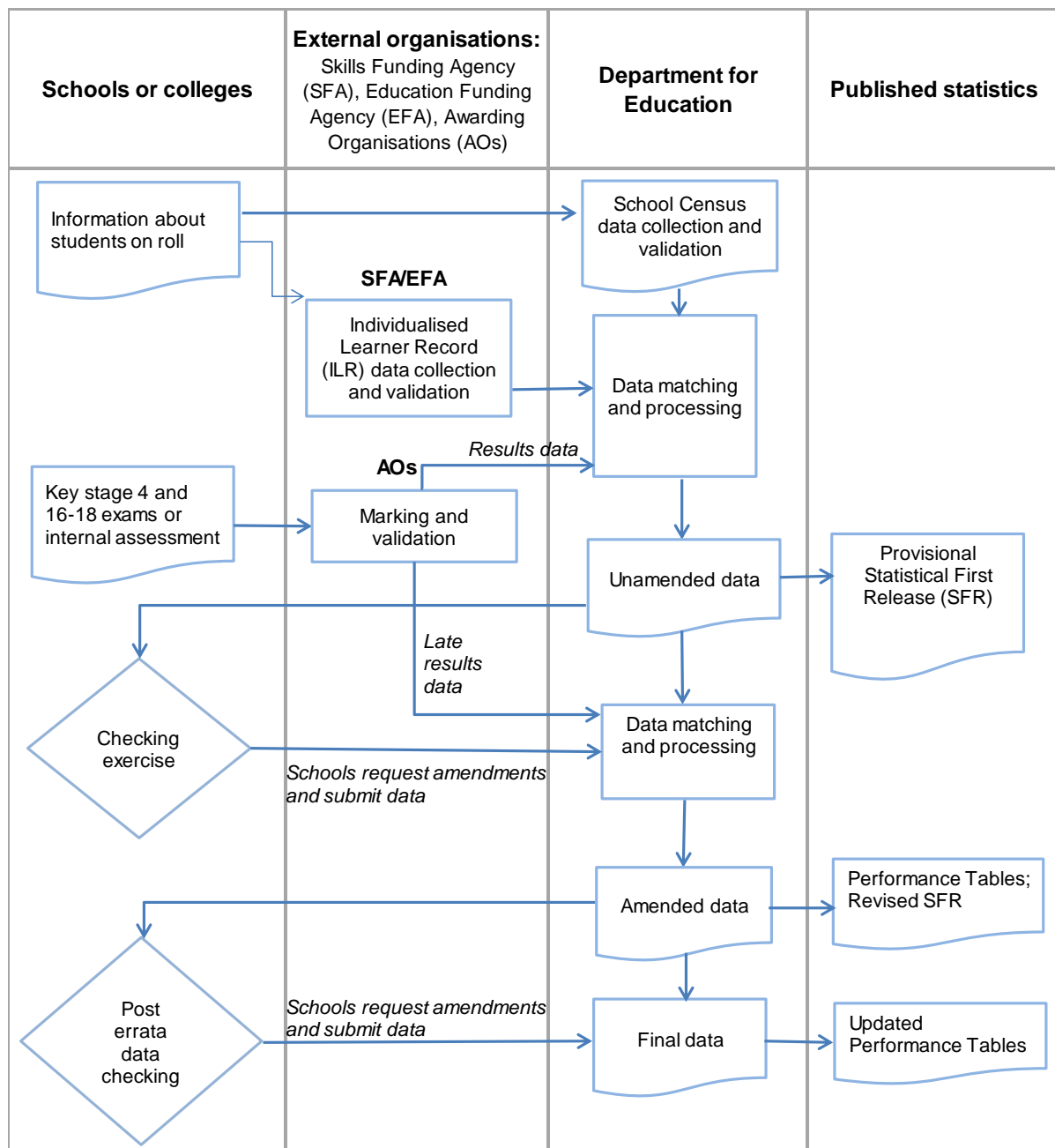
The entries and awards for qualifications at key stage 4 and 16-18 are submitted by awarding organisations to an external contractor, who processes the data and completes a set of quality checks on behalf of the department. This includes checks that the coverage is as expected and that the data does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

Once the latest entries and results data has been submitted to the contractor in August 2016, this is matched to students' characteristics and information on students' prior attainment to calculate performance measures for each pupil/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 updates to their data. This could include adding any missing results, supplying information on grade amendments following successful reviews of results, or deferring students that are not yet at the end of 16-18 study. The student attainment data is updated to take on board any approved 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 2017. Following publication of the performance tables, there is a short errata process where schools and colleges can inform us of any additional changes that should be made to the data. Following this process, the performance tables' data is finalised and the performance tables website updated in spring. The final data is used to update the time series in the following year's SFR.

