

# 16 to 18 accountability measures: technical guidance

October 2022

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## **Summary**

16 to 18 performance measures, as published on the <u>school and college performance</u> <u>measures website</u> are designed to provide a rounded picture of school and college performance to inform student choice, inform a school or college's own self-assessment and benchmarking, inform Ofsted inspection, and inform government's oversight of the 16 to 18 sector.

This guidance sets out what these measures are and how we calculate them. This year, as it is the first year since the 2018 to 2019 academic year that we are publishing results-based performance measures, the guidance also sets out changes to the measures, and how we can use and understand the measures, given the impacts of COVID-19. In particular, it sets out changes to which measures we can produce, and where we will need to change how we calculate measures given our commitment not to include results from qualifications achieved between January 2020 and August 2021. It also sets out current plans for changes to 16 to 18 performance measures in future years.

## **Expiry or review date**

This guidance will be reviewed by autumn 2023.

## Who is this publication for?

This guidance is for:

- School and college leaders, school and college staff and governing bodies in all
  maintained schools, academies and free schools with a sixth form, sixth form
  colleges and general further education colleges.
- Local authorities.
- Other users of 16 to 18 performance measures.

# Accountability arrangements for the 2021 to 2022 academic year

Most exams and assessments did not take place in the 2019 to 2020, or 2020 to 2021 academic years, due to COVID-19. We did not publish school or college level results data for these years, and we have been clear that this data will not be used to hold schools and colleges to account. We also made clear that we will not use qualification grades achieved between January 2020 and August 2021 in future performance measures.

As GCSE, AS and A level exams returned for 2021 to 2022, it is important we move back to publicly available data about exam results in a school or college, for transparency and as a starting point to support parents and students when choosing schools or post-16 institutions.

### How will 2021 to 2022 performance data be used?

We have always been clear that all users of educational school and college performance data need to consider this data alongside a range of other information about the school or college and its individual circumstances, for example by speaking to the school or college directly, and that conclusions should not be drawn based on a single piece of data alone. This will be particularly important in relation to the data for 2021 to 2022, as a school or college's performance may be affected by the uneven impact of the pandemic on students, and schools and colleges, and so data will need to be used more cautiously.

While school and college level data for 2021 to 2022 will provide information about how a school or college has performed, in relation to local and national averages, it will not provide the broader context around a school or college's outcomes. In short, as in any year, school and college level data will tell you 'what' but not 'why'. This is particularly important to bear in mind in relation to the 2021 to 2022 data, due to the uneven impact of the pandemic on students and schools and colleges, the changes in the approach to grading and methodological changes to the way we calculate 16 to 18 measures. That is why we will ensure that clear messages are placed alongside any data shared, to advise caution in its interpretation.

We will strongly discourage users of the data from drawing conclusions based on direct comparisons with performance data from earlier years. We will also advise caution when comparing a school or college's performance with national or local authority averages, advising users to talk to the school or college to understand the context for the results. We will also strongly advise against direct comparisons between the performance data for one school or college and another school or college, without taking this broader context into account.

We will ensure these messages are published alongside the data on the performance measures website and shared with officials across the department, including regional teams and the FE commissioner, as well as local authorities, schools, colleges, academy trusts and governors and trustees.

As set out in DfE guidance<sup>1</sup>, school, college and trust leaders should not make pay progression for teachers dependent on the assessment data for a single group of students. Performance management targets relating to student performance should not be used in isolation and other factors, in this case the uneven impact of the pandemic on students, and schools and colleges and the considerable caution needed when using the 2021 to 2022 performance data, should also be taken into account.

#### Ofsted

Ofsted inspectors will be clear that 2021 to 2022 data is not comparable with earlier years and aware of the caveats on the data due to the uneven impact of the pandemic on pupils and schools, and sensitive in their use of it. HMCI has committed that inspectors will use the 2021 to 2022 data cautiously and that it will be used only to inform discussion with schools and colleges about student outcomes. No judgements will be made on the basis of the 2021 to 2022 data alone<sup>2</sup>.

#### Department for Education (DfE) use of the data

DfE teams, including Regional Directors and the FE commissioner, will have access to 2021 to 2022 performance measures.

Any teams in DfE using the data for decision making will have regard to guidance on how the data can and cannot be used. This means that while the data will inform discussions with schools, colleges, trusts and LAs, it will not be used to compare directly between two or more providers. For example, it will not be used to choose one school, college or trust over another simply because one has higher or lower performance data. 2021 to 2022 data will also not be compared directly to 2018 to 2019 data or earlier. The current and historic data may, with caution, be compared to national or LA averages from the same year. Regional Directors have set out guidance on how how they will use 2021 to 2022 data in decision making.

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<sup>&</sup>lt;sup>1</sup> School teachers' pay and conditions: guidance - GOV.UK (www.gov.uk)

<sup>&</sup>lt;sup>2</sup> School inspection handbook - GOV.UK (www.gov.uk)

# Changes to the school and college performance measures website for the 2021 to 2022 academic year

To support the appropriate use of data we have made changes to the performance measures website. Changes include:

- removing the "all schools and colleges in England" and local authority comparison tables (we will continue to show local authority and national averages for each performance measure on the individual school or college pages; and data on all schools/colleges and local authorities will still be available to download from the website);
- changing the name of the website from 'Compare School and College
  Performance data' (also known as 'school performance tables') to reduce the
  emphasis on comparison between institutions. The new name will be 'Find School
  and College Performance data';
- stopping displaying pre-pandemic data (from the 2018 to 2019 academic year and earlier) on the school and college pages, and moving these data to the usual archive with a link on the website; and
- changing the way we present progress measures, by removing the coloured
  "bandings" to discourage simplistic conclusions being drawn about a school or
  college's overall performance. At 16 to 18, as we will not be publishing progress
  measures for the 2021 to 2022 academic year (see the <u>section on progress</u>
  measures in this guidance), this will only apply to the 'Progression to Higher
  Education and Training' destinations measure.

# Summary of performance measures for the 2021 to 2022 academic year

# Data excluded from 2021 to 2022 performance measures due to alternative assessment arrangements in 2020 and 2021

We have committed not to include results of qualifications achieved between January 2020 and August 2021 in future performance measures, given the alternative assessment arrangements used to award grades in this period.

When calculating 16 to 18 performance measures for 2021 to 2022, we will include results from qualifications awarded in the 2021 to 2022 academic year, with the exception of AS and A level qualifications taken as part of the extraordinary autumn 2021 examination series<sup>3</sup>. Qualifications routinely offered in autumn that count towards 16 to 18 performance measures, such as vocational and technical awards taken in autumn 2021, will be included. See also the section of this guidance that covers <u>qualifications</u> and <u>performance points</u> for further information on which qualifications count in performance measures.

For unit-based <u>vocational and technical qualifications that count in 16 to 18 performance measures</u>, we will include the outcome, as long as the overall grade was awarded in September 2021 or later. We will include overall grades even if some of the constituent unit-level grades were awarded between January 2020 and August 2021 via Centre Assessment Grade, Teacher Assessed Grade or another process.

# Changes to which measures we produce, and how we calculate measures

Between 2016 and 2019, we published five headline measures for 16 to 18: progress, attainment, English and maths progress, retention and destinations.

We will need to adjust the way that we calculate some performance measures at 16 to 18 for 2021 to 2022 to take account of the fact that results of qualifications achieved between January 2020 and August 2021 will not be included. In some cases this will mean calculating the measures differently, to leave out the 2020 and 2021 qualification

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achieved in summer 2021, and it will not be included.

<sup>&</sup>lt;sup>3</sup> This is because this exam series was provided solely due to the cancellation of summer 2021 exams (except for GCSE English language and GCSE maths exams which are always available in the autumn). Entry was also restricted to students who either received a teacher-assessed grade in summer 2021 or who, in the opinion of the exam board, would have entered summer 2021 exams had they not been cancelled. In this case, for the purpose of performance measures, we will count the result as if it was

grades, and in others that we will not produce the measures at all, where removal of the 2020 and 2021 qualification grade information would create too many problems to produce a robust measure. In particular, we will not be able to use key stage 4 (KS4) baseline data from 2020 or 2021, which will affect the 16 to 18 value-added measure and the English and maths progress measure in 2021 to 2022 and future years. This guidance provides information about the adjustments we will make to the way we calculate 16 to 18 performance measures, and which 16 to 18 measures we will be able to publish for 2021 to 2022.

These changes to methodology have been designed to minimise the impact of gaps in data for schools and colleges, as far as possible. We will ensure messages are placed alongside performance measures to highlight the changes in methodology and the potential impact this might have on a school or college's performance measures.

In summary, the measures that we will produce for the 2021 to 2022 academic year are:

- Attainment measures we will produce and publish the headline attainment
  measure, which shows the average point score (APS) that students achieved per
  entry, and is also expressed as an average grade. When calculating this measure,
  we will omit qualification entries and grades achieved between January 2020 and
  August 2021. See the section on the headline attainment measure for more detail
  and worked examples. We will also produce the following additional attainment
  and entry measures, using the same approach to omitting 2020 and 2021 data:
  - Best 3 A levels
  - AAB in at least two facilitating subjects
  - Level 3 vocational entry measures
  - Technical certificate entry measure

More information on how we will calculate these additional measures can be found in the section on additional measures.

- Retention measures we will produce and publish both the headline retention
  measure (percentage of students retained to the end of the core aim of their study
  programme) and additional retention measures (percentage of students retained
  and assessed, and percentage of students returned and retained for a second
  year of study). These measures do not need adaptations to the methodology as
  they are not based on results data. More information on how we calculate these
  measures can be found in the section on retention measures.
- Destination measures we will produce and publish the headline destination
  measure (percentage of students that progress to a sustained education, training
  or employment destination after 16 to 18 study) and additional destination
  measure (progression to higher education and training) as normal, as they are not
  based on results data. More information on how we calculate these measures can
  be found in the section on destination measures.

We will not publish the following headline measures for the 2021 to 2022 academic year:

- Progress (16 to 18 value-added) measure when published previously, these measures showed how well students did in their qualifications compared to other students with similar prior attainment nationally ie. how much progress they made. We will not produce these measures for the 2021 to 2022 cohort, as for most students we would have to use KS4 prior attainment data from summer 2020, which we have committed not to use in performance measures. More information on how we reached this decision can be found in the section on 16 to 18 value-added measures. This section also contains information on what this means for the 'completion and attainment' measures we previously published for the tech level and level 2 technical certificate cohorts. We will return to producing 16 to 18 value-added measures again as soon as possible, which will be for the 2023 to 2024 academic year at the earliest.
- English and maths progress measures when published previously, these measures showed, for students that did not achieve a grade 4 or above in English or maths GCSE at KS4, how much progress students made between their KS4 GCSE result and any re-takes they did in English or maths GCSE or equivalent at 16 to 18. We will not produce these progress measures, as for most students we would have to use KS4 prior attainment data from summer 2020, which we have committed not to use in performance measures. More information on how we reached this decision can be found in the section on English and maths measures. We are considering whether we can produce an alternative measure of the outcomes of students that take English and maths GCSE and equivalent qualifications at 16 to 18 for publication in 2022 to 2023 and 2023 to 2024, and will confirm further details in due course.

We will also <u>not</u> produce and publish the following additional measures for the 2021 to 2022 academic year:

- Level 3 maths measure when published previously, this measure showed the
  percentage of students who achieved grade 4 or above in GCSE maths (or
  equivalent) at KS4, who go on to achieve an approved level 3 maths qualification
  at 16 to 18. We will not produce this measure because of our commitment not to
  include qualification grades achieved between January 2020 and August 2021,
  including as prior attainment. We will return to producing this measure again as
  soon as possible. See the section on the additional advanced level maths
  measure for more information.
- **TechBacc measure** when published previously, this measure showed the number of students at a school or college who achieved at least a pass grade in all of a tech level, a level 3 maths qualification, and an extended project qualification. Due to changes in the technical qualifications landscape, including the introduction

of T Levels, and low take up, we are going to stop producing this measure permanently from 2022. See the section on the <u>Tech Bacc measure</u> for more information.

As in previous years, we will also publish the following information on the <u>performance</u> <u>measures website</u> for the 2021 to 2022 academic year:

- **Subject entries information** information on the number of exam entries at a school or college in different subjects, including only those qualifications that count in 16 to 18 performance measures. See the section on <u>subject entries information</u>.
- Apprenticeships qualification achievement rates (QARs) for 16 to 18 year old apprenticeships. See the section on apprenticeship reporting.

We will also publish measures for:

- **Disadvantaged students** headline measures broken down for disadvantaged students only. See the section on <u>disadvantaged measures</u>.
- Multi-academy trusts (MATs) school level measures aggregated up to MAT level, for eligible MATs. We will publish an attainment measure at MAT level this year, as will not produce progress measures. See the section on <a href="Multi-Academy Trust measures"><u>Multi-Academy Trust measures</u></a>.

# Schools and colleges included in 16 to 18 performance measures

Schools and colleges in England with 16 to 18 study provision are generally included in performance measures. However, we do not include performance measures for:

- training providers
- independent FE colleges, adult education colleges, special colleges
- international schools, hospital schools, Pupil Referral Units

For special schools, we only include those that have opted in – see below.

## Independent schools

We calculate and publish headline and additional attainment measures for independent schools, using information sourced from awarding bodies.

Retention measures are not calculated for independent schools because the department does not have access to the relevant data.

We do not produce school-level destination measures for independent schools due to more limited information on students causing low coverage. Independent schools are similarly excluded from the national and local authority comparator figures. They are however included at national and institution level in the destination measures statistical release.

Disadvantaged measures are not calculated for independent schools.

## **Special schools**

Students who need more specialised teaching and facilities may go to special schools. Special schools with sixth form students can currently choose to have their results included in the 16 to 18 performance measures. Even if they opt-in, some special schools will have no results published for their students because they do not take the qualifications reported in these tables.

## Students included in 16 to 18 performance measures

Students' results are reported in 16 to 18 performance measures only once, at the point at which they have completed 16 to 18 study (rather than reporting results as soon as they are achieved).

Students are considered at the end of 16 to 18 study, and are therefore 'triggered' for inclusion if;

 a) they have entered for at least 2 qualifications, each of which is at least the size of an A level or they have entered for at least 1 qualification the size of at least 2 A levels, in the reporting year;

**OR** 

b) they are 18 at the start of the reporting year and have not been reported in 16 to 18 performance measures at their current allocated school or college.

Prior to 2021, we also used a third inclusion rule where a student would be triggered for inclusion if they had been allocated to the same school or college for the last two years. We have removed this criteria to reduce the burden on schools and colleges where large numbers of students complete 16 to 18 study in their third year. Previously, schools and colleges would have had to spend a lot of time removing these students from the cohort during the data checking exercise. Students will still be triggered for reporting after two years if they meet either of the other criteria above.

This change will also ensure that when students' results are reported, this includes the extent of their 16 to 18 study (where that data is not results data from the January 2020 to August 2021 period, which we have committed not to use). This allows us to identify all students at the end of their 16 to 18 study, not just those following a level 3 programme of study.

Schools or colleges will still be able to defer students who meet criteria a) or b) but who are continuing their 16 to 18 study, as part of the checking exercise, as long as the student has not reached age 18 before the start of the reporting year.

We applied this change to the inclusion rules, to the data used in the 'A level and other 16 to 18 results' statistical publication, reporting on measures at a national level, which was published in November 2021. There was no checking exercise in this year, due to most performance measures being suspended. This means that any students that did not meet the two remaining criteria (a) and (b), above, were not counted in this data. Schools and colleges will see these students in their provider level data in 2021 to 2022.

Please note a student eligible for reporting in 16 to 18 performance measures will also need to meet criteria for each performance measure to be included in that measure. For example, to be included in the average point score per A level entry expressed as a grade, the student must have been entered for at least an AS qualification.

## Allocation of students to schools and colleges

Results are allocated on an annual basis to the school or college where the student has enrolled to take their main programme of study, as recorded in the school census or Individualised Learner Record (ILR). All results taken in that year will be allocated to the main school or college, irrespective of where they were taken.

There are three possible sources of information to consider, each year:

- schools that return the spring school census the spring school census returns student level information and is used to identify 16 to 18 students on-roll in state-funded schools;
- colleges that return the ILR the ILR returns student level information and is
  used to identify 16 to 18 students 'on-roll' in colleges (and other provider types
  returning the ILR); determined by where the student studied their main course of
  study. Outcomes related to additional courses recorded on the ILR, which may
  include those delivered by a different school or college, are also reported against
  the 'core' college since they are responsible for that student's overall study
  programme; and
- awarding organisation data<sup>4</sup> (for schools or colleges that do not return the spring school census or ILR) – for schools or colleges which do not return student level information to the department i.e. independent schools, we use awarding organisation data to allocate results to schools and colleges but on an annual basis.

On completion of 16 to 18 study, outcomes are reported against one, two or three schools or colleges, reflecting the study and achievements of the student in the year(s) they were allocated to that particular school or college.

The following section sets out the rules in practice using these data sources, including some worked examples.

## Allocation rules and worked examples

The table below shows how a student will be allocated to one or more schools or colleges based on the three data sources that we use to determine allocation.

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<sup>&</sup>lt;sup>4</sup> Awarding organisations (AOs) deliver regulated qualifications and award examination results to students in post-16 study. Each year, the department collects data from AOs, via an external contractor, on the students who have entered exams and their results

	Spring School Census	Individualised Learner Record (ILR SN10 for report year, SN14 for previous years)	Awarding Organisation Data
If students are reported once, select school or college based on:	Where the student is recorded as on-roll in the spring school census.	Where the student is recorded as studying a main course of study/core aim which is 16 to 19 funded and is level 3 or below.	Where the student is recorded as having sat their exams.
If students are returned multiple times in the same data source:	School selected prioritising enrolment status of 'current', then 'main', then 'subsidiary'. If the enrolment status is the same, the school with the highest volume of entries (from awarding organisation data) will be selected.	Where two or more courses are recorded in different colleges, the following hierarchy is used to select the college:  1. Aim started before 1 May  2. Latest start date Where there are concurrent courses of study:  3. Largest course of study  4. Earliest start date  5. Latest end date	School or college with the highest volume of exams (based on size) will be selected
		sus, Individualised Learne varding Organisation Data	r Record and/or
If students are returned in multiple data sources:	<ul> <li>If students are reported in both the spring school census and the ILR: The ILR record (a college) will be selected when the student has an enrolment status of subsidiary at the school or is retained in their main course of study and the college either had the highest volume of exam results, or started their main course of study after the date of the spring school census (but before 1st May). Otherwise, the spring school census (a school) will be selected.</li> <li>If students are reported in both the spring school census and the ILR: The ILR record (a college) will be selected when the student has an enrolment status of subsidiary at the school or is retained in their main course of study and the college either had the highest volume of exam results, or started their main course of study after the date of the spring school census (but before 1st May). Otherwise, the spring school census (a school) will be selected.</li> <li>If students are reported in both the spring school census and Awarding Organisation data: State-funded school with 'main' or 'current' enrolment status is chosen; but if 'subsidiary' or hospital school then independent school is selected based on AO data.</li> </ul>		

Table 1: Allocation of a student to a school or college

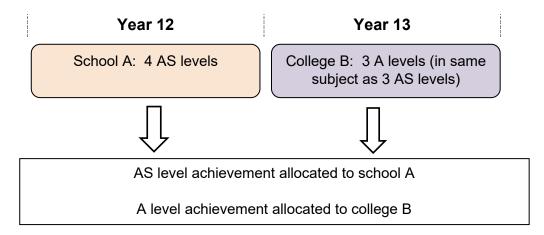
If the same college or school was selected in all years of post-16 study, then all the student's outcomes will be reported against this one school or college. However, if different schools or colleges were selected using the principles above, only the outcomes achieved in that year are reported against the school or college.

The following examples show some common scenarios and how results are reported against each school or college.

For the 2021 to 2022 performance measures cohort, these diagrams indicate only to which institution respective results would be allocated. Due to our commitment not to include qualification grades achieved between January 2020 and August 2021 in future performance measures, the grades may not actually be reported at all, if they were achieved in this period. For the 2021 to 2022 performance measures cohort it is likely that qualification grades achieved in year 12, or years 12 and 13 for students being reported at the end of year 14, were achieved between January 2020 and August 2021.

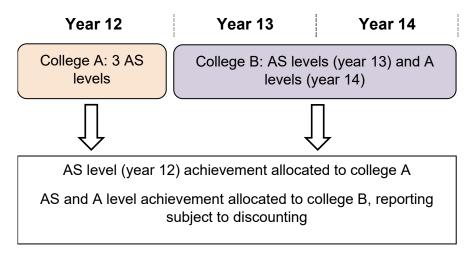
# Scenario 1: A student is taking an academic pathway but moves from a school to a college between AS and A levels

On completing 16 to 18 study in year 13, the student's outcomes are reported:



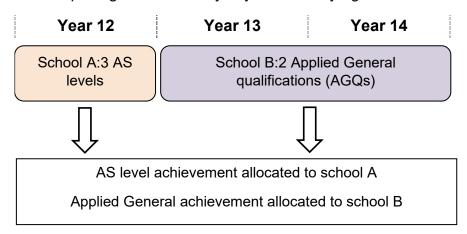
# Scenario 2: A student starts on an academic pathway but moves to another academic pathway and moves college

On completing 16 to 18 study in year 14 or by age 18 outcomes are reported:



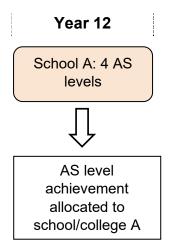
# Scenario 3: A student starts on an academic pathway but moves to a vocational pathway and moves schools

On completing 16 to 18 study in year 14 or by age 18 outcomes are reported:

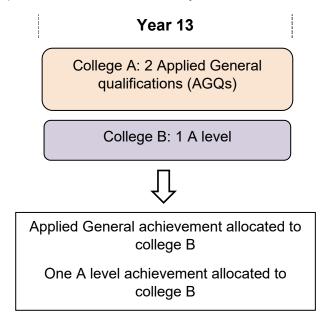


#### Scenario 4: A student starts on an academic pathway but leaves partway through

At reaching the age of 18 or requesting the student be included in performance measures early via the checking exercise outcomes are reported:



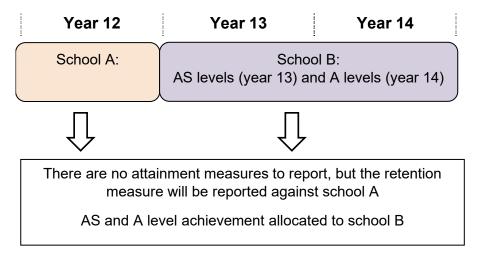
**Scenario 5: A student studies in 2 different colleges in the same academic year.** A college is selected using DfE allocation rules – see table 1 above. All their results are attributed to a single college, including any results studied elsewhere. This may mean qualifications not offered by the allocated college are reported against them.



To note: in this scenario the student will be included against college A and B for the retention measures based on the core aim at each college

# Scenario 6: A student attends a school in the first year but takes no exams and then takes an academic pathway at a different school.

On completing 16 to 18 study in year 14 or by age 18 outcomes are reported:



## **Qualifications and performance points**

#### **Qualifications included**

A list of qualifications recognised in performance measures is published on gov.uk: <a href="https://www.gov.uk/government/publications/16-to-19-qualifications-discount-codes-and-point-scores">https://www.gov.uk/government/publications/16-to-19-qualifications-discount-codes-and-point-scores</a>

The list of qualifications included in performance measures for a particular reporting year (i.e. 2021 to 2022) is usually first published around 2 to 3 years in advance, i.e. before the student has started studying the qualification.

#### **Cohorts**

Headline and additional attainment and retention measures are published separately by cohort<sup>5</sup>, so that you can see separately the outcomes for the different types of qualifications taken in a school or college.

The level 3 cohorts in 16 to 18 performance measures are:

- A level
- Academic (the A level cohort is a subset of this, so the academic cohort includes A level outcomes as well as the outcomes of other academic qualifications)
- Applied general
- Tech level

At level 2, there is only one cohort, for technical certificate outcomes.

All qualifications that count in 16 to 18 performance measures are one of these qualification types, and are listed as such in the link above.

#### A level

To be included in the A level performance cohort for a school or college, the student must have been entered for at least one of the following qualifications in the academic years they have been allocated to that school or college:

- GCE A level
- Applied GCE A level single award

<sup>&</sup>lt;sup>5</sup> Progress measures are also normally published by cohort, but we will not publish progress measures for the 2021 to 2022 academic year or the 2022 to 2023 academic year performance measures cohorts.

- Applied GCE A level double award
- GCE AS level
- Applied GCE AS level single award
- Applied GCE AS level double award

#### Academic

The A level category is a sub-set of the academic category. Therefore, the qualifications listed above will also be reported as academic qualifications.

To be included in the academic performance cohort for a school or college, the student must have entered for one of the following qualifications, which must be equivalent in size to at least 0.5 A levels with the exception of the extended project, which although smaller is still included.

- GCE A level
- Applied GCE A level single award
- Applied GCE A level double award
- GCE AS level
- Applied GCE AS level single award
- Applied GCE AS level double award
- International Baccalaureate Diploma (IB)
- IBO Standard level component
- IBO Higher level component
- IBO Diploma Theory of Knowledge, Extended Essay and Reflective Project\*
- Pre-U Principal Subject
- Pre-U Short Course Subject
- Pre-U Diploma
- Extended Project (Diploma)
- Advanced Extension Award
- Core Maths Qualifications at level 3
- Free standing Maths Qualification level 3 (FSMQ)\*

\*These qualifications are too small to cause inclusion in the academic performance cohort on their own; however, they are still counted if students have entered other qualifications on this list.

#### Applied general and tech level

The lists of vocational and technical qualifications that count in performance measures can be found here:

https://www.gov.uk/government/publications/16-to-19-qualifications-discount-codes-and-point-scores

Since 2016, only high value level 3 vocational and technical qualifications, which met predefined characteristics, have been recognised in the 16 to 18 performance measures (categorised as either applied general or tech level qualifications).

From 2018, further reforms set out a full set of characteristics requirements including criteria relating to size, content and assessment, including a requirement that a proportion of the qualification' content is subject to external assessment.

To be included in the applied general or tech level performance cohort, the student must have entered for at least one of these qualifications in the academic years they have been allocated to that school or college.

We currently expect all students wishing to pursue a level 3 vocational and technical course to be studying either a T Level or a qualification on one of these two lists. Other qualifications should only be studied in exceptional circumstances.

T Levels are a new course, which do not count as either an applied general or tech level qualification. T Level students will be included in 16 to 18 performance measures in future, but not until the 2023 to 2024 performance measures cohort. See the <u>section on T Level measures</u> for more information.

A review of qualifications at level 3 and below is currently underway. More information can be found in the section on the <u>post-16 qualifications review</u>.

### **Technical certificates (level 2)**

The lists of qualifications that count in performance measures can be found here: <a href="https://www.gov.uk/government/publications/16-to-19-qualifications-discount-codes-and-point-scores">https://www.gov.uk/government/publications/16-to-19-qualifications-discount-codes-and-point-scores</a>

Technical certificates are a subset of level 2 vocational qualifications. All technical certificate qualifications that count in performance measures are at least equivalent in size to two GCSEs (minimum 145 guided learning hours), and often larger.

Reforms to technical certificates in 2019, mean that similar criteria exist across all level 2 and 3 vocational and technical qualification approved for reporting in performance measures.

To be included in the technical certificate performance cohort, the student must have entered for at least one of these qualifications in the academic years they have been allocated to that school or college.

A review of qualifications at level 3 and below is currently underway. More information can be found in the section on the post-16 qualifications review.

## **Discounting**

Discounting is applied to attainment measures at 16 to 18. Discounting is primarily about ensuring that where a student has taken more than one qualification in the same subject area, performance measures only give credit to institutions once for teaching a single course of study.

Fuller details on discounting can be found in the section on <u>discounting in attainment</u> <u>measures</u>, and in the discounting guidance:

https://www.gov.uk/government/publications/16-to-19-qualifications-discount-codes-and-point-scores

## Performance points for attainment measures

Performance points for attainment measures can be found here: <a href="https://www.gov.uk/government/publications/16-to-19-qualifications-discount-codes-and-point-scores">https://www.gov.uk/government/publications/16-to-19-qualifications-discount-codes-and-point-scores</a>

## **Level 3 qualifications**

The points for level 3 qualifications in attainment measures have not changed since reforms to 16 to 18 performance tables in 2016. They were designed to allow level 3 qualifications of different sizes and grade structures to be compared, as well as to act as a good basis for calculation and statistical modelling in the new headline measures.

### Level 2 qualifications

The performance points at level 2 have been designed to have the following properties (and can differ from the points used in KS4 performance measures):

- 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, or average grade) make intuitive sense: for most qualifications an improvement of one grade would translate to an improvement of one unit (APS per entry).

#### **Attainment measures**

#### Headline attainment measure

The headline attainment measure is a measure of the average point score (APS) per entry. This is expressed as both a point score and as a grade.

The headline attainment measure is reported by cohort: for level 3 - A level, academic, applied general, and tech level; and the technical certificate cohort for level 2. A student can be reported in more than one cohort, for example, a student who enters both A level and applied general qualifications will contribute to an institution's performance in both attainment measures.

# Impact of our commitment not to include qualification results achieved between January 2020 and August 2021

When we calculate this measure we will omit all grades and entries data from qualifications awarded between January 2020 and August 2021, in accordance with our commitment not to include results from qualifications achieved between these dates. This is explained in more detail in the section on the <u>attainment measure methodology</u> below.

Before taking this decision, we tested this approach using 2019 data and based on this modelling, found that, for 2019 data, calculating the measure in this way had a limited impact on institution level measures. It had a slightly larger impact, compared to to how the measure would have looked if calculated using our normal methodology, on schools and colleges where students routinely enter qualifications before their final year of study. When we publish 2021 to 2022 attainment measures, guidance alongside the data will make clear that such schools and colleges where students routinely enter qualifications before their final year of study, may see a bigger impact on their measures (compared to to how the measure would have looked if calculated using our normal methodology). We know that there will be other impacts on the data for the 2021 to 2022 academic year caused by the disruption of the pandemic. Guidance alongside the data will reflect this also.

We are omitting entries data, as well as grades data, because the headline attainment measure at 16 to 18 is not based on whether students have entered or achieved a particular range or set of qualifications, but rather reports on whichever qualifications (of those that count in performance measures) they have taken. Counting entries in qualifications but not counting the grades from these qualifications would, therefore, have an unnecessarily negative effect on the data, as this measure shows the average point score per entry. This differs from the approach we are taking at KS4, where we are using entries data as part of our calculations, because measures like Progress 8 and Attainment 8 look for pupils to have taken a particular range of qualifications.

This commitment will affect our calculation of this measure for the 2021 to 2022 academic year (where students may have taken qualifications before their final year of study in 2019 to 2020 or 2020 to 2021) and 2022 to 2023 academic year (where students may have taken qualifications before their final year of study in 2020 to 2021), and to a much lesser extent, the 2023 to 2024 academic year (where it is possible that students reported after 3 years took a qualification in their first year of study, in 2020 to 2021).

### **Attainment measure methodology**

The average point score per entry is calculated by dividing the total number of points achieved by students in a particular cohort by the total size of entries for those students.

For example, to calculate an average point score per academic entry, the total point score achieved by students in all academic qualifications is divided by those students' total size of academic entries. The average point score per applied general and tech level entry is calculated in the same way, based on students entered for the relevant qualifications and their results.

At 16 to 18, size is determined by the number of students rather than the number of entries. This is because students may take different numbers of qualifications, and qualifications themselves can have varying size (with larger qualifications counting as larger entry).

Where a student has attempted an A level and failed, but they have been awarded an AS in the same subject, the size of the A level entry is counted and not the size of the AS level entry. Therefore, these students will have an A level size of 1 and not 0.5.

Average grades are published for each school and college in the 16 to 18 performance measures alongside the average point score per entry measure. These are reported to help interpret the average point score per entry in terms of grades that are meaningful for the types of qualification reported within each performance cohort.

The average grade per entry is calculated using the average point score per entry. The average point score per entry is assigned an average grade based on the average point score band rules set out in table 2, table 3 and table 4 below. The average point score is kept unrounded when assigning the grade; for example, an A level APS per entry of 41.6667 would be given a grade B.

- The average grade per A level and academic entry is reported in terms of A level grades. Table 2 shows the relevant point score bands for A levels and academic qualifications.
- The average grade per level 3 vocational entry is reported in terms of qualification with a four-grade structure (for example, Distinction\*/Distinction/Merit/Pass). Table 3 shows the relevant point score bands for applied general and tech level qualifications.

• The average grade per level 2 technical certificate entry is based on a level 2 qualification with a Distinction\*/Distinction/Merit/Pass grade structure. Historically some reported level 2 technical certificates have had passing grades at level 1, and the scale is extended to reflect this. All passing grades in reported qualifications will count towards an institution's APS per entry score and the related average grade. Table 4 shows the relevant point score bands for technical certificate qualifications.

A level grade (for comparison only)	A level point score (for comparison only)	APS band	Fine grade <sup>6</sup>
A*	60	>= 58.34 - 60.00	A*
A*	60	>= 55.00 - < 58.34	A*-
Α	50	>= 51.67 - < 55.00	A+
А	50	>= 48.34 - < 51.67	Α
А	50	>= 45.00 - < 48.34	A-
В	40	>= 41.67 - < 45.00	B+
В	40	>= 38.34 - < 41.67	В
В	40	>= 35.00 - < 38.34	B-
С	30	>= 31.67 - < 35.00	C+
С	30	>= 28.34 - < 31.67	С
С	30	>= 25.00 - < 28.34	C-
D	20	>= 21.67 - < 25.00	D+
D	20	>= 18.34 - < 21.67	D
D	20	>= 15.00 - < 18.34	D-
E	10	>= 11.67 - < 15.00	E+
E	10	>= 8.34 - < 11.67	E
E	10	>= 5.00 - < 8.34	E-
U	0	< 5.00	U

Table 2: Average grade per A level or academic qualification

<sup>&</sup>lt;sup>6</sup> Fine grades such as B-, B and B+ are assigned by evenly distributing the points around the point score i.e. 40 points for a grade B.

Grade	Points / size (L3 vocational)	APS band	Fine grade <sup>7</sup>
Distinction*	50 <sup>8</sup>	>= 46.67 - 50.00	Dist*
Distinction*	50 <sup>9</sup>	>= 41.67 - < 46.67	Dist*-
Distinction	35	>= 36.67 - < 41.67	Dist+
Distinction	35	>= 33.34 - < 36.67	Dist
Distinction	35	>= 30.00 - < 33.34	Dist-
Merit	25	>= 26.67 - < 30.00	Merit+
Merit	25	>= 23.34 - < 26.67	Merit
Merit	25	>= 20.00 - < 23.34	Merit-
Pass	15	>= 16.67 - < 20.00	Pass+
Pass	15	>= 13.34 - < 16.67	Pass
Pass	15	>= 10.00 - < 13.34	Pass-
U	0	< 10.00	U

Table 3: Average grade per applied general or tech level qualification

<sup>&</sup>lt;sup>7</sup> Fine grades for the vocational grade bands are assigned by evenly distributing the points around the points/grades for a prototypical vocational qualification with a 4-grade structure (D\*/D/M/P).