For the first time in 2017, the performance tables will also be updated in March with additional new 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 Skills Funding Agency (SFA)/Education Funding Agency (EFA) 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:



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), supporting decisions on where to move house, 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 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) 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. The performance tables also include time series results for key measures, so that parents can compare results in previous years.

Timeliness

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

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 level 3 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 time table is shown as below.

May and June

Main A level and AS level examinations are taken.

July and August

The Joint Council for Qualifications (JCQ) collects results data from the awarding bodies. JCQ publish A level and AS level results in mid-August.

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

September

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.

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 colleges which do not complete the school census can check that students assigned to them are on roll.

October to December

The department publishes the provisional A level and other 16-18 results SFR in mid-October based on unamended data.

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.

January

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 new English and maths progress measures and Level 3 Value Added results.

January to February

Post errata period commences for schools and colleges. This provides a further opportunity to request additional amendments to the data.

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.

March

The performance tables are updated with retention and completion and attainment measures.

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](https://www.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 all 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 level 3 qualification data collection is all 16 to 18 year old students who, by the end of the 2015/16 academic year have completed advanced level 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 level 3 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 the student has 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 advanced level 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. There are no quotas set or underlying

assumptions about the proportion of students who should be at each grade. Proportions are decided entirely by how student attainment measures up to the exam standards.

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 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. There are a number of ways that the department acts to ensure the quality of this data:

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 Skills Funding Agency (SFA), 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 Skills Funding Agency (SFA) and the Education Funding Agency (EFA) 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 SFA and the EFA 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](https://www.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 60 per cent of schools and colleges check 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 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 changes are validated in the same way as those which are received during the checking exercise and final data is produced in March in the performance tables but is not updated in the SFR. However the final data will be used to update any time series in the following year's statistical first release.

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 2015/16 performance tables and the use of new data sources such as the ILR and the autumn school census, the entire process was piloted with the contractor last year using 2014/15 data. This successfully tested that the new data sources could be accurately matched together and that the data quality was sufficient for use in performance tables. The use of both a pilot and dry run means that the 2015/16 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 (see examples in the box to the right). 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 increase 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.

The size and impact of the updates made to 2015 A level and other level 3 results was low and broadly comparable with previous years. Further details are below:

- at national level, the average point score per entry for A level cohort increased by 0.7 points from 215.4 to 216.1 between provisional and revised data. In 2014, the average point score per entry for A level cohort increased from 214.8 to 215.5.
- the average point score per entry for vocational cohort increased by 0.2 points from 219.3 to 219.5 between provisional and revised data. In 2014, the average point score per entry for the vocational cohort increased from 216.3 to 216.6.
- at local authority level, the average point score per entry for A level cohort change ranged from -0.5 points to +5.1 points. Over half of them saw changes of 0.5 points or less. In 2014, the change ranged from -2.4 points to +8.7 points. Over half of them saw changes of 0.6 points or less.

We will provide further information on the scale and impact of 2016 updates in due course.

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. In 2016, for the first time, the SFR also include further tables on English and maths progress for those students who did not achieve a good pass at the end of key stage 4 - these use the same methodology as the new 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 don't need to download larger files than necessary for their needs.

Underlying data for all the tables and metadata describing that data is provided in csv format so that users can load this into an analysis package of their choice.

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.

Similar statistics are published by the Department for Education and other organisations. There are key differences to note, which have been 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 2016. 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 2015/16 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 2015/16, 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 in 2015/16, available at:

[Welsh government statistics and research](#)

They also publish information about individual schools here:

[My Local School](#)

Northern Ireland

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

[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 have been a number of changes to 16-18 attainment measures due to educational policy reforms. As such, there are difficulties with making comparisons between 2016 data and data published in previous years.

To help users understand the impact that the reforms have had on the statistics, and make comparisons over time, the provisional SFR supplies information using 2015 'shadow' data.

Shadow data

The 2015 'shadow' data was produced during the department's pilot of the 2016 reforms to performance tables. The data was created using actual 2015 student results data but applying the new data sources, such as the Individualised Learner Record, alongside the new methodology for performance tables measures. Individual results from the shadow data were shared with schools and colleges in May 2016, to help them prepare for the reforms, but were not published more widely.

The shadow 2015 data reported in this SFR differs slightly from the data that was shared with schools and colleges in May 2016. This is because students who were deferred by schools and colleges in 2015 checking exercise have been included in the SFR shadow data to allow us to compare with 2016 provisional data on a like-for-like basis. In addition, some areas of the methodology were refined on the basis of feedback from schools and colleges:

- Late key stage 4 results were excluded from the process of allocating students to institutions, where the student is not recorded as on roll in either the school census or the Individualised Learner Record. This is to ensure that key stage 4 results are not incorrectly included in 16-18 results.
- When using the Individualised Learner Record to allocate students to institutions, in the small proportion of cases where students had multiple core learning aims or were attending multiple providers, some clarifications were made to the rules to ensure we selected the most appropriate core aim
- When defining the students that should be included in the tech level and applied general measures, we have removed students for whom all of their results in these qualification types have been discounted. This to ensure that all tech level and applied students have results eligible for measures

These changes do not have a large impact across the data, and tend to apply to more isolated groups of students. The changes to the national results as a result of these refinements have been small e.g. it does not change the average point score grades.

Using shadow data to compare over time

The 2015 shadow data allows us to assess the impact of the reforms by making a comparison between 2015 statistics on the basis of both the new and old methodology. The SFR includes a section which sets out the main differences in the 2015 results, for those measures that will continue to be available in the reformed performance tables.

For new performance measures, where there is no official time series published in previous SFRs, we have added some context by looking at the difference between the 2015 shadow data and the 2016 results. However, it is not always possible to make a full like-for-like comparison between these two datasets, due to the impact of any school/college behavior change due to the reforms. For example, in 2015 the reforms to the vocational qualifications that count in performance tables were not yet in place. As such, it is likely that the 2015 data will not fully reflect the impacts of schools or colleges incentivising students to take new approved applied general or tech level qualifications.

Other statistics from the Department for Education

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

Destination measures	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 has recently published statistical working papers detailing improved coverage at key stage 5, following the incorporation of additional data sources.
Participating in education, training and employment by 16 18 year olds in England	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.
Key stage 4	GCSE and equivalent results for key stage 4.
Key stage 2	National curriculum assessments and review outcomes at key stage 2 (KS2), including measures of progress between KS1 and KS2.
Key stage 1	National curriculum assessments at key stage 1 and phonics screening check results.

Got a query? Like to give feedback?

If from the media Press Office News Desk, Department for Education, Sanctuary Buildings,
Great Smith Street, London SW1P 3BT.
020 7783 8300

If non-media Tingting Shu, Education Data Division, Department for Education, 53-55
Butts Road, Earlsdon Park, Coventry CV1 3BH.
0114 2742117, statistics.attainment@education.gov.uk

Annex A: Further detail on institution characteristics

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

School Admission Basis

The school admission basis is taken from Edubase. Schools and colleges are classified as per their status on 12th September. They are defined as follows:

Comprehensive schools	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.
Modern schools	Takes pupils regardless of their ability or aptitude, including those who have not been selected for a place at a local selective school.
Selective schools	Admits pupils wholly or mainly with reference to ability. These schools are formally designated as grammar schools.

Institution Type

The institution types are taken from [Edubase](#) and are given at 12th September at the start of the academic year. They are defined as follows:

Academy Sponsor Led	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.
Academy Converter	Schools that have chosen through Governing Body Resolution and application to the Secretary of State to become an academy under the Academies Act 2010.
Free School	Free schools are funded by the government but aren't 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.

Further Education (FE) colleges	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.
---------------------------------	--

Studio School	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.
---------------	---

University Technical College (UTC)	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.
------------------------------------	---

City Technology College (CTC)	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.
-------------------------------	---

LA maintained school	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.
----------------------	--

Registered independent school	Any school which provides full time education for 5 or more students which is not state-funded or a non-state-funded special school.
-------------------------------	--

Independent special school	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. This group includes non-maintained special schools.
State-funded school	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).
State-funded mainstream schools	Includes LA maintained mainstream schools, academies, free schools, city technology colleges (excluding all special schools, pupil referral units, alternative provision and independent schools).
State-funded special schools	Includes LA maintained special schools, academy sponsor led special schools, academy special schools and special free schools.
All independent	Includes independent schools, independent special schools and non-maintained special schools.
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 2016 16-18 SFR and performance tables.

Examination point score and size – level 3 qualifications

Points are allocated to each of a student's level 3 exam results using a scoring system. In 2016, this system has changed to reflect reforms to performance tables. You can find the full point scores and guidance on how they are calculated in the [16-19 technical guide](#). The point scores 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.

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.

You can find the full English and maths point scores in the [16-19 technical guide](#).