<sup>&</sup>lt;sup>8</sup> Note: in some exceptional circumstances schools/colleges may achieve a tech level APS above 50 where students have entered for Principal Learning qualifications

<sup>&</sup>lt;sup>9</sup> Note: in some exceptional circumstances schools/colleges may achieve a tech level APS above 50 where students have entered for Principal Learning qualifications

Level	Grade	Points / size (L1/L2 vocational)	APS band	Fine grade <sup>10</sup>
L2	Distinction *	8	>= 7.83 - 8.00	L2 Dist*
L2	Distinction *	8	>= 7.50 - < 7.83	L2 Dist*-
L2	Distinction	7	>= 7.17 - < 7.50	L2 Dist+
L2	Distinction	7	>= 6.83 - < 7.17	L2 Dist
L2	Distinction	7	>= 6.50 - < 6.83	L2 Dist-
L2	Merit	6	>= 6.17 - < 6.50	L2 Merit+
L2	Merit	6	>= 5.83 - < 6.17	L2 Merit
L2	Merit	6	>= 5.50 - < 5.83	L2 Merit-
L2	Pass	5	>= 5.17 - < 5.50	L2 Pass+
L2	Pass	5	>= 4.83 - < 5.17	L2 Pass
L2	Pass	5	>= 4.50 - < 4.83	L2 Pass-
L1	Distinction	4	>= 4.17 - < 4.50	L1 Dist+
L1	Distinction	4	>= 3.83 - < 4.17	L1 Dist
L1	Distinction	4	>= 3.50 - < 3.83	L1 Dist-
L1	Merit	3	>= 3.17 - < 3.50	L1 Merit+
L1	Merit	3	>= 2.83 - < 3.17	L1 Merit
L1	Merit	3	>= 2.50 - < 2.83	L1 Merit-
L1	Pass	2	>= 2.17 - < 2.50	L1 Pass+
L1	Pass	2	>= 1.83 - < 2.17	L1 Pass
L1	Pass	2	>= 1.50 - < 1.83	L1 Pass-
No level	U	0	< 1.50	U

Table 4: Average grade per level 2 technical certificate qualification

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<sup>&</sup>lt;sup>10</sup> Fine grades for the L2 vocational grade bands are assigned by evenly distributing the points/grades for a prototypical qualification with a D\*/D/M/P grade structure at L2. Some reported qualifications include grades that span both L2 and L1 so the fine-grade classification is extended to reflect this.

A worked example of calculating an average grade per academic qualification based on a cohort of five students is shown in Table 5. A further example is shown in Table 6 where a student in the cohort achieved a grade between January 2020 and August 2021.

Students	Total academic point score	No of academic entries
Student 1	100	3.0
Student 2	240	4.0
Student 3	140	3.0
Student 4	210	5.5
Student 5	140	4.0
Sum	830	19.5
Average point score	42.56	
Average grade (academic)	B+	

Table 5: Example of calculation for average grade per academic qualification

Student	Exam year	Qualification	Points	Size	Notes
Student 1	2022	A level	40	1	
Student 1	2022	A level	30	1	
Student 1	2022	A level	40	1	
Student 2	2022	A level	60	1	
Student 2	2022	A level	50	1	
Student 2	2021	A level	50	1	Removed
Student 3	2022	International Baccalaureate	300	5	
		Sum	520	10	
		Average Point Score	52		
		Average grade (academic)	A+		

Table 6: Example of calculation for average grade per academic qualification where an exam is removed due to being a qualification grade awarded between January 2020 and August 2021

## Discounting in attainment measures

Discounting is primarily about ensuring that where a student has taken more than one qualification in the same subject area, the performance measures only give credit to institutions once for teaching a single course of study.

- One level 3 qualification can discount another level 3 qualification(s) in the same subject area.
- Level 2 qualifications can discount other level 2 qualification(s) in the same subject. Discounting between level 2 qualifications prefers first the largest qualification, and if all the same size, the qualification with the most performance points in the same subject area. Note, a failed technical certificate qualification cannot discount a smaller technical certificate pass.
- Level 3 qualifications (applied general and tech levels) can discount a level 2 qualification in the same subject area (but not vice-versa). Note, a failed level 3 qualification cannot discount a level 2 pass.

Full details on discounting can be found in the discounting guidance <a href="https://www.gov.uk/government/publications/16-to-19-qualifications-discount-codes-and-point-scores">https://www.gov.uk/government/publications/16-to-19-qualifications-discount-codes-and-point-scores</a>

#### **Additional measures**

In addition to the headline attainment measures, we will produce and publish four additional attainment measures for the 2021 to 2022 academic year: best 3 A levels, at least AAB including 2+ facilitating subjects, level 3 vocational (entry) measures and the level 2 technical certificate (entry) measure.

We will no longer publish the 'TechBacc' measure – see the section on the <u>Tech Bacc</u> measure for more information.

We will not publish the Level 3 (advanced level) maths measure for 2021 to 2022, 2022 to 2023 or 2023 to 2024 – see the section on the <u>additional advanced level maths</u> measure for more information.

# Impact of our commitment not to include qualification results achieved between January 2020 and August 2021

We will calculate these measures using the same approach as for the headline attainment measure: we will omit grades and entries from qualifications awarded between January 2020 and August 2021 but will otherwise calculate the measures as normal. We have chosen to maintain this approach across all attainment measures for consistency, and also because it is the approach that we expect will have the most limited impact for the majority of institutions.

#### **Best 3 A levels**

This measure applies to the subset of A level students who entered at least one full size A level (this includes double award A levels, and applied A levels, but does not include AS levels, general studies or critical thinking). If students are entered for less than three full size A levels, they are only included in the measure if they have not entered for other academic, applied general and tech level qualifications greater than or equal to the size of an A level. Where a student has only been at a school or college 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. This is divided by the number of eligible students, then further 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, but have been at a school or college for two years and have not entered at least size 1 of other approved qualifications, the points in their one or two A levels are still divided by three.

As set out above, results achieved between January 2020 and August 2021 will be omitted when calculating this measure. This means that if a student has achieved 3 A levels, but one of these was achieved in summer 2021 (or 2020), they will be counted as only having achieved 2 A levels, and their score will still be divided by 3, as per the rules of the measure. This is represented in the worked example below (see students D and E).

We recognise this means that schools and colleges that routinely enter students into A levels before their final year of study are most likely to see an impact on this measure. We have been clear that data for the 2021 to 2022 academic year should not be used to make direct comparisons between providers, or with previous years. Guidance for users will be included alongside the data explaining this. This measure will also not be shown on the school and college pages of school and college performance measures website for the 2021 to 2022 academic year, but will be available in downloadable data.

#### Worked examples of the best 3 A levels measure

The following examples assume all the students remained at the same school or college for two years.

Student	Qualification	Size	Year achieved	Grade	Points
Α	Single Award A level	1	2022	A*	60 pts
Α	Single Award A level	1	2022	В	40 pts
Α	Single Award A level	1	2022	В	40 pts
	Total points				140 pts
В	Double Award A level	2	2022	A* A*	120 pts
В	Single Award A level	1	2022	А	50 pts
В	Single Award A level	1	2022	В	Ignored
	Total points				170 pts
С	Single Award A level	1	2022	В	40 pts
С	Single Award A level	1	2022	В	40 pts
С	Single Award AS level	0.5	2022	С	Ignored
	Total points				80 pts
D	Single Award A level	1	2022	А	50 pts
D	Single Award A level	1	2022	В	40 pts
D	Single Award A level	1	2021	В	Ignored
	Total points				90 pts
Е	Single Award A level	1	2022	А	50 pts
Е	Single Award A level	1	2022	А	50 pts
Е	Single Award A level	1	2022	В	40 pts
Е	Single Award A level	1	2021	А	Ignored
	Total points				140 pts

Table 7: Worked example for the best 3 A levels measure – student level

- For student A: their best 3 A levels count in the measure. Note that students who study combined A/AS levels, where size = 1.5, each result is divided by 1.5 to scale the size/points to 1 A level.
- For student B: the double award counts as two of their best three A level entries; only the best result from the two single award A levels count (if there are two double awards, the points from the lower grade are halved).
- For student C: although this student has only entered 2 A levels they still count in the measure, provided they have not also entered an approved tech level, applied

- general or other academic qualification of size=1). The AS result does not count (only A levels count in this measure).
- For student D: this student is still included in the measure despite having only 2 A levels that are being counted. The A level being ignored was awarded in 2021 and therefore can not be used in the measures.
- For student E: under normal circumstances the A levels with three grade As would be counted in the measure but one grade A is being ignored because it was awarded in 2021 and therefore can not be used in the measure. We will therefore use the grade B.

The points for students A, B, C, D and E are combined to produce a school/college score in the best 3 A levels measure as follows:

Student / total	Points
Student A	140
Student B	170
Student C	80
Student D	90
Student E	140
Total points	620
Total entries	15 (number of students x 3)
Points per entry	620 / 15 = 41.33
Result expressed as a grade	В

Table 8: Worked example for the best 3 A levels measure – school or college level

#### AAB measure (of which at least two are in facilitating subjects)

Up until 2019, the Russell Group published a list of 'facilitating subjects' which was designed to inform students which A-level subject choices were most likely to secure them a place at a top university. Instead of publishing a list of facilitating subjects in its 'Informed Choices' publication, the Russell Group now provide an interactive website to allow students to see the subjects recommended for specific degrees.

We are continuing to publish the AAB measure (of which at least two are in facilitating subjects) as a way to recognise excellent A level results in subjects that keep students' options open and support progression to top universities. We will keep this under review, as we do with all of our performance measures.

This measure shows the percentage of students achieving at least AAB in 3 A levels that count as facilitating subjects, for each school or college. The facilitating subjects are: Biology, Chemistry, Physics, Mathematics, Further Mathematics, Geography, History, English Literature, and Classical/Modern Languages<sup>11</sup>.

This measure applies to the subset of A level students who entered at least one full size A level, excluding applied A levels (this includes double award A levels, but also does not include AS levels, general studies or critical thinking). It is a similar subset to the best 3 A levels measure, except that applied A levels are not included when determining the cohort. If students are entered for less than three full size A levels, they are only included in the measure if they have not entered for other academic, applied general and tech level qualifications greater than or equal to the size of an A level. Where a student has only been at a school or college for one year, they need to have entered three A levels to be included. A student must have achieved three A levels, of which at least two are in facilitating subjects, at grades AAB or better.

As above, results achieved between January 2020 and August 2021 will be omitted when calculating this measure. This means that if a student has achieved at least AAB in 3 A levels that count as facilitating subjects, but one or more of these A levels was achieved in summer 2021 (or summer 2020), they will not count in the measure as having achieved at least AAB including 3 facilitating subjects. We recognise this means that schools and colleges that routinely enter students into A levels before their final year of study are most likely to see an impact on this measure. We have been clear that data for the 2021 to 2022 should not be used to make direct comparisons between providers, or

Russian, Spanish, Turkish, Urdu, Welsh (second language)

<sup>&</sup>lt;sup>11</sup> Classical/Modern Languages which will count towards the AAB 16 to 18 performance measure in 2021 to 2022 are: Arabic, Bengali, Chinese, Dutch, French, German, Greek (Classical), Greek (Modern), Gujarati, Irish (second language), Italian, Japanese, Latin, Modern Hebrew, Panjabi, Persian, Polish, Portuguese,

with previous years. Guidance for users will be included alongside the data explaining this. This measure will also not be shown on the school and college pages of the school and college performance measures website for the 2021 to 2022 academic year, but will be available in downloadable data.

The qualification numbers for A level facilitating subjects, awarding organisations and qualification titles are flagged in the guidance showing discount codes here: <a href="https://www.gov.uk/government/publications/16-to-19-qualifications-discount-codes-and-point-scores">https://www.gov.uk/government/publications/16-to-19-qualifications-discount-codes-and-point-scores</a>.

The following table summarises the rules governing which A level and academic qualification results contribute to headline attainment and the Best 3 A level and AAB additional measures:

Qualification	Counts in headline attainment (APS)  Counts in best 3 A levels measure		headline A levels measure attainment		Counts in at least AAB in 2+ facilitating subjects measure
GCE A level	Yes	Yes (except General Studies and Critical Thinking)	Yes (except General Studies and Critical Thinking)		
GCE AS level	Yes	No	No		
Applied GCE AS level Double Award	Yes	No	No		
Applied GCE Single Award	Yes	Yes	No		
Applied GCE AS level	Yes	No	No		
Applied GCE Double Award	Yes	Yes	No		

Table 9: Rules for which A level results contribute to headline and additional attainment measures

#### Level 3 vocational measures

These additional measures shows the number of students entering level 3 technical and vocational qualifications that count in the 16 to 18 performance measures as a proportion of the total number of students entering any level 3 vocational qualification. The level 3 comparison group includes all level 3 vocational qualifications at least equivalent in size to one A level (minimum 325 guided learning hours), including those which are not approved to count in the 16 to 18 performance measures. The measures are produced separately for applied general qualifications and tech levels.

We expect the proportion of students studying level 3 vocational qualifications that are not either T Levels or on either the approved tech level or applied general lists for 2022 to be very small.

We do not apply discounting when determining the proportion of students entering approved level 3 vocational qualifications out of the entire cohort of level 3 vocational students (approved and non-approved).

The methodology for calculating this measure for the 2021 to 2022 academic year will follow the methodology for calculating the headline attainment measure, in that both grades awarded and entries made between January 2020 and August 2021 will be omitted from the calculation. This means that if a student has entered a vocational or technical qualification in the 2019 to 2020 or 2020 to 2021 academic year, they will not count in either the numerator or denominator of this measure. These measures will not be shown on the school and college pages of the school and college performance measures website for 2021 to 2022, but will be available in downloadable data.

T Level students are not included in this measure in any way. See the section on <u>T</u> <u>Level accountability measures</u> for more information.

#### Calculating the tech level measure

Variable	Description
% <sub>Tech</sub>	Proportion of students entering tech levels that count in performance measures in 2022 (omitting any entries made between January 2020 and August 2021)
N <sub>Tech</sub>	Number of students entering tech levels that count in performance measures in 2022 (omitting any entries made between January 2020 and August 2021)
N <sub>NonL3Voc</sub>	Number of students just entering level 3 vocational qualifications that do not count in performance measures at least the size of one A level (omitting any entries made between January 2020 and August 2021)

Table 10: Calculating the tech level (entry) measure

$$\%_{Tech} = \frac{N_{Tech}}{N_{Tech} + N_{NonL3Voc}}$$

Note: The denominator in this calculation does not include applied general qualifications.

## Calculating the applied general measure

Variable	Description
% <sub>AGen</sub>	Proportion of students entering applied general qualifications that count in performance measures in 2022
	(omitting any entries made between January 2020 and August 2021)
$N_{AGen}$	Number of students entering applied general qualifications that count in performance measures in 2022
	(omitting any entries made between January 2020 and August 2021)
N <sub>NonL3Voc</sub>	Number of students just entering level 3 vocational qualifications that do not count in performance measures at least the size of one A level
	(omitting any entries made between January 2020 and August 2021)

Table 11: Calculating the applied general (entry) measure

$$\%_{AGen} = \frac{N_{AGen}}{N_{AGen} + N_{NonL3Voc}}$$

Note: The denominator in this calculation does not include tech level qualifications.

#### **Level 2 Technical Certificate measure**

Technical certificates were developed to encourage take-up of level 2 vocational qualifications that support student progression into a recognised occupation. This measure shows the proportion of students whose highest attainment is a level 2 qualification and who achieve a technical certificate approved to count in performance measures.

The methodology for calculating this measure in 2021 to 2022 will follow the methodology for calculating the headline attainment measure, in that both grades awarded and entries made between January 2020 and August 2021 will be omitted from the calculation. This means that if a student has entered a level 2 technical certificate or a level 2 qualification that does not count in performance measures in the 2019 to 2020 or 2020 to 2021 academic year, they will not count in either the numerator or denominator of this measure.

Note discounting will not apply in this measure. Consequently, a student who passes both a technical certificate and also a larger vocational qualification at level 2, will count towards an institution's performance in this measure.

## TechBacc measure (permanently discontinued from 2022)

We have previously published a 'TechBacc' measure, which showed the number of all students in a school or college who achieved at least a pass grade in all of: a tech level, a level 3 maths qualification, such as core maths, and an extended project qualification.

In previous years, only very low numbers of students, in a limited number of institutions, have achieved this (191 students in England, spread across 68 institutions, in 2019). With the roll out of T Levels, and the ongoing level 3 and below qualifications review, the Tech Bacc is becoming less relevant as a challenging technical route, and given the very low numbers of students taking this combination of subjects already, we intend to stop producing or publishing this measure, permanently.

## Retention

As the participation age has been increased to 18, it is increasingly important that all young people are given suitable education and training opportunities that they see through to completion. We want schools and colleges to ensure that students study courses that match their ability and ambition and that they remain motivated and engaged to complete their studies.

In contrast to the attainment measures, these measures, including the additional retention measures, do not rely on grades data from any year. This means they are not affected by our commitment not to include results from qualifications achieved between January 2020 and August 2021 in future performance measures. We will produce and publish these measures as normal in 2021 to 2022.

We recognise that retention rates may have been affected by the broader impacts of COVID-19, including school and college closures during 2020 and 2021 and alternative grading arrangements. Guidance will be included alongside the data.

All retention measures are reported separately for each cohort.

#### Headline retention measure

The headline retention measure shows the percentage of students who are retained to the end of the 'core aim' (or main learning aim) of their study programme at a school or college. The core aim is either a level 3 qualification that counts in performance measures (academic, A level, applied general and tech level) or a level 2 qualification that counts in performance measures (technical certificate).

Withdrawing from supporting aims, such as GCSEs, will not stop students being counted as retained on this measure. Similarly, an A level student only needs to complete one A level to be counted as retained 12.

Students are counted as retained if they are recorded as having "completed the learning activities leading to the learning aim" on the Learning Aim Status field of the school census or the Completion Status field of the ILR.

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<sup>&</sup>lt;sup>12</sup> The A level that is completed must be in a subject other than General Studies or Critical Thinking.

Some programmes will be more than one-year long. For example, an International Baccalaureate is typically studied over two years. For a student to be counted as retained they must complete all learning activities for an aim.

Since the retention measure is calculated at student level it is not affected by the total number of subjects a student takes, or whether they only complete a subset of these. Enrolling a student for additional AS level subjects alongside A levels, or entering a student for AS level exams as well as A level exams in the same subject will not affect the retention calculation.