Eligible students

Students will be eligible to be reported in this SFR and the 2016 16 - 18 performance tables 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:

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

In addition, as part of the performance tables checking exercise, institutions are able to request that their students' results are 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 covers qualifications accredited by Ofqual and approved under Section 96 of the Learning and Skills Act (2000). Other qualifications or learning provision 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 2016 list is available on gov.uk. This change is as a 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](#). 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: From 2016, the 16-18 SFR and performance tables will report below level 3 attainment in the new English and maths progress measures. These include 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

Institutions reported

The performance of schools and colleges are in scope for reporting purposes but other education and training provider types are not, such as independent training providers (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 performance tables and the 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 part of the A level). 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 relevant [performance tables guidance](#) on gov.uk.

These discounting principles remain the same for 2016, however the reforms to report students at up to three providers, depending on whether they moved during 16-18

studies, means that discounting is applied slightly differently at the school/college level compared to local authority and national level. At school/college level, if a student takes an AS level at school A then moves to school B and takes an A level, both the AS and A level will be reported separately at each school. However, when aggregated to national level, discounting will apply and only the A level will be included in results. If both schools are in the same local authority, then similarly only the A level will be included in the local authority results. However, if the schools are in different local authorities, both the AS and A level will be reported separately in the results.

By applying discounting, the number of examination entries and results is underestimated for the reporting year in this SFR. In order to show the effect of AS discounting, this SFR shows two sets of AS tables, one with discounting applied and one which shows the discounted AS entries.

Allocation of students to institutions

In the 2016 performance tables students are allocated to institutions on an annual basis, for the reporting year (2015/16) 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 (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 new allocation methodology ensures that the results more accurately reflect where a student studied and the patterns of movement between different schools and/or colleges.

Handling of duplicate students in institution-type breakdowns

The change to allocation impacts on the calculations for the national institution-type breakdowns reported in the SFR. Previously, 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 due to the fact that 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.

A level, academic, and vocational students

The SFR and performance tables include statistics for different cohorts of pupils, depending on the type of study programme they took. In 2016, there are two main changes to these cohorts. Firstly, as set out previously in this document, the vocational cohort has been replaced by two new cohorts: applied general and tech level. Secondly, the criteria by which a student is included in each cohort has changed. In 2015, a student needed to have taken a qualification at least the size of 1 A level or equivalent in order to be included in a cohort. In 2016, this has been reduced to a qualification at least the size of 0.5 of an A level or equivalent. This means that the statistics will now include students who have only been entered for a single AS level or similar sized qualification, whereas previously they would have been excluded from the calculations.

- 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 in the 2015/16 academic year
- Academic students: students entered for an advanced level academic qualification at least the size of 0.5 of an A level in the 2015/16 academic year. 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 in the 2015/16 academic year.
- Tech level students: students entered for an approved tech level qualification at least the size of 0.5 of an A level in the 2015/16 academic year.

Performance measures

Additional attainment measures are also being published alongside the headline measures, these are described below.

Best 3 A levels measure

This measure only applies to a subset of the A level students: 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.

Where a student has only been included for one year, they need to have entered three A levels to be included. A best 3 A levels score is then calculated for each student by adding together the points in their best 3 A levels, then summed across a school or college, then divided by three to give a best 3 A levels points per entry, and this is also expressed as a grade.

For students who have only entered one or two A levels, the points in their one or two A levels are still divided by three.

AAB in 2 facilitating subjects measure

This measure applies to a similar subset to the best 3 A levels measure, eg students taking A level-only programmes, as set out in the best 3 A levels measure. In addition, it also excludes those students who have entered only applied A levels or applied AS levels. A student must have achieved three A levels, of which two are in facilitating subjects, at grades AAB. The measure is shown as the percentage of students achieving AAB or better, of which at least two are in facilitating subjects.

The facilitating subjects are: Biology, Chemistry, Physics, Mathematics, Further Mathematics, Geography, History, English Literature and Classical/Modern Languages.

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

- Average point score per entry
- Level 3 Value Added*
- English and maths progress
- Retention measures*
- Completion and attainment measure*

*Note that these measures are not published in the provisional SFR but will be made available in January - March 2017 once the data is available.



Department
for Education

© Crown copyright 2016

This publication (not including logos) is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

To view this licence:

visit www.nationalarchives.gov.uk/doc/open-government-licence/version/3

email psi@nationalarchives.gov.uk

write to Information Policy Team, The National Archives, Kew, London, TW9 4DU

About this publication:

enquiries www.education.gov.uk/contactus

download www.gov.uk/government/publications

Reference: [000-000-000]



Follow us on Twitter:
[@educationgovuk](https://twitter.com/educationgovuk)



Like us on Facebook:
facebook.com/educationgovuk