In the majority of cases, the core aim will be at least the size of 1 A level or 4 GCSEs. However, where students are solely taking AS levels they can be counted as retained in year 12 provided they complete at least one AS level. We publish separate supporting information on the proportion of level 3 students who return in year 13 (see the section below on the returned and retained for a second year measure).

Some students may take multiple programmes that are one academic year in length. In these cases, they need to have completed in any year, for level 3 programmes, an aim equivalent to the size of 1 A Level and for level 2 programmes an aim equivalent in size to 4 GCSEs. Or if they have no aims of this size, an aim of A level size 0.5 or GCSE size 2, for level 3 and level 2 programmes respectively, again in any year. A range of examples are shown below.

### **Exceptions to the retention measure**

Students who are not eligible for funding because they withdrew during the "qualifying period" at the start of their programme are not included in the retention measure. For programmes longer than 24 weeks the qualifying period is six weeks, for programmes that are 2 to 24 weeks the qualifying period is two weeks. All withdrawals from a programme will be treated in the same way in the measure methodology regardless of whether they are related to educational reasons or not. This aligns with the funding methodology.

The following aims are not included in the retention measure:

- where a student's core aim is less than 0.5 in size
- where a student's core aim has a completion status of 'continuing'
- where the planned end date of a student's core aim is after the current reporting year and the student is academic age 18 in the reporting year

Independent schools are not included in the retention measure as learning aims data are not available for these schools.

#### Selection of the core aim

The majority of students will only have one core aim for their time in 16 to 18 education. However, any students who attend multiple institutions will have one core aim for each institution attended.

The process of selecting a student's core aim depends on the combination of aims that a student is studying. A student can be studying either all academic aims, all vocational aims or a mixture of academic and vocational aims.

When a student has a mix of level 2 and level 3 aims, the level of their aims is largely ignored in selecting the core aim as selection will continue to be done on the status of the aim. The level of the aim only comes into consideration where a student has multiple aims of the same size with the same status.

#### All academic aims or academic aims and level 2 vocational aims

If a student is studying the International Baccalaureate, this aim is selected as their core aim due to the large size of this type of qualification. Otherwise, an aim of size 1 A level or 4 GCSEs or above is selected as their core aim, with preference being given to any aim recorded as 'completed'. If a student has no completed aims, then an aim recorded as 'continuing' is selected. If a student has no completed or continuing aims, then an aim recorded as 'withdrawn' or 'transferred' is selected as their core aim.

If a student does not have any aims of size 1 A level or 4 GCSEs or above, the above process is followed for aims of size 0.5 A levels or 2 GCSEs or above.

If a student has multiple aims with the same status, the following criteria are used (in order) to select a single core aim:

- A level or AS level
- aim flagged as a 'core aim' by the school or college
- qualification included in 16 to 18 performance measures
- largest size (size of level 2 aims is divided by 4 before comparing to level 3 aims)
- level 3 over level 2

This is set out in the flowchart below.

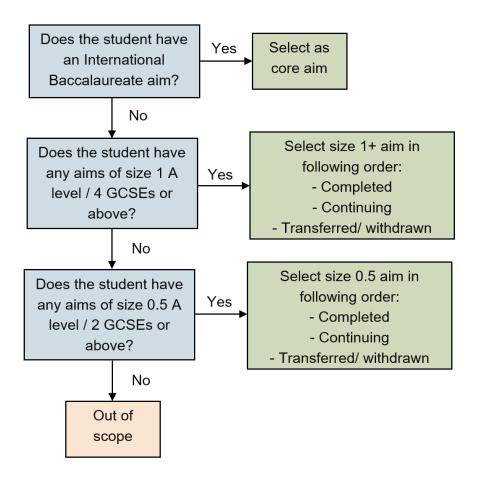


Figure 1: Flowchart which shows how the core aim is selected for students with all academic aims or academic aims and level 2 vocational aims

#### All vocational aims

If a student has an aim which has been flagged by their school or college as being their 'core aim' (for funding purposes), it is selected for the retention measure. If a student has no aims flagged as a 'core aim', then any aim equivalent in size to 1 A level (level 3 programmes) or 4 GCSEs (level 2 programmes) or above is selected as their core aim, with preference being given to any aim recorded as 'completed'. If a student has no completed aims, then any aim recorded as 'continuing' is selected. If a student has no completed or continuing aims, then any aim recorded as 'withdrawn' or 'transferred' is selected as their core aim. If a student does not have any aims of size 1 A level or 4 GCSEs or above, the process below is followed for aims of size 0.5 A levels or 2 GCSEs or above.

If a student has multiple aims with the same status, the following criteria are used (in order) to select a single core aim:

- qualification included in 16 to 18 performance measures
- aim of the same type as the majority of the student's attainment
- largest size (size of level 2 aims is divided by 4 before comparing to level 3 aims)
- level 3 over level 2

This process is set out in the flowchart below.

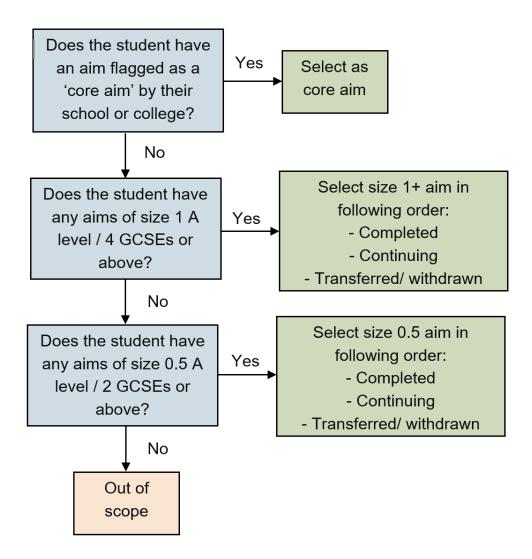


Figure 2: Flowchart which shows how the core aim is selected for students with all vocational aims

#### Mixture of academic and vocational aims

If a student has a tech level or applied general aim which has been flagged by their school or college as being their 'core aim' it is selected for the retention measure. If not and they are studying the International Baccalaureate, then this aim is selected as their core aim. If a student does not meet these first two criteria, then any aim of size equivalent to 1 A level (level 3 programmes) or 4 GCSEs (level 2 programmes) or above is selected as their core aim, with preference being given to any aim recorded as 'completed'. If a student has no completed aims, then any aim recorded as 'withdrawn' or 'transferred' is selected as their core aim. If a student does not have any aims of size 1 A level or 4 GCSEs or above, the process below is followed for aims of size 0.5 A levels or 2 GCSEs or above.

If a student has multiple aims with the same status, the following criteria are used (in order) to select a single core aim:

- qualification included in 16 to 18 performance measures
- aim of the same type as the majority of the student's attainment
- A level or AS level if the majority of the student's attainment is academic
- largest size (size of level 2 aims is divided by 4 before comparing to level 3 aims)
- level 3 over level 2

This process is set out in the flowchart below.

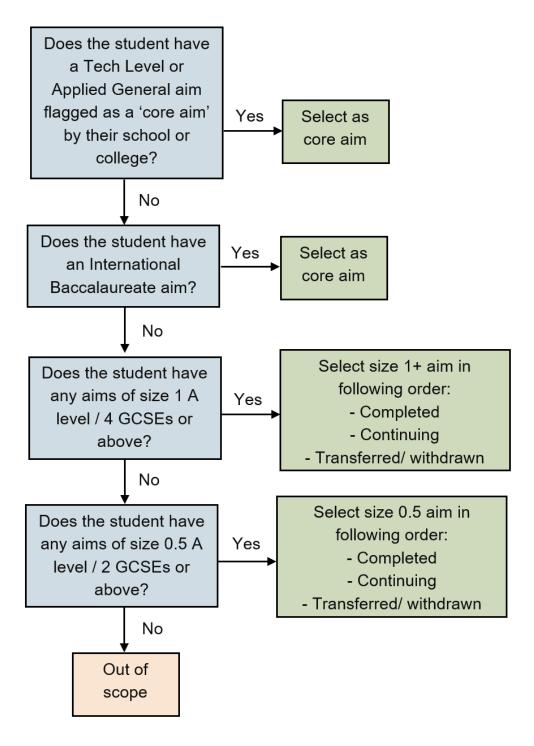


Figure 3: Flowchart which shows how the core aim is selected for students with a mixture of academic and vocational aims

## Worked headline measure examples

The following tables give examples of how the core aim is selected and show whether the students count as retained or not retained in the headline retention measure.

**Example 1:** The VR2 aim is selected as the core aim since it is the only one with size of at least 1. This student does not count as retained as they withdrew from the core aim.

Qualification type	Size	'Core aim' flagged by school/ college	Completion Status	Selected Core Aim	Retained?
AS level	0.5		Completed		
AS level	0.5		Completed		
AS level	0.5		Completed		
AS level	0.5		Completed		
VR2	1.3		Withdrawn	Х	No

Table 12: Headline retention measure – worked example 1

**Example 2:** The tech level VR3 aim is selected as the core aim since there are multiple completed aims and the majority of the student's attainment is tech level. This student counts as retained.

Qualification type	Size	'Core aim' flagged by school/ college	Completion Status	Selected Core Aim	Retained?
VR3	1.3		Completed	X	Yes
VR2	1.3		Completed		
VR2	1.3		Completed		
VR2	1.3		Continuing		
A level	1.0		Continuing		

Table 13: Headline retention measure – worked example 2

**Example 3:** Although the IB qualification is the only one that the student did not complete, this is selected as their core aim due to its large size. This student does not count as retained as they withdrew from the core aim.

Qualification type	Size	'Core aim' flagged by school/ college	Completion Status	Selected Core Aim	Retained?
AS level	0.5		Completed		
AS level	0.5		Completed		
AS level	0.5		Completed		
International Baccalaureate	5.0		Withdrawn	Х	No

Table 14: Headline retention measure - worked example 3

**Example 4:** The BTEC Diploma level 3 qualification (size 1) is selected as the core aim as this vocational aim has been flagged by the school or college as being the student's 'core aim'. This student does not count as retained as they withdrew from the core aim.

Qualification type	Size	'Core aim' flagged by school/ college	Completion Status	Selected Core Aim	Retained?
Extended Project	0.3		Completed		
AS level	0.5		Completed		
AS level	0.5		Completed		
BTEC Diploma level 3	2		Withdrawn		
BTEC Diploma level 3	2		Completed		
BTEC Diploma level 3	1	Χ	Withdrawn	X	No

Table 15: Headline retention measure - worked example 4

**Example 5:** One of the AS level qualifications is arbitrarily selected as the core aim as the student only had 0.5 size aims, all of which were completed. This student counts as retained.

Qualification type	Size	'Core aim' flagged by school/ college	lagged by Completion school/ Status		Retained?
AS level	0.5		Completed	Χ	Yes
AS level	0.5		Completed		
AS level	0.5		Completed		
AS level	0.5		Completed		

Table 16: Headline retention measure – worked example 5

#### Additional retention measures

Alongside the headline retention measure we publish two additional retention measures.

#### Returned and retained for a second year

This additional measure shows the percentage of level 3 students who return to the same school or college for a second year of study and are retained in their second year. It highlights cases where, although students are retained, they have only completed, for example, AS levels and do not return for a second year of study.

The returned and retained for a second year measure is reported separately by cohort, but for level 3 cohorts only: academic, A level, applied general and tech level.

The following students are excluded:

- Students with a level 2 core aim (since many level 2 programmes are not expected to be two years long);
- Students who are academic age 18 in their first year in the institution (since they
  would be out of scope for inclusion in performance measures in their second
  year);
- Students who achieve a sizeable qualification (their level 3 qualifications of size 1 or above sum to 2 or more) in their first year in the institution (since they have already completed what is expected).

To be counted as returned and retained for a second year, a student must:

- be recorded as completing their selected core aim which is at least size 1 and in scope for inclusion in 16 to 18 performance measures;
- have been attending the institution for at least two academic years; or
- have completed a level 3 qualification of at least size 1 in their second (or third) year at the institution (this may be the selected core aim or another aim).

A student is deemed to have been attending an institution for at least two academic years if they meet any of the following conditions:

- they have aims at that institution in three academic years;
- they have aims at that institution in two academic years and have been at that institution for at least 602 days (based on the start and end dates of all their aims at that institution);
- they have aims at that institution in two academic years; they left in May, June or July and have been at that institution for at least 480 days.

The following tables give examples of whether the student counts as returned and retained for a second year and show situations where a student is excluded from the measure.

**Example 1:** This student had aims in the institution in two academic years and spent a total of 657 days in the institution. They completed an aim of size 1+ in their second year so they count as returned and retained for a second year.

Year	Qualification type	Size	Aim start date	Aim end date	Completion Status	Selected Core Aim	Returned & retained for a 2nd year?
1	VR3	1.5	09/09/2014	27/06/2015	Completed		
2	VR3	3.0	09/09/2015	26/06/2016	Completed	Х	Yes

Table 17: Returned and retained measure - worked example 1

**Example 2:** This student had aims in the institution in two academic years and spent a total of 690 days in the institution. The selected core aim was completed in their first year but they have other level 3 aims of size 1+ in their second year so they count as returned and retained for a second year.

Year	Qualification type	Size	Aim start date	Aim end date	Completion Status	Selected Core Aim	Returned & retained for a 2 <sup>nd</sup> year?
1	AS level	0.5	02/09/2014	23/07/2015	Completed		
1	AS level	0.5	02/09/2014	23/07/2015	Completed		
1	AS level	0.5	02/09/2014	23/07/2015	Completed		
1	A level	1.0	02/09/2014	23/07/2015	Completed	Х	Yes
2	A level	1.0	01/09/2015	22/07/2016	Completed		
2	A level	1.0	01/09/2015	22/07/2016	Completed		
2	A level	1.0	01/09/2015	22/07/2016	Completed		

Table 18: Returned and retained measure - worked example 2

**Example 3:** This student had aims in the institution in three academic years. Although they did not complete an aim of size 1+ in their second year, they did in their third year so they count as returned and retained for a second year.

Year	Qualification type	Size	Aim start date	Aim end date	Completion Status	Selected Core Aim	Returned & retained for a 2 <sup>nd</sup> year?
1	AS level	0.5	03/09/2013	19/07/2014	Completed		
1	AS level	0.5	03/09/2013	19/07/2014	Completed		
1	AS level	0.5	03/09/2013	19/07/2014	Completed		
2	AS level	0.5	02/09/2014	18/07/2015	Completed		
2	AS level	0.5	02/09/2014	18/07/2015	Completed		
2	AS level	0.5	02/09/2014	18/07/2015	Completed		
3	A level	1.0	01/09/2015	01/06/2016	Completed		
3	A level	1.0	01/09/2015	01/06/2016	Completed		
3	A level	1.0	01/09/2015	01/06/2016	Completed	X	Yes

Table 19: Returned and retained measure – worked example 3

**Example 4:** This student had aims in the institution in two academic years and spent a total of 682 days in the institution. They did not complete a qualification of size 1+ in their second year so they do not count as returned and retained for a second year.

Year	Qualification type	Size	Aim start date	Aim end date	Completion Status	Selected Core Aim	Returned & retained for a 2 <sup>nd</sup> year?
1	AS level	0.5	06/09/2014	04/03/2015	Withdrawn		
1	AS level	0.5	06/09/2014	04/03/2015	Withdrawn		
1	AS level	0.5	06/09/2014	19/07/2015	Completed		
2	AS level	0.5	02/09/2015	18/07/2016	Completed		
2	AS level	0.5	02/09/2015	18/07/2016	Completed		
2	AS level	0.5	02/09/2015	18/07/2016	Completed	Х	No

Table 20: Returned and retained measure - worked example 4

**Example 5:** This student had aims in the institution in two academic years but only spent 432 days in the institution. Even though they completed a qualification of size 1, they do not count as returned and retained for a second year since they were not in the institution for long enough.

Year	Qualification type	Size	Aim start date	Aim end date	Completion Status	Selected Core Aim	Returned & retained for a 2 <sup>nd</sup> year?
1	BD3	1.0	09/09/2014	02/07/2015	Completed	X	No
2	BD3	2.0	09/09/2015	14/11/2015	Withdrawn		

Table 21: Returned and retained measure – worked example 5

**Example 6:** This student had aims in the institution in one academic year. However, they are excluded from the returned and retained for a second year measure since they are aged 18 and although they may return for a second year, they will be too old to be included in performance measures.

Year	Qualification type	Size	Aim start date	Aim end date	Completion Status	Selected Core Aim	Returned & retained for a 2 <sup>nd</sup> year?
1	AS level	0.5	03/09/2015	22/07/2016	Completed		
1	AS level	0.5	03/09/2015	22/07/2016	Completed	X	N/A
1	AS level	0.5	03/09/2015	22/07/2016	Completed		
1	GCSE	0.3	03/09/2015	22/07/2016	Completed		

Table 22: Returned and retained measure - worked example 6

**Example 7:** This student had aims in the institution in one academic year. However, they are excluded from the returned and retained for a second year measure since their level 3 qualifications of size 1 or above sum to 2 or more.

Year	Qualification type	Size	Aim start date	Aim end date	Completion Status	Selected Core Aim	Returned & retained for a 2 <sup>nd</sup> year?
1	AS level	0.5	04/09/2015	10/07/2016	Completed		
1	A level	1.0	04/09/2015	10/07/2016	Completed		
1	A level	1.0	04/09/2015	10/07/2016	Completed	Х	N/A
1	A level	1.0	04/09/2015	10/07/2016	Completed		

Table 23: Returned and retained measure – worked example 7

**Example 8:** This student had aims in the institution in two academic years and spent a total of 671 days in the institution. However, they are excluded from the returned and retained for a second year measure since their selected core aim is a level 2 qualification.

Year	Qualification type	Size	Aim start date	Aim end date	Completion Status	Selected Core Aim	Returned & retained for a 2 <sup>nd</sup> year?
1	AS level	0.5	09/09/2014	25/07/2015	Completed		
1	AS level	0.5	09/09/2014	25/07/2015	Completed		
2	VR2	1.3	04/09/2015	10/07/2016	Completed	Х	N/A

Table 24: Returned and retained measure – worked example 8

#### Retained and assessed

This additional measure shows the percentage of students who are retained to the end of their course and are assessed. This allows monitoring of whether students are effectively completing their study rather than merely being enrolled at an institution for a certain period of time.

A student is considered retained and assessed <sup>13</sup> as long as they have an exam entry that matches on the level of and is at least the same size as the core aim qualification selected for the headline retention measure. For example, if a student's core aim is an A level in Biology with size of 1, we do not require it to match to a Biology A level but just one of the same size. Similarly, we also do not require the qualification type of the result to match the aim as long as it is of the same size. For example, a student with a tech level aim of size 1 is considered a match to an applied general result of size 1.

The retained and assessed measure is reported separately for each cohort: at level 3, academic, A level, applied general and tech level; and technical certificates at level 2.

The following tables provide examples of whether a student is retained and assessed and shows situations where a student would not be counted.

**Example 1:** The student was retained in an A level core aim and was assessed in five exams. Two of these, the Applied General and Tech level assessments are of sufficient size and level to allow the student to be retained and assessed.

	Type / qualification	Size	Level
Core aim	A level	1	Level 3
Exams taken	AS level	0.5	Level 3
Exams taken	AS level	0.5	Level 3
Exams taken	AS level	0.5	Level 3
Exams taken	Tech level	1	Level 3
Exams taken	Applied general	1	Level 3
Retained and assessed?	Yes		

Table 25: Retained and assessed measure - worked example 1

assessed supporting measure.

<sup>&</sup>lt;sup>13</sup> Students that have been assessed but are recorded as not retained in the headline retention measure will not be included. Students need to be both retained and assessed to be included in the retained and

**Example 2:** The student was retained in a BTEC Diploma level 3 qualification and was assessed in three exams. However, this student is not retained and assessed as the individual A level assessments do not match the size of the BTEC Diploma level 3.

	Type / qualification	Size	Level
Core aim	BTEC Diploma Level 3	2	3
Exams taken	A level	1	3
Exams taken	A level	1	3
Exams taken	A level	1	3
Retained and assessed?	No		

Table 26: Retained and assessed measure - worked example 2

**Example 3:** The student was retained in a BTEC Certificate level 2, and was assessed in three exams. However, this student would not be considered retained and assessed as even though the Tech level qualification is larger than the core aim, it is at a different level.

	Type / qualification	Size	Level
Core aim	BTEC Certificate level 2	1	2
Exams taken	AS level	0.5	3
Exams taken	AS level	0.5	3
Exams taken	Applied general	1.5	3
Retained and assessed?	No		

Table 27: Retained and assessed measure - worked example 3

## **Destinations**

Schools and colleges should be supporting and preparing their students for future education, training and employment. Including destination information as part of the 16 to 18 performance measures broadens the information available to the public and gives schools and colleges the opportunity to demonstrate other aspects of their performance.

Destination measures encourage institutions to make sure their pupils receive the support needed to prepare for, and complete, a transition on to education, training or employment that offers good long term prospects.

#### **Headline destination measure**

The headline destination measure shows the percentage of students staying in education, employment or training for at least two terms in the year after their last allocation to a school or college at 16 to 18.

The measure is published on a two-year time lag compared to other performance measures, to allow us to see whether students have sustained their destination. The data published in the October 2022 statistical release and 2022 performance measures will report on students who were deemed to have reached the end of 16 to 18 study in the 2019 to 2020 academic year and identifies their education and/or employment destinations in October to March of their destination year, or any six months in the year for apprenticeships. This is a cohort for which very little other performance information is available, given the suspension of most performance measures in 2019 to 2020 and 2020 to 2021.

There are no impacts on how we calculate the measure due to the data we have committed not to use because of COVID-19. The measure does not rely on grades data from any current or previous academic years. We use entries data to enable us to break down the destinations data by the level of a students' 16 to 18 study, and will continue to use entries data from all years, including entries between January 2020 and August 2021, for this purpose.

We recognise that destination measures may have been affected by the broader impacts of COVID-19, including school and college closures during 2020 and 2021 and alternative grading arrangements. Guidance will be provided alongside the data, to encourage users to approach the data with this context in mind.

We also recognise that, as there were no results-based performance measures published for this cohort of students, schools and colleges have not had the opportunity to check that we are reporting on the right cohort of students as part of the usual checking exercise. We will make this clear to users with guidance alongside the data.

#### How the headline measure works

The headline destination measures' cohort aims for full coverage by including young people aged 16, 17 or 18 who were deemed to be at the end of 16 to 18 study and had been allocated to a school or college, regardless of qualifications entered.

To be counted in the headline measure as having a positive destination, young people must be recorded as having participation in one of the following:

- Six consecutive months at any point in the year (from August to July) in an apprenticeship;
- all of the first two terms of the academic year (October to March) at one or more education destinations; or
- six consecutive months from October to March in employment, although if there is no activity in March then April may be substituted.

Young people with a combination of education and employment, or apprenticeships, meeting the sustained participation criteria are also counted as having a positive destination in the measure.

#### **Data sources**

Data used to compile the measure come from the <u>National Pupil Database (NPD)</u> and <u>Longitudinal Education Outcomes (LEO)</u> datasets with individual student level data matched to a range of administrative sources on education participation, employment records and claims of out-of-work benefits.

Five administrative data sources used in compiling the national pupil database have been used to determine pupils' education destinations:

- individualised learner record (ILR) covering English further education providers and specialist post-16 institutions
- school census covering English schools
- awarding body data
- alternative provision census
- Higher Education Statistics Authority (HESA) data covering UK universities and other higher education institutions (including alternative providers)

Employment data and out-of-work benefit data have been linked to the national pupil database to form the longitudinal education outcomes (LEO) dataset. LEO data is used to calculate employment destinations. Two administrative datasets are used:

- employment data from His Majesty's Revenue and Customs (HMRC)
- out-of-work benefit data from the Department for Work and Pensions (DWP)

A hierarchical series of rules is used to determine whether students meet the criteria for sustained participation and the specific destinations they are reported under if more than one definition is met.

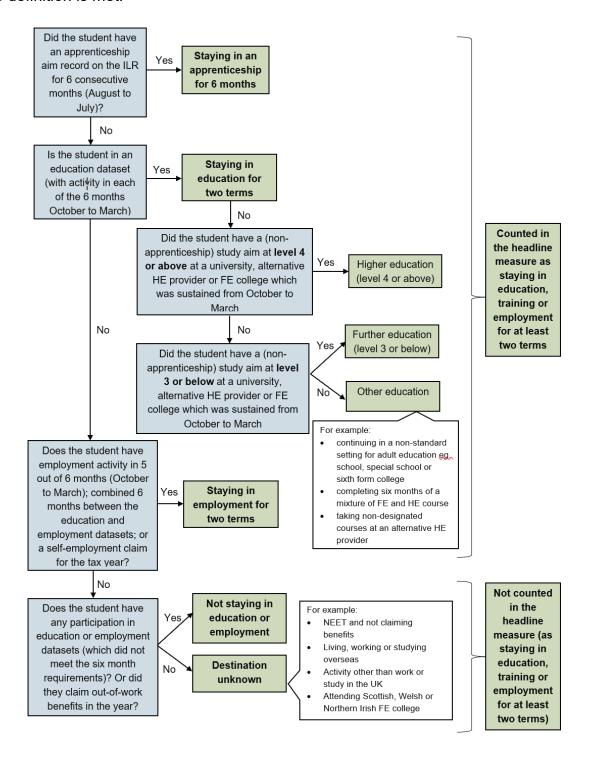


Figure 4: Flowchart which shows how destinations are allocated in the headline destination measure

We are continuing to work with other government departments and with analysts developing the <u>Longitudinal Education Outcomes</u> dataset to improve the scope of activity that can be captured. Strands under development include increasing the range of benefits included and the quality of the employment information, as well as linking to information on Scottish and Welsh schools and colleges. We are hopeful that this will

increase our coverage beyond 97% in future years and more fairly reflect the outcomes of certain institutions.

### **Included institution types**

Destinations are reported for students completing 16 to 18 study at state-funded mainstream schools and colleges. The national and local authority totals on the performance measures website include state-funded mainstream schools and colleges only. Destinations are not reported in the 16 to 19 performance measures for independent schools or special schools (including maintained, non-maintained and independent special schools).

Because destination measures are calculated for students who reached the end of 16 to 18 study at the school or college two years previously not all providers with attainment results have destination measures reported.

Schools and colleges that have both attainment results and destinations include:

- providers which have remained open throughout the period and have not undergone any changes to school type
- providers which have become a converter academy
- providers which have undergone a merger (one continuing provider 'absorbs' another)

Schools and colleges which have attainment results but no destinations reported include:

- providers which have opened (as entirely new schools or colleges)
- providers which have become a sponsored academy
- providers which have formed from an amalgamation (two or more providers come together to form a 'new' provider)
- providers which did not have students completing 16 to 18 study two years previously (this may include schools or colleges which were new)

## Breakdown of data by level of study

Destination results are broken down by level so that schools and colleges with a high proportion of level 2 and below students are not unfairly compared against those that primarily cater to level 3 students. When a student has studied a mixture of qualification types at their allocated institution, the level they are reported against is determined by the size of the exams they have entered at each level. Unapproved qualifications are however only taken into account when the size of approved qualifications for that student totals to less than half an A level (at level 3) or one GCSE (at level 2). The higher level is chosen in the event of a tie.

## Flexible destination years

The majority of level 3 students (about 95%) are allocated to the school or college they are reported against in the same year as which they were deemed to have reached the end of 16 to 18 study. At level 2 and below however a significant proportion (about 20%) of the cohort are not allocated to a school or college in the year in which they are deemed to have reached the end of 16 to 18 study (for example, by having reached the age of 18 but without having completed qualifications equivalent in size to two A levels). We therefore use a 'flexible destination year' methodology, to ensure that we include level 2 students in this situation.

The figure below shows the seven possible attendance patterns over the 16 to 18 study period for the 2019 to 2020 cohort that will be reported on in October 2022. Students who were not allocated to their institution in the year before triggering (groups 3, 6 and 7) are included but with the destination activity taken from an earlier year than the majority of the cohort groups 1, 2, 4 and 5).

This means that not all destinations reported will have taken place in the same year. It allows more students to be included, and it more accurately reflects the influence of the school or college in achieving that destination (which is important for accountability purposes), and it measures the destinations at a more meaningful point in time than if 2020 to 2021 was uniformly used for all students.

	2017/18	2018/19	2019/20	2020/21
Group 1	Х	Х	Х	0
Group 2		X	Х	0
Group 3	Х	Х	0	
Group 4	Х		Х	0
Group 5			Х	0
Group 6		Х	0	
Group 7	Х	0		

Table 28: Diagram showing the seven possible permutations of institution allocation (Xs / purple blocks) in each of the years before triggering as end of 16 to 18 study (blue lines between 2019/20 and 2020/21 columns). Purple blocks / Xs represent a year of allocation; green blocks / Os show the subsequent year chosen for consideration of destination activity.

## Progression to higher education or training

In addition to the headline destination measure, we also publish the 'Progression to higher education or training' measure. The aim of this measure is to encourage schools and colleges to prepare their students for academic, technical and vocational study at level 4 and above.

The measure shows the percentage of Level 3 students from each school or college that continue to degrees, higher technical courses and higher apprenticeships, as well as a

value-added score that shows whether this demonstrates good progress based on the students' prior attainment and qualification type.

Degrees, higher technical courses and higher apprenticeships are treated equally as level 4+ destinations. The measure also contains a Higher Education Institution (HEI) breakdown that shows the number of students progressing to a top-third HEI (determined by the average UCAS points of successful applicants), Russell Group or Oxford or Cambridge HE destination.

This measure is published on a three-year time lag compared to other results-based performance measures, to allow us to see if students sustain their destination, including students that take a gap year after 16 to 18 study. This means that in 2021 to 2022 performance measures this measure will report mostly on level 3 students that completed 16 to 18 study during the 2018 to 2019 academic year.

For 2021 to 2022 there are no impacts on how we calculate the measure due to the data we have committed not to use because of COVID-19. While this measure uses KS4 prior attainment data for the progression score and banding, for the destination measures published in 2022, most students will have KS4 prior attainment from 2017, so we do not face the same issues as we do with the other progress measures – and we can continue to produce and publish this measure this year. We will instead face these issues with not being able to use KS4 prior attainment data in this measure from 2024 to 2025 destination measures onwards, and will provide further information on how we will approach this in due course.

## Students in scope and progression criteria

The cohort for the 'Progression to higher education and training' measure consists only of level 3 students on the grounds that students of level 2 courses and below are not expected to progress directly to a level 4 or higher destination. Students of academic qualifications (such as A levels), applied general qualifications, tech levels and unapproved level 3 qualifications are in scope.

A student is deemed to have successfully progressed to a level 4 or higher destination if they sustain a level 4 or higher course in an HE or FE institution, a level 4 or above apprenticeship, or a mixture of the two for at least six months within the two-year period following their allocation to a school or college at 16 to 18. This measure uses a two-year destination window rather than the headline measure's one-year window to allow for gap years and similar breaks in study. This means that the cohort will be drawn from those level 3 students that were deemed to be at the end of 16 to 18 study in the 2018 to 2019 academic year (rather than the 2019 to 2020 cohort reported on in this year's headline destination measure).

## **Included institution types**

Destinations are reported for students completing 16 to 18 study at state-funded mainstream schools and colleges. Only students at state-funded mainstream schools and colleges are included in the cohort for determining the value-added progression scores. Because destinations are determined for pupils who reached the end of 16 to 18 study at the school or college up to three years previously, not all providers with attainment results have destination measures reported.

### How the progression measure works

The entire level 3 cohort is first grouped according to their qualification type and their prior attainment at KS4. The prior attainment for each student follows the same methodology as is used for the level 3 value-added measure (average GCSE score for students of academic qualifications; average GCSE and vocational equivalents score for students of other qualification types) but students are then placed into deciles. Qualification type for each student is decided using the same methodology as the standard destination measure (using the size of qualifications entered), however students of academic and applied general qualifications are grouped together as they have the same expectation for progression to higher education or training.

Within each combination of qualification type and prior attainment decile the number of students that progress to a level 4 or higher destination is divided by the size of the group to obtain the national average for that type of student. Each student then scores +1 if they progress to level 4+, 0 otherwise, and the national expectation for that student is subtracted. For example, an A level student in the  $9^{th}$  prior-attainment decile might have an 85% probability of progressing to level 4+ according to the national average. If that student does progress then they score 1 - 0.85 = +0.15. If they do not progress then they score 0 - 0.85 = -0.85. These individual scores are then averaged for the school or college and the result multiplied by 100 to convert into percentage points. Thus a value-added score of e.g. +12 represents a 12 percentage point increase on progression to level 4+ when compared to the national average for students similar to that institution's intake.

Level 4+ education or training must be sustained for six consecutive months at any point within the two-year destination window to count as a positive destination. When a sustained period of activity begins in or extends into the second year of the window, that second year will be used to determine the reported destination type such as whether the education or training was an apprenticeship/level 4 or 5 course/degree, and whether Top third/Russell group/Oxbridge flags should be applied. Otherwise, the first year will be used.

### Information included in the performance measures

- Progression Score: This score tells you the proportion of students from this
  school or college that go on to degrees, higher apprenticeships or other study at
  level 4 or above after leaving advanced level qualifications (level 3), taking prior
  attainment into account. For example, if a school/college has more students go on
  to higher education or training than other schools with similar-ability intakes then it
  will receive a positive progression score.
- Confidence intervals: schools and colleges with small cohorts might be more subject to having their score significantly altered by the destination intentions of a few individual students, while larger cohorts will likely see these effects average out. Confidence intervals are provided which represent the range we think the true score is likely to lie in.
- **Total number of students:** The school or college's total cohort size of students that completed 16 to 18 study and entered predominantly level 3 qualifications.
- Students progressing to higher education or training: The proportion of 16 to 18 students that progressed to degrees, higher apprenticeships or other study at level 4 or above for at least 6 consecutive months in the 2 years after taking advanced level qualifications (level 3) at this school or college.
- **Higher apprenticeships:** Proportion of students that sustained a higher apprenticeship destination. A higher apprenticeship is at level 4 or higher and a vocational equivalent to a foundation, bachelor's or post-graduate degree.
- **Degrees:** Proportion of students that sustained a degree destination. Degree destinations include any study at level 6 or higher such as bachelor degrees, graduate diplomas, and post-graduate degrees.
- **Top third higher education institutions:** Proportion of students that sustained a destination at a top-third higher education institution (HEI). This is those HEIs that, when ranked by average UCAS tariff score of entrants across their best 3 A levels, represent 1/3 of that year's total HE entrants.
- Russell group institutions: Proportion of students that sustained a destination at a Russell group higher education institution. The Russell Group is a self-selecting group of 24 research-intensive universities. It includes Oxford and Cambridge universities.
- Oxford or Cambridge: Proportion of students that sustained a destination at Oxford or Cambridge universities.
- Other study at level 4 or 5: Other study at level 4 or 5 destinations include those students studying qualifications such as foundation degrees, Higher National Certificates (HNCs) and Higher National Diplomas (HNDs).
- Students that took academic and applied general qualifications: These students predominantly studied applied general qualifications or academic qualifications such as A levels at this school or college. This table shows their rate of progression from these qualifications to any higher education or training after 16 to 18 (level 3) study.

- Students that took technical qualifications: These students predominantly studied technical qualifications such as level 3 diplomas and advanced technical certificates, equivalent to A levels, at this school or college. This table shows their rate of progression from these qualifications to any higher education or training after 16 to 18 (level 3) study.
- Students taking qualifications not included in 16 to 18 performance measures: These students studied qualifications that are similar in level to A levels and equivalent technical qualifications, but do not meet the criteria for being included in other 16 to 18 performance measures.

## Suppression of destination data

The Code of Practice for Statistics requires us to take reasonable steps to ensure that our published or disseminated statistics protect confidentiality. Values may also be suppressed for small cohorts.

## **Supporting information**

We publish a range of supporting information for destination measures. This includes further breakdowns of the data in school and college performance measures showing more detail on destinations: for example, further education colleges and higher education institutions, apprenticeships, or employment, as well as information on those not sustaining participation in education or employment, and those with no activity captured in our data.

Further information is published in the <u>Destination measures statistical release on</u> <u>Explore Education Statistics</u> showing national trends and characteristics data such as special educational needs, ethnicity, disadvantage and gender. A detailed methodology is available from this page.

# 16 to 18 value-added measures (suspended until the 2023 to 2024 academic year)

In previous years we have produced a progress measure for each cohort. For the level 3 academic, A level and applied general cohorts, this was a value-added measure which showed how well students had done in their qualifications, compared to students nationally that had similar prior attainment at the end of key stage 4. For the level 3 tech level cohort, and level 2 technical certificate cohort, we had used a combined completion and attainment measure to represent progress, although had announced in 2019 that in future years we would be introducing a progress measure Tech Levels. We also intended to introduce a progress measure for Technical Certificates.

## Impact of our commitment not to include qualification results achieved between January 2020 and August 2020

We will not produce or publish value-added progress measures for any cohort at 16 to 18 for the 2021 to 2022 academic year.

This is because this measure relies on KS4 prior attainment data, to consider how well students do in their qualifications, compared to students with similar prior attainment at the end of KS4. For 2021 to 2022 performance measures, the majority of this KS4 prior attainment data would be from 2020, as many students finish 16 to 18 study after two years. We have committed not to use data, including prior attainment data, from qualifications achieved between January 2020 and August 2021 in future performance measures.

We have considered other options that would enable us to produce a progress measure for the 2021 to 2022 academic year, including the possibility of using key stage 2 (KS2) prior attainment data (which for the 2021 to 2022 performance measures cohort would mostly come from 2015). Modelling this approach with 2019 data showed a weak correlation between KS2 prior attainment and 16 to 18 outcomes, so we will not be taking this approach.

We also considered using another type of measure that would provide more information than the attainment measure, but which didn't take prior attainment into account, similar to a completion and attainment measure. We felt that introducing this as an 'alternative progress measure', especially for A levels and Applied General qualifications for which we have never used completion and attainment, would be misleading.

We will include information alongside the other, available measures which make clear that they only represent attainment, and that they do not take prior attainment into account. We will also highlight other performance data which provides more information on how providers support all students, including the Progression to Higher Education and

Training destinations measure, which takes prior attainment into account, and breakdowns of the headline attainment measure for disadvantaged students.

For information, the value-added methodology that we have used in previous years is set out in Annex B.

#### Progress measures at other key stages

We will face the same issue for progress measures at other key stages, in time, when the prior attainment data will also be from 2020 and 2021 (from 2023 to 2024 performance measures at KS2, and from 2024 to 2025 at KS4). We will explore whether there are any alternative options for producing a progress measure in the affected years for KS2 and KS4, and will announce our approach nearer the time, which will not necessarily follow that which we are taking at 16 to 18.

### **Progress measures in future years**

Given that in performance measures for the 2022 to 2023 academic year, value-added measures would rely on KS4 prior attainment data from both 2020 and 2021, we will not be able to produce or publish a value-added progress measure for 2022 to 2023 performance measures, either. We will return to producing value-added progress measures at 16 to 18 again as soon as possible, which will be in 2023 to 2024, at the earliest.

## **Completion and attainment measures**

As above, we have announced that we will be introducing a value-added type progress measure for Tech Levels, to replace the completion and attainment measure. We had been due to share shadow measures for this in Spring 2020, based on data from the 2018 to 2019 academic year, and first publish a Tech Level value-added progress measure in January 2021 for the 2019 to 2020 academic year. This did not happen as for 2019 to 2020 or 2020 to 2021 we did not publish most performance measures, and did not use any 2019 or 2020 results to calculate school or college level data.

We also intend to introduce a value-added type progress measure for level 2 Technical Certificate students, which would also replace the completion and attainment measure.

We now intend to introduce value-added measures for the tech level and technical certificate cohorts when progress measures return (as above, in 2023 to 2024 performance measures at the earliest). Until then, we will not publish a completion and attainment measure for either the Tech Level or level 2 Technical Certificate cohorts. We will share shadow measures, demonstrating what the progress measures will look like for these cohorts, based on data for the 2018 to 2019 performance measures cohort, before the new value-added progress measures are introduced.

# English and maths progress (suspended until 2024 to 2025 performance measures)

English and maths provide a vital foundation to enable students to progress to further study and employment. In previous years, these measures have accounted for the progress of students in English and maths where they did not achieve at least a grade 4 or above at GCSE by the end of key stage 4.

## Impact of our commitment not to include qualification results achieved between January 2020 and August 2020

We will not produce and publish a 16 to 18 English and maths progress measure for the 2021 to 2022 academic year.

We will face similar issues calculating these measures in 2021 to 2022 as we do for the main progress (value-added) measure. This is because the information that we use to count students in scope for these measures is either their KS4 English and/or maths GCSE grade, or their grade in an English and/or maths GCSE, or equivalent, at a previous 16 to 18 provider. This also provides the starting point for calculating the average change in grade. For the 2021 to 2022 performance measures cohort, the majority of these grades will have been awarded between September 2020 and August 2021, which we have committed not to use in future performance measures.

We are therefore unable to produce a progress-type measure for the 2021 to 2022 cohort of students taking English and maths GCSE, or equivalent qualifications, at 16 to 18. This measure will face the same issues for the 2022 to 2023 performance measures cohort, and the 2023 to 2024 performance measures cohort, as a high number of students that are included in this measure are reported after three years of 16 to 18 study. We therefore intend to pause publication of the usual English and maths progress measure for the next three years.

We will not publish any school or college level data on the outcomes of level 2 English and maths qualifications for the 2021 to 2022 performance measures cohort. As the English and maths progress measures are currently the only public-facing performance measures showing how well schools and colleges support the study of English and maths GCSE or equivalent qualifications at 16 to 18, though, we continue to consider whether we could introduce an interim non-progress measure for the 2022 to 2023 and 2023 to 2024 performance measures cohorts, to show some information about the outcomes of students in these qualifications, so that we are not without data on these qualifications at 16 to 18 for the next three years. We are continuing to work on the development of an interim measure, including working with the sector, and we will confirm details of whether we will be introducing such a measure in due course.

The Condition of Funding remains in place, and will be based on a student's individual prior attainment as normal, regardless of which year this was achieved. The Condition of Funding requires that students aged 16 to 18 (and 19 to 25 with an education, health and care (EHC) plan), who do not hold a GCSE grade 9-4, or equivalent qualification in maths and English, and are doing a programme of 150 hours or more, must study maths and/or English as part of their programme, in each academic year. Providers have the freedom to determine when a student is ready to sit exams and assessments in these subjects to support their progress to further study, training and skilled employment.

For information, the English and maths progress methodology that we have used in previous years is set out in <u>Annex C</u>.

#### Additional advanced level maths measure

The department's ambition is for the overwhelming majority of young people in England to study maths to age 18. In previous years, this measure has supported this aim, showing the percentage of students who achieved a GCSE 9-4 or A\*-C grade in GCSE maths (or equivalent) by the end of key stage 4 and go on to achieve a level 3 maths qualification that is approved to count in 16 to 18 performance measures.

As for the English and maths progress measure, this measure relies on KS4 prior attainment data to count students in scope for the measure. Most students reported in performance measures for the 2021 to 2022 academic year will have KS4 prior attainment data from 2020, which we have committed not to use. We will, therefore, not produce or publish this measure for 2021 to 2022. As the measure will face similar issues in 2022 to 2023, when most prior attainment data will come from the 2020 to 2021 academic year, we also will not produce or publish this measure for the 2022 to 2023 academic year. We intend to return to producing and publishing this measure again as soon as possible.

## **Disadvantaged measures**

Headline measures are also produced that just include disadvantaged students in a school or college, to illustrate differences between how well disadvantaged students in a school or college do compared to non-disadvantaged students.

The disadvantage classification follows that used at KS4. Disadvantaged students are all students who were in receipt of pupil premium when they were in their last year of KS4. Note, the pupil premium is distinct from the Service Pupil Premium (SPP); students eligible for the SPP but not in receipt of pupil premium will not be identified as disadvantaged.

For non-destination headline measures, the disadvantage measures do not include students who were not reported at the end of KS4 – for example, because they came from overseas. Students who were known to be at independent schools in their last year of KS4 are treated as non-disadvantaged. However, destination measures group all students not known to be disadvantaged at the end of key stage 4 as "all other students".

Disadvantaged measures are not calculated for independent schools.

## **Multi-Academy Trust measures**

Schools in multi-academy trusts (MATs) include an expanding proportion of the students in the 16 to 18 phase. It is therefore increasingly important that all young people attending a school within these trusts are confident of that trust's effectiveness, and from a delivery standpoint, Regional Directors (RDs) remain informed of MAT performance and can support MATs to focus on 16 to 18 provision where appropriate.

We will publish multi-academy trust (MAT) level performance measures for the 2021 to 2022 academic year. For 16 to 18 at MAT level, we have previously only published the value-added progress measure. We are unable to publish this measure for the next two years as we have committed not to use data, including prior attainment data, based on qualifications awarded between January 2020 and August 2021 (see the section on 16 to 18 value-added measures). From the 2021 to 2022 performance measures, we will therefore publish attainment (APS per entry) at MAT level.

Once we are able to publish progress measures again, we intend to publish both the attainment and the value-added progress measure at MAT level, to better align with school and college-level performance measures.

As in 2018 to 2019 performance measures, we will only produce 16 to 18 MAT measures for 2021 to 2022 for the Academic and Applied general cohorts.

2022 MAT performance measures for 16 to 18 students will be published in February 2023.

## Eligibility for inclusion in the MAT measures

We publish performance data at MAT level for trusts that are sufficiently well established to a) have had time to have an impact on the performance of the academies within the MAT and b) so that aggregate data tells you more than the individual institution data would.

For 2021 to 2022, for each cohort (Academic, Applied General) we will produce measures for MATs:

- that have at least three academies with results, in that cohort, at 16 to 18, and
- where those schools have been with the MAT for at least three academic years (defined as having joined that MAT before 14 September 2019).

This means that we do not produce measures for all MATs. It also means that where we do produce measures for a MAT, the measures may be based on the results from only some of their academies (i.e. a MAT may have at least three academies, that have been part of the MAT for 3 or more years, with results at 16 to 18, but also have academies with results at 16 to 18 that have been with the MAT for less than 3 years). Additionally, a

MAT may be reported for one cohort but not another, if it satisfies the above eligibility criteria for one cohort (e.g. Academic) but doesn't satisfy the criteria for another cohort (e.g. Applied General).

The examples below show how the inclusion criteria would apply for MATs with various compositions.

#### **Example MAT 1**

Academy name	Years in MAT	16 to 18 Academic cohort results?	16 to 18 Applied general cohort results?
Red Academy	7	Yes	Yes
Blue Academy	4	Yes	Yes
Green Academy	2	Yes	Yes
Yellow Academy	2	Yes	Yes

Table 29: Worked example for inclusion criteria for example MAT 1

MAT 1 would not be reported, because while they have four academies, with results for the 16 to 18 cohorts, only two of the academies have been in the MAT for three or more years.

#### **Example MAT 2**

Academy name	Years in MAT	16 to 18 Academic cohort results?	16 to 18 Applied general cohort results?
North Academy	6	Yes	Yes
West Academy	5	Yes	Yes
South Academy	4	Yes	No
East Academy	2	Yes	Yes

Table 30: Worked example for inclusion criteria for example MAT 2

MAT 2 would be reported for the academic cohort, because they have three academies, with academic results, that have been in the MAT for three or more years. However, MAT 2 would not be reported for the applied general cohort, as they do not have three academies with applied general results that have been in the MAT for three or more years.

We last produced MAT measures for the 2018 to 2019 academic year, as we did not publish most school or MAT level performance measures for the 2019 to 2020 or 2020 to 2021 academic years, due to the suspension of most exams and assessments. Since

then, we know that the number of MATs that have at least three academies, that have been part of the MAT for at least three years has increased – as the MAT sector has continued to mature. This means that we expect that for the 2021 to 2022 academic year we will be producing measures for significantly more MATs than we did for the 2018 to 2019 academic year, and some MATs will have MAT measures produced for the first time.

The measures cover state-funded mainstream academies (including academies with sixth forms, 16-19 academies, University Technical Colleges (UTCs) and studio schools) within MATs. Special schools, pupil referral units, alternative provision academies and alternative provision free schools are not included.

Previously, we have also reported at sponsor level, for the very small number of MATs this affects. We will no longer be reporting at this level.

## Calculating the attainment measure at MAT level

As above, for 2021 to 2022 performance measures, we will produce the attainment measure (APS per entry) at MAT level, for the Academic and Applied general cohorts.

We will also produce breakdowns of these measures for disadvantaged pupils - provided that a MAT has results from disadvantaged students, for each cohort, at three academies that have been in the MAT for three or more years.

The Average Point Score per entry for a MAT is based on the weighted average of its individual academies' respective APS per entry scores. Weighting is employed when calculating the average to ensure an academy's contribution to the overall score is proportional to its size. At 16 to 18, size is not determined by the number of pupils but rather the number of entries. This is because pupils may take different numbers of qualifications, and qualifications themselves can have varying size (with larger qualifications counting as larger entry).

The example below shows how this weighting is applied to calculate the measures

#### Example MAT 2

Academy	Years in MAT	Included in calculation?	APS per entry	Total Entries
North Academy	6	Yes	41	80
West Academy	5	Yes	38	90
South Academy	4	Yes	42	100
East Academy	2	No	36	110

Table 31: Worked example for calculating APS at MAT level for example MAT 2

We would calculate the APS per entry for MAT 2 in the following way:

$$\textit{MAT APS per entry} = \frac{41*80 \, + \, 38*90 \, + \, 42*100 \, + \, \textit{Not Counted}}{80 + 90 + 100 + \textit{Not Counted}}$$

Note that 'Not Counted' refers to East Academy, which is 'not counted' because it hasn't been in the MAT for 3 or more years.

## Additional information published on the school and college performance measures website

### **Subject entries information**

As part of the small amount of information that we did publish for the 2020 to 2021 academic year, we started publishing information on the number of exam entries in each subject (for qualifications that count in 16 to 18 performance measures) at a school or college. We will continue to include this information on the 16 to 18 performance measures website for the 2021 to 2022 academic year, and in future years.

### **Apprenticeship reporting**

Qualification achievement rates (QARs) for 16 to 18 year old apprenticeships are shown alongside the performance measures detailed in this guidance, on the <u>school and college</u> performance measures website.

This data is currently published in National Achievement Rate Tables, updated annually at the following link:

https://explore-education-statistics.service.gov.uk/find-statistics/apprenticeships-and-traineeships

The QAR shows the proportion of apprenticeships in an institution that were achieved, calculated as the number achieved in an institution divided by the number started for the relevant year. The relevant year is defined as the 'Hybrid End Year', which is the later of the Achievement Year, Expected End Year, Actual End Year or Reporting Year of an apprenticeship. Students who start an apprenticeship but transfer to another qualification within the same institution are excluded from the calculation. Full details of the methodology are available at this link:

Qualification achievement rates and minimum standard— - GOV.UK (www.gov.uk)

There are two significant differences between the QAR and the other 16 to 18 performance measures reported on the school and college performance measures website. Firstly, QAR reporting is not subject to allocation rules (see section on allocation rules). This means that in the QARs a student could be reported against more than one institution in a given academic year (in this case if they started apprenticeship aims in different institutions). Secondly, the cohort of students in the apprenticeship QAR are academic age 16 to 18 when they started the apprenticeship framework, so unlike other performance table measures could be aged 19+ when they achieved (or did not achieve) the apprenticeship framework

### Post-16 qualifications review

We are in the process of reforming the post-16 qualifications system. The aim of the review is to streamline the complex qualifications landscape, creating clear choices for young people and adults. We want to ensure that every qualification approved for public funding are both needed, and high-quality.

### Level 3 qualifications review

At level 3 the qualifications review will improve the quality of both technical and academic qualifications on offer. We want A levels and T Levels to become the qualifications of choice for 16 to 19 year olds studying at level 3 in an education setting. A levels are world renowned, and will be central to the study programmes of most students taking the academic pathway to progress to university. T Levels are co-designed by employers to ensure students develop the skills required by business and industry. They focus on occupational skills and can help students into skilled employment, higher study or apprenticeships. T Levels are intended to provide new, world class technical education, and we want as many people as possible to benefit from them, just as many thousands of young people on the academic route already benefit from rigorous and well-respected A levels.

We recognise, however, that there will be a need for other qualifications to support the core A level and T Level offer. These will only be funded where they are high quality and have a clear purpose that adds value to that core offer. The government response to the second consultation on post-16 qualifications reform sets out the types of academic and technical qualifications that will be considered for funding alongside A levels and T Levels. The Secretary of State for Education will determine which qualifications at level 3 should be approved for funding. This will follow approval by the Institute for Apprenticeships and Technical Education (IfATE) for technical qualifications.

The new funding approval process will ensure that all qualifications are high quality, which we expect will lead to greater alignment between the qualifications that are funded for 16 to 18 year olds, and the qualifications which count in 16 to 18 performance measures. Full details of the process for adding qualifications to the list of qualifications that count in 16 to 18 performance measures, performance points and approach to discounting will be shared in due course.

For more information, please see the <u>department's guidance on the Review of post-16</u> <u>qualifications at Level 3 in England</u>.

### Level 2 and below qualifications review

As at level 3, the review of qualifications at level 2 and below aims to improve the quality of both technical and academic qualifications. It aims to streamline the qualifications landscape and make it easier for students, providers and employers to understand.

It is vital in a fast-moving and high-tech economy that education closes the gap between what people study and the needs of employers. Our education system must deliver the skills we will need in the future to strengthen the economy.

We recognise the diversity of the cohort studying at level 2 and below. Individuals who take these qualifications will have very different backgrounds, achievements, needs, aspirations and motivations. Qualifications at these levels are more likely to be taken post-16 by students from disadvantaged backgrounds or with special educational needs or disabilities. Our proposed landscape will serve all students better.

We want to ensure that all qualifications that are approved for public funding in future are high quality, have a clear purpose, and will lead to strong progression outcomes, with every student having a range of options leading either into employment or into further study (or, for a small minority of students, independent living).

In April 2022 we consulted on our proposals for reforms to qualifications at level 2, level 1 and entry level. The government response to the consultation will be published later this year.

We will confirm in due course what the outcomes of the qualifications review will mean for which measures and cohorts are reported in performance measures.

### Future plans for accountability measures

### Reporting on college groups

Currently in 16 to 18 performance measures, we report at college level, or college group level depending on which is the legal entity, which is important for accountability. However, the sector has been changing with more colleges expanding and merging into large college groups where the legal entity may feel far removed from the site where education is delivered.

Following public consultation college groups will soon also be reported in their constituent parts i.e. colleges. This is to aid transparency for the students and local accountability. It will supplement existing reporting and not replace it. <u>Information on the public</u> consultation is available.

Eligible college groups will allocate students to a college in the Individualised Learner Record (ILR) where they are principally based. If the student is allocated to that college group based on current allocation principles (<u>allocations section</u>), performance measures will also be disaggregated to the colleges eligible for reporting within the college group.

We had been due to create and share shadow data based on data for the 2019 to 2020 and 2020 to 2021 performance measure cohorts, ahead of the first planned publication of disaggregated data of college groups as part of 2021 to 2022 performance measures. Due to COVID-19 and us not publishing results achieved from January 2020 and August 2021, this timetable has changed. Shadow data will now be created for the 2022 to 2023 performance measures cohort with the expectation to publish live data for the 2023 to 2024 academic year.

### T Level accountability measures

### **Background**

T Levels are new courses being rolled out nationally from September 2020, which are equivalent to 3 A levels. These 2-year courses have been developed in collaboration with employers and business so that the content meets the needs of industry and prepares students for skilled employment. T Levels will become one of the main choices for students after GCSE alongside A levels for students who wish to continue academic education, and apprenticeships for students who wish to learn a specific occupation 'on the job'. You can find out more information about T Levels at Introduction of T Levels - GOV.UK (www.gov.uk).

Following a public consultation, the government response set out at a high-level five headline accountability measures for T Levels that we intend to develop and publish as part of 16 to 18 performance measures:

- Attainment
- Completion
- English and maths
- Progress
- Destinations

We will first publish 16 to 18 performance measures for T Level students for the 2023 to 2024 academic year (ie for students starting T Levels in September 2022, and completing them in summer 2024). In that first year, we will publish attainment measures, and will confirm in due course if any of the above measures will also be published in that year, or whether they will be introduced in future years <sup>14</sup>. Shadow measures for the first set of measures will be shared with schools and colleges only, in the prior academic year, based on T Level students that completed their study in the 2022 to 2023 academic year.

We have set out below how we expect to calculate T Level performance measures. All details will be confirmed again closer to the time that we publish T Level measures for the first time.

### **Attainment**

The attainment measure will show a school or college's attainment in each of the Technical Qualification (TQ) elements of the T Level. The attainment measure will show the average grade that students attain and builds on the average point score per entry data (expressed as a grade) that is currently published as part of 16 to 18 performance measures.

### How we expect the new measure will work

Separate attainment scores will be derived for the different TQ components: the core theory ('Core'), and the specialist skills for a particular occupation or career ('Occupational Specialism' or OS).

To derive the average point score, within each TQ component, we will take the total point score achieved by all students and divide by the total entry size. Both the Core and OS component types will be attributed a size of 1 irrespective of actual guided learning hours.

<sup>&</sup>lt;sup>14</sup> The T Level measures that we are able to produce for 2023/24 are affected by the fact that we are not able to produce the full suite of measures for the next few years, given our commitment not to include qualification grades achieved between January 2020 and August 2021.

Average point score =  $\frac{\text{Total component point score for all students}}{\text{Total size of component entries for all students}}$ 

Point scores for both the Core and OS will range from 0-60, in parallel with A level points. These average points scores will be assigned an average grade based on the average point score band rules set out in tables 32 and 33 below.

Outcomes will be reported where a student has entered for an assessment in either a Core or OS component, irrespective of whether the student completes the overall T Level. This means the treatment of students taking TQ components as part of a T Level in the headline attainment measure is the same as a student taking A levels instead as part of their study programme. Withdrawals to level 3 apprenticeships or above, or alternative educational provision (A levels, tech levels) however, will not be reported as a fail.

Core grade	Core point score	APS band	Fine grade <sup>15</sup>
A*	60	>= 58.34 - 60.00	A*
A*	60	>= 55.00 - < 58.34	A*-
А	50	>= 51.67 - < 55.00	A+
А	50	>= 48.34 - < 51.67	А
A	50	>= 45.00 - < 48.34	A-
В	40	>= 41.67 - < 45.00	B+
В	40	>= 38.34 - < 41.67	В
В	40	>= 35.00 - < 38.34	B-
С	30	>= 31.67 - < 35.00	C+
С	30	>= 28.34 - < 31.67	С
С	30	>= 25.00 - < 28.34	C-
D	20	>= 21.67 - < 25.00	D+
D	20	>= 18.34 - < 21.67	D
D	20	>= 15.00 - < 18.34	D-
E	10	>= 11.67 - < 15.00	E+
Е	10	>= 8.34 - < 11.67	E
Е	10	>= 5.00 - < 8.34	E-
U	0	< 5.00	U

Table 32: Average grade per T Level core qualification

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<sup>&</sup>lt;sup>15</sup> Fine grades for the core are assigned by evenly distributing the points around the points/grades for a qualification with a 6-grade structure (A\*/A/B/C/D/E). For example, fine grades such as B-, B and B+ are assigned by evenly distributing the points around the core point score of 40.

OS grade	OS point score	APS band	Fine grade <sup>16</sup>
Distinction	60	>= 56.67 - 60.00	Dist
Distinction	60	>= 50.00 - < 56.67	Dist-
Merit	40	>= 43.34 - < 50.00	Merit+
Merit	40	>= 36.67 - < 43.34	Merit
Merit	40	>= 30.00 - < 36.67	Merit-
Pass	20	>= 23.34 - < 30.00	Pass+
Pass	20	>= 16.67 - < 23.34	Pass
Pass	20	>= 10.00 - < 16.67	Pass-
U	0	< 10.00	U

Table 33: Average grade per T Level occupational specialism (OS) qualification

### Completion

It is important to provide an indicator of schools' and colleges' overall completion rate of T Levels, which parents and employers can easily understand and use to compare schools and colleges. T Levels are a significant undertaking and bring together a variety of components – as such, we want schools and colleges to ensure that students leave 16 to 18 study with a valuable T Level qualification. The completion measure will show the proportion of students who complete all required components of their T Level study programme.

#### How we expect the new measure will work

Students who are recorded as enrolled on a T Level study programme, or have component aims (in the ILR or School Census), or results from TQ components in Awarding Organisation data are in scope for this measure. A student is considered to have completed a T Level if they achieve an overall pass grade in a T Level pathway. In practice this will require that:

- They pass the TQ (core and OS components)
- They complete the industry placement

<sup>&</sup>lt;sup>16</sup> Fine grades for the occupational specialism are assigned by evenly distributing the points around the points/grades for a qualification with a 3-grade structure (D/M/P). For example, fine grades such as Merit-, Merit and Merit+ are assigned by evenly distributing the points around the core point score of 40.

 They are recorded as having completed any additional other requirements for that T Level pathway.

A student will only count once toward the overall completion rate in a school or college. Where a student has an incomplete and complete T Level (perhaps because they transferred between different T Level routes or pathways), the complete T Level will take precedence, and the student will be counted as complete. Where a student has two incomplete T Levels, even if they pass components, or complete elements from both, without on overall passing grade for a T Level pathway they remain incomplete for the accountability measure overall.

### **English and maths**

The condition of funding will apply to all students starting T Levels from academic year 2022 to 2023 in the same way is it does to students on 16 to 19 study programmes.

As such we expect that the English and maths accountability measure for T Level students will use the same methodology as the current English and maths accountability measure.

As in the section on the <u>English and maths progress measure</u>, due to the commitment to not use prior attainment data from qualifications achieved between January 2020 and August 2021, we will not produce or publish the English and maths progress measure in its current form until 2024 to 2025 performance measures. We are considering whether we could produce an alternative non-progress measure in the interim.

### **Progress (value-added)**

The T Level consultation document indicated respondents supported a progress measure, but with reservations about the possibility of developing a value-added measure for technical qualifications given that historically GCSEs are not a good predictor of outcomes for technical qualifications. It is expected that this progress measure will follow a similar methodology to the existing 16 to 18 value-added progress measure, however until we have the results from the first T Level cohorts, the approach set out below should be regarded as indicative of how the progress measure would work.

It should also be noted that as detailed in the section on <u>16 to 18 value-added measures</u>, the publication of usual value-added progress measures has been paused until the 2023 to 2024 performance measures due to the commitment of not using data from qualifications achieved between January 2020 and August 2021.

We expect that the T Level-specific progress measure would show the progress students make between KS4 and the TQ components of the T Level (core and occupational specialism) for a school or college. Students would be compared with other students

studying the same components nationally before being aggregated to give an overall score for a school or college. This score will be expressed as a proportion of a grade above or below the national average in each component type.

### How we expect the new measure will work

As laid out in the current value-added progress measure, a student's prior attainment will be their average attainment at key stage 4. We expect to use students' prior attainment in all qualifications achieved at key stage 4 (in common with value-added for the current applied general cohort). As in the headline attainment measure, there is no penalty if a student withdraws or transfers to do a level 2 apprenticeship, alternative qualifications such as A levels, or another destination.

Completion of the overall T Level programme will not affect whether a learner's components are included in the measure.

The core and occupational specialism components included in the VA measure will depend on the number of students and schools/colleges offering them nationally. As now, we expect to have a lower limit of at least 16 students across five schools or colleges for a particular component qualification to be in scope for the value-added measure.

### Future plans - timescales for implementation

The below table shows the expected timeline for the roll out of changes set out in the previous section on future plans for accountability measures. It covers the publication of statistics, and the sharing of 16 to 18 shadow data (see below). The aim is to fully test out new methodologies and prepare the sector for full implementation of new accountability cohorts (e.g. T Levels) or measures (e.g. tech level value-added).

There are two types of data release described in the timetable 'Shadow data' and 'published'. Shadow data means measures created using non-final methodology, and shared with schools and colleges only. The methodology may not exactly replicate what is later applied in performance measures. The outputs are shared with individual schools and colleges to both incentivise behaviour, and also to invite feedback ahead of public implementation.

The timeline will be updated once we are in a position to clarify the timing for the introduction of all T Level measures

Date of publication / sharing	Data release	Access	Cohort
TBC – ahead of publication	Progress (16 to 18 value-added) Progress measures for tech level and technical certificate cohorts	Shadow data (schools and colleges only)	2019
Spring 2024	College group data (measures TBD)	Shadow data (schools and colleges only)	2023
Spring/ summer 2024	T Level measures: Attainment (any other measures TBD)	Shadow data (schools and colleges only)	2023
Spring 2025	Progress (16 to 18 value-added) Progress measures for all cohorts (except T Level) – including for the first time, tech level and technical certificate cohorts	Published	2024
Spring 2025	College group data (measures TBD)	Published	2024
Spring 2025	T Level measures: Attainment (any other measures TBD)	Published	2024

Table 34: Timescales for implementation of future changes to performance measures

A timeline of changes made to 16 to 18 performance measures previously can be found in Annex A.

### **Data sources**

### Attainment and retention measures

These are the data sources for the 16 to 18 performance measures for the 2022 to 2023 academic year:

- Student 'on roll' status, for allocation of students to schools: spring school census for 2021/22, 2020/21 and 2019/20. For general guidance on the school census click here: https://www.gov.uk/guidance/school-census
- Student core aim, for allocation of students to colleges: ILR SN10 for 2021/22; ILR SN14 for 2020/21 and 2019/20. For general guidance on ILR click here: <a href="https://www.gov.uk/government/collections/individualised-learner-record-ilr">https://www.gov.uk/government/collections/individualised-learner-record-ilr</a>
- Students' learning aims, for retention measures: ILR SN14 for 2021/22, 2020/21 and 2019/20.
- Learning Aims from the autumn school census relating to education completed in 2021/22, 2020/21 and 2019/20 academic years for retention measures.
- School census funding relating to education completed in 2021/22, 2020/21 and 2019/20 academic years for retention measures.
- Students' exams in the 16 to 18 phase: awarding organisation data for 2021/22 and previous years (however, excluding covid-impacted results from Jan 2020 to August 2021).

### **Destination measures**

Students who had previously been recorded as being at the end of 16 to 18 study are matched to a wide range of data sources that contain information about their activity in the following academic year.

Matching takes place at individual level using personal identifiers such as name, date of birth and postcode. Information on the students' activity throughout the following academic year, as recorded across these administrative datasets, is used to determine whether they sustained an education or employment destination, and the specific category they are recorded against.

Many of the datasets used to determine whether a student continued participating in education form part of the National Pupil Database (NPD):

- individualised learner record (ILR) covering English further education (FE) sector colleges, other FE providers and specialist post-16 institutions (SPIs).
- school census (SC) covering state-funded schools in England. This includes state-funded and non-maintained special schools and pupil referral units (PRU) and the alternative provision (AP) census.
- awarding body data for independent schools

 Higher Education Statistics Agency (HESA) data covering United Kingdom higher education institutions and higher education alternative providers

The Longitudinal Educational Outcomes (LEO) dataset extends the national pupil database by linking employment, earnings and benefits data from other government departments to education data at an individual level:

- employment data from HM Revenue and Customs (HMRC) including selfemployment
- out-of-work benefit data from the Department for Work and Pensions (DWP)

These sources give reliable information about participation throughout the year and do not rely on self-report or activity at a single point in time. Activity was captured in these sources for 97% of 16 to 18 students in 2014/15. We cannot include evidence from sources beyond those listed at this point in time, but will continue to investigate further datasets for future years.

Additional information from the Universities & Colleges Admissions Service (UCAS) showing students having an accepted deferred offer for a UK higher education institution is shown alongside their recorded activity in the year.

### **Annex A: Timeline of changes since 2016**

The table below provides a high-level summary of the range of measures since 2016, detailing extensions to reporting (additional measures, or extending coverage to include more qualifications). It also outlines any methodological changes to how measures are calculated. Note methodological changes are not applied retrospectively to previous cohorts / tables.

Year	Change
	Vocational qualifications reported separately for <b>tech levels and applied general qualifications</b> , following the review of vocational education and recommendations by Professor Alison Wolf.
	A new set of headline measures were introduced, covering:
2016	<ul> <li>Level 3 progress: value-added for academic and applied general qualifications; combined completion and attainment measure for tech levels</li> </ul>
	<ul> <li>Attainment based on average grade for academic, applied general and tech levels</li> </ul>
	<ul> <li>English and maths progress (for students who complete key stage 4 without an A*-C/9-4 GCSE in these subjects).</li> </ul>
	Retention measure
	<ul> <li>Destination measures (reporting on cohort of 16 to 18 students reported in other measures in 2014 tables)</li> </ul>
	New cohort introduced: level 2 vocational qualifications and technical certificates;
	<b>Disadvantaged measures introduced:</b> Disadvantaged status at end of KS4 applied to headline measures;
	New additional measures introduced:
	level 3 maths measure;
	technical certificate measure;
2017	<ul> <li>returned and retained for a second year;</li> </ul>
	<ul> <li>retained and assessed measure</li> </ul>
	<b>Methodology change:</b> Update to completion and attainment measures, such that:
	<ul> <li>Aggregate score now weighted by the relative size of each qualification.</li> </ul>
	<ul> <li>Change to subject grouping methodology. Qualifications of the same subject with different awarding bodies now grouped together rather than grouped separately (as they were in the 2016 tables).</li> </ul>

Year	Change		
	Multi-academy trust measures introduced: progress measures for academic (including A levels) and applied general cohorts;		
	<b>Apprenticeship measures introduced:</b> Qualification achievement rates (QARs) for 16 to 18 year old apprenticeships reproduced in performance tables;		
	New supporting measures introduced:		
	<ul> <li>English and maths progress: the proportion of students in scope for either the English and/or maths measures who enter an approved qualification;</li> </ul>		
	Level 3 vocational measures: the proportion of students entering level 3 vocational qualifications that count in the 16 to 18 performance tables as a proportion of the total number of students entering any level 3 vocational qualifications. The measures are published separately for applied general students and tech level students.		
2018	Methodology changes in 2018:		
	<ul> <li>English and maths progress: schools and colleges are able to remove apprenticeship students from 2018. This is in line with the condition of funding policy;</li> </ul>		
updated. From 2018, the KS4 used when calcular Qualifications in scope performance tables in a 2018, the first entry a sequalifications on the appropriate tables.  • Destination measures year lag with the other allocation rules from 20 have studied an appropriate to an institution.	Level 3 value-added: Methodology for KS4 prior attainment updated. From 2018, the best result in any subject achieved in KS4 used when calculating the average point score. Qualifications in scope will be those that count in KS4 performance tables in any year from 2014 onwards. Before 2018, the first entry a subject was used, and only vocational qualifications on the approved list for inclusion in the year when the student was at the end of KS4 were included.		
	Destination measures: As destination measures are on a 2-year lag with the other measures, changes to the institution allocation rules from 2016 come into effect. A student must have studied an approved level 3 qualification and have been allocated to an institution in the 2016 academic year to be included in 2018 Destination measures.		

Year	Change	
	<b>Progression to higher education or training:</b> This value-added measure shows the number of level 3 students that progress to a sustained level 4 or higher destination (apprenticeships, level 4/5 courses and degrees).	
	<b>Level 2 vocational cohort withdrawn:</b> from 2019 at level 2 only approved technical certificate qualifications are reported in attainment, completion and attainment, and retention measures.	
2019	Methodology changes in 2019:	
	Destination measures: The cohort of students in scope for destination measures is expanded to include students of level 2 and below and unapproved qualifications. Students that did not attend their school or college in the year in which they were deemed to have reached the end of 16 to 18 study are also included by implementing a flexible destination year methodology.	
2020	No accountability measures produced (apart from destination measures) due to the COVID-19 pandemic and the cancellation of most exams, tests and assessments	
2021	No accountability measure produced (apart from destination measures) due to the COVID-19 pandemic and the cancellation of most exams, tests and assessments In 2020/21, we published information on the number of exam entries in each subject (for qualifications that count in performance tables) at a school or college. We will continue to include this information at the 16 to 18 Find Schools and College Performance data website for 2021/22, and in future years.	
	Accountability measures return – attainment, retention and destinations	
2022	Attainment measures: calculated excluding entries and grades awarded awarded between January 2020 and August 2021 (as alternative assessment arrangements were used to award these grades)	
2022	Retention measures: calculated as normal	
	No progress measures (16 to 18 value-added and English and maths), as we would need to use KS4 results data from between January 2020 and August 2021 to calculate them.	
	Attainment measures produced at MAT level, instead of progress measures.	

Table A.1: Timeline of changes since 2016

# Annex B: 16 to 18 Value-added (progress) measure methodology (measure suspended until 2023 to 2024 performance measures)

### Measure suspended until 2023 to 2024 performance measures

This section explains how we have calculated the value-added progress measures for academic and applied general qualifications in previous years. We are not producing these measures for the 2021 to 2022 performance measures cohort and this information is here for information only. See the <a href="main section on 16-18 value added measures">measures</a> for more information.

The value-added progress measure shows how well students have progressed when compared with students with similar prior attainment. Progress is shown separately for academic and applied general qualifications.

The 16 to 18 value-added measure shows the progress each student makes between key stage 4 and graded level 3 qualifications (excluding tech levels), compared with the actual progress made by students nationally who had similar levels of attainment at key stage 4. Students are compared with other students studying the same qualification nationally before being aggregated to give an overall score for a school or college. This score is expressed as a proportion of a grade above or below the national average, e.g. students achieve half a grade lower than the national average for those with similar starting points.

### 16 to 18 value-added overview

### Students included in the measure

To be included in the 16 to 18 value-added measure, a student must:

- have results at the end of key stage 4.
- have completed an academic or applied general qualification (see the section on qualifications). If they enter and fail they are included, but if they withdraw and don't enter, they are not.

### Qualifications included in the measure

Only academic qualifications and qualifications on the approved applied general list (see the section on <u>qualifications</u>) are included in value-added measures. In addition, qualifications are only included if at least 16 eligible students, in at least five schools or colleges, have an exam result.

### How the measure works

For all students, we work out their average attainment at key stage 4. For academic qualifications, students' prior attainment is based on their average attainment in GCSEs only<sup>3</sup>. For applied general qualifications, students' prior attainment is based on all qualifications achieved at key stage 4.

From 2018 onwards, prior attainment in level 3 value added (L3VA) reflects the points scales used at KS4 in the current reporting year for all students (e.g. for the 2019 L3VA, the scale used for GCSE and other qualifications will be the points used in the 2019 key stage 4 performance measures). Qualifications in scope are all those approved in key stage 4 performance measures in any year from 2014 onwards. Simple discounting rules apply, with the best result in any subject used when calculating the average point score. Resits or additional qualifications gained during 16 to 18 are ignored.

To calculate the progress made by students taking the same qualification nationally we first divide students into up to 20 bands based on their prior attainment. We then calculate the average attainment for each of these bands. This allows us to compare a student's result with the average result of students with equivalent prior attainment taking the same qualification. The difference between the two is the student's value-added score in that qualification.

The students' value-added scores are then aggregated to create separate scores for academic qualifications and applied general qualifications for each school or college. The supporting information allows schools and colleges to see value-added scores for specific qualifications and qualification types (e.g. A levels). All results are shown with confidence intervals.

### Value-added calculations

The calculation of L3VA contains four main steps, where each step will be explained in detail in the following sections:

- Calculating the national average grade for comparison
- Calculating student value-added (VA) scores
- Calculating school and college VA scores
- Calculating confidence intervals

### Calculating average prior attainment at key stage 4

The starting point for the L3VA calculation is to determine each student's key stage 4 prior attainment. Prior attainment reflects the point scale used at KS4 in the current reporting year. For specific points information see the <u>Key stage 4 performance points for qualifications that count in performance measures</u>.

Different qualifications are taken into account when calculating VA scores for qualifications in the academic or applied general cohorts. As a subset of the academic cohort, the calculation for the A level cohort follows the same method as the academic cohort:

Qualification type	Average prior attainment based on
Academic qualification	If academic VA scores are being calculated, the average prior attainment is based on students' GCSEs grades only.
Applied General qualification	If applied general VA scores are being calculated, the average prior attainment is based on all students' key stage 4 results.

Table B.1: Which data average prior attainment is based depending on which cohort / qualification type the VA score is being calculated for

- For both categories, only qualifications achieved during key stage 4 are included in the prior attainment calculation. Re-sits or additional qualifications gained during the 16 to 18 study phase are not included.
- Qualifications in the same subjects will be discounted.
- AS levels taken before a student reaches the end of key stage 4 are included in the prior attainment calculation for both academic and applied general L3VA.

To calculate prior attainment of students, we first identify exams that are done both during KS4, and are approved for reporting in KS4 tables (in any year from 2014 onwards). Simple discounting is applied to pick exam entries that had the highest points for a particular subject, filtering out lower scoring results. This will usually return the best entry that a student sat. The points they received from their exam entries are averaged – weighted by the qualification size of their entries – to return their average point scores.

This process is applied both a student's GCSE entries – to use as prior attainment for L3VA academic qualifications – and to all of a student's KS4 entries – to use as prior attainment for L3VA applied general qualifications.

### Worked example

The student below achieved 4 GCSEs at grade 4 (worth 4 points each) and an OCR Level 1/2 National Certificate at grade M2 (worth 5.5 points) in key stage 4. Each qualification is equivalent to a size of 1.

Academic qualification	Applied general qualification
For academic VA scores, only the student's GCSE grades are included:	For applied general VA scores, all of the student's key stage 4 qualifications are
Total points: 4*4 = 16	included:
Total size: 4*1 = 4	Total points: 4*4+1*5.5 = 21.5
Total points/total size: 16/4 = 4	Total size: 5*1 = 5
Average prior attainment at KS4:	Total points/total size: 21.5/5 = 4.3
APS per entry = 4	Average prior attainment at KS4:
	APS per entry = 4.3

Table B.2: Comparison of the way academic VA scores ad Applied General VA scores are calculated

### Calculating the national average grade

After determining each student's key stage 4 average prior attainment, the next step is to calculate the national average grade of every level 3 qualification type that will be included within the L3VA report for comparison.

At the start, data for a particular subject are taken – for example A level design and technology<sup>17</sup>.

For each student taking this subject, their average key stage 4 prior attainment and their A level grade are plotted on a chart and divided into 20 bands 18 based on their prior attainment. Each band contains the same number of students.

The first band contains the 5 per cent of students with the lowest prior attainment. In the example below, these mainly achieved 4, grades in their GCSEs. The 20<sup>th</sup> band contains the 5 per cent of students with the highest prior attainment. They mainly achieved 8 grades in their GCSEs.

<sup>17</sup> This example shows an A level but the methodology is equivalent for both academic and applied general qualifications.

<sup>18</sup> There are usually 20 bands. However, if the 20 bands model does not fit well for a qualification due to various reasons, this is reduced to 10 bands, 5 bands or 1 band. 1 band is used where there is a poor relationship between prior attainment at key stage 4 and outcome in level 3 qualifications, for example where there are only a small number of students entering the qualification.

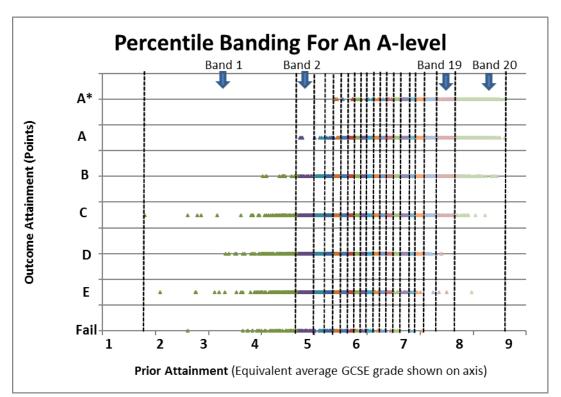


Figure B.1: Percentile Banding for an A-level

The average attainment for each of these 20 bands can then be calculated. As prior attainment increases, the 16 to 18 attainment will typically increase<sup>19</sup>. This reflects the fact that students who get better grades at key stage 4 typically do better at 16 to 18.

19 Where the outcome attainment does not increase steadily with prior attainment, hands will be com-

<sup>&</sup>lt;sup>19</sup> Where the outcome attainment does not increase steadily with prior attainment, bands will be combined to create an average attainment based on a larger number of students. This will ensure a steadily increasing or level line. The methodology used is called "pool adjacent violators smoothing".

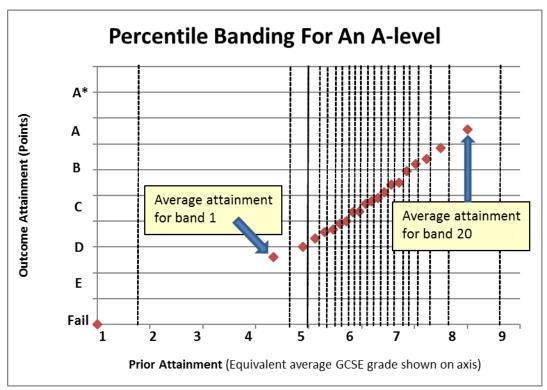


Figure B.2: Percentile Banding for an A-level

In the example below, for band 1, the students with the lowest attainment, the average A level grade in this subject is just below a 5 grade. For band 20, the students with the highest prior attainment, the average A level grade in this subject is around an 8 grade.

These averages can then be "joined up" by drawing a straight line between the points to get a line of average attainment, which shows that students with higher prior attainment typically get better grades. The line is also extrapolated with the lowest and highest grades achieved in the qualification type being the starting and ending points respectively.

For example, the figure below shows that students whose average prior attainment was equivalent to a 6 grade at GCSE on average attain a C grade at this A level (30pts).

Value-added uses the same point scores for outcome attainment as those used in the headline attainment measure with one exception. A fail grade in the full International Baccalaureate (IB) scores 91pts (rather than 0pts). This is to avoid a cliff-edge effect compared to students who narrowly pass the IB (the lowest pass grade 24 scores 100.5 pts, pass grade 25 scores 110 pts, pass grade 26 scores 119.5 pts etc).

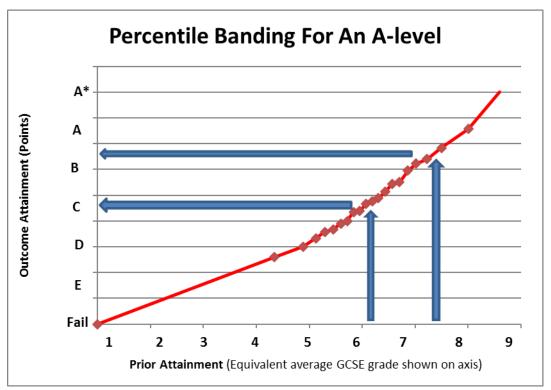


Figure B.3: Percentile Banding for an A-level

### **Calculating value-added scores**

This is the second step of how the L3VA calculation works.

### Calculating student value-added scores for individual qualifications

The line of average attainment from the previous section can then be used to calculate the VA scores. These are the difference between actual A level attainment and average A level attainment for students with the same key stage 4 prior attainment.

For example, if a student achieves an A grade when the average attainment for a student with that prior attainment in that subject was a C grade, the VA score is +2 grades. Where the difference between the average attainment and the actual attainment is a fraction of a grade, the VA score will be a decimal. VA scores are reported to 2 decimal points.

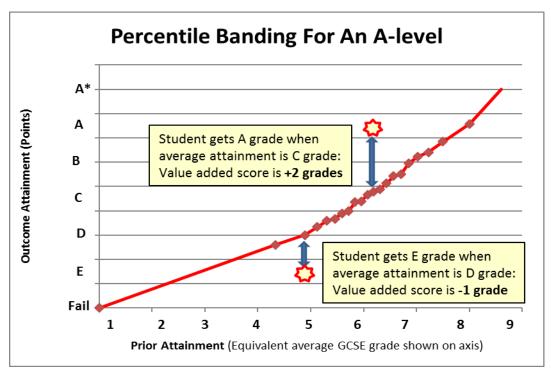


Figure B.4: Percentile Banding for an A-level

The percentile banding approach allows for the average attainment to be calculated in a way that closely aligns with the underlying data. This minimises any bias for certain groupings of prior attainment that can occur if a "line of best fit" is used.

### School and college value-added scores

School and college VA scores for individual qualifications (e.g. A level chemistry), qualification types (e.g. A Levels) and overall academic and applied general qualifications can be calculated. This is explained in the following sections.

### Calculating value-added scores for individual qualifications

Once the student VA scores have been calculated for a particular qualification, the average of all the student VA scores for that qualification is calculated within the school or college.

The figure below shows an example of how a school or college VA score is calculated from five student VA scores in an individual qualification.

Student / school or college	VA score
Student 1	+0.25
Student 2	+0.35
Student 3	+0.50
Student 4	-0.60
Student 5	-0.80
School or college VA score in the qualification (eg. A level maths)	+0.25+0.35+0.50-0.60-0.80 ÷ 5 = -0.06 A level grades

Table B.3: Worked example for calculating the school or college VA score for individual qualifications

The information required to perform this calculation is detailed below:

Variable	Description
n	Number of exam records in qualification per school/college
<u>u</u>	Array of exam record VA scores

Table B.4: Information required to calculate a school or college's value-added score for an individual qualification

A qualification VA score for a school or college is calculated by finding the average of all the exam level VA scores in that qualification and in that institution.

$$VA_{avg} = \frac{\sum_{1}^{n} \underline{u}_{n}}{n}$$
 where  $\underline{u}_{n}$  = the VA score of the  $n_{th}$  exam record

Hence, the overall institution VA score U for the given qualification is  $U = VA_{avg}$ .

### Calculating value-added scores for qualification types

After the VA scores for each qualification have been determined, the qualification type VA scores for the school or college can be calculated by finding the sum of the VA scores for each qualification within the type, divided by the total number of students taking each individual qualification.

Score / number of students	Score
A level history VA score	+0.25
Number of students	50
A level economics VA score	-0.70
Number of students	20
A level maths VA score	+0.35
Number of students	100
Overall A level VA score	(50*+0.25)+(20*-0.70)+(100*+0.35) 50+20+100 =+0.20 A level grades

Table B.5: Calculating value-added scores for qualification types

The information required to perform this calculation is as follows:

Variable	Description
$VA_{\mathit{QualSubj}}$	VA score for a particular qualification within a given qualification type at school/college level
$VA_{{\scriptscriptstyle {\it Qual}}}$	Aggregate VA score across qualifications within a given qualification type at school/college level
$n_{{\scriptscriptstyle ExamQualSubj}}$	Number of exams for a particular qualification at school/college level
$n_{\scriptscriptstyle ExamQuals}$	Number of exams across all qualifications within a given qualification type at school/college level

Table B.6: Information required to calculate a school or college's value-added score for qualification types

Weighting factor for selected qualifications,  $\omega$  = 1 for all qualifications, except General Studies, where  $\omega$  = 0.5

### Calculating aggregate value-added scores for a qualification type

The formula below is used to calculate aggregate VA scores for qualification types for a school or college. This formula is used for each qualification type that a school or college offers:

$$VA_{Qual} = \frac{\sum_{1}^{TotalSubjs} VA_{QualSubj} \cdot n_{ExamQualSubj} \cdot \omega}{\sum_{1} n_{ExamQualSubj} \cdot \omega}$$

Calculating academic and applied general qualifications value-added score

Finally, using VA scores for all qualifications, school and college overall academic and applied general VA scores can be calculated.

Academic VA scores are the average of all academic qualification type VA scores. This calculation is weighted by the relative size of each qualification type. Applied general scores are calculated likewise.

Below is the summary of all qualification type VA scores for an example school:

Qualification type	VA score	Number of students	Qualification type size
A level chemistry	+0.50	50	1.0
AS level maths	-0.15	100	0.5
BTEC Level 3 subsidiary diploma business studies	+0.30	30	1.0
Level 3 Foundation Diploma in art and design	-0.10	60	2.0

Table B.7: Qualification type VA scores for an example school

Academic VA scores	Applied general VA scores
Total points: (50*+0.50*1)+(100*-0.15*0.5)	Total points: (30*+0.30*1)+(60*-0.10*2)
= 17.5	= -3
Total sizes: 50*1+100*0.5	Total sizes: 30*1+60*2
= 100	= 150
Total points/total sizes: 17.5/100	Total points/total sizes: -3/150
=+0.175 A level grades	=-0.02 BTEC grades

Table B.8: Calculating an Academic VA score and Applied general VA score using VA scores for an example school (as in table B.7 above)

The information required to perform this calculation is detailed below:

Variable	Description
$VA_{ACVQ}$	School or college's overall academic or applied general VA score
$N_{QualACVQ}$	The number of academic or applied general qualifications for that school or college
$VA_{Qual}$	School or college's VA score for given academic or applied general qualification (e.g. A level physics VA score)
$\mu_{Qual}$	National average VA score for a given academic or applied general qualification
$n_{Qual}$	Number of entries within school or college within given academic or applied general qualification
$Vol_{Qual}$	The size of the qualification type for the given academic or applied general qualification, in relation to A Levels (for academic qualifications) or BTEC level 3 Subsidiary Diplomas (for applied general qualifications)

Table B.9: Information required to calculate an aggregate VA score for a qualification type

The formula below is used to calculate aggregated VA scores for academic and applied general qualifications. As this VA score combines information from different qualification types, the  $Vol_{Oual}$  variable is included in the formula.

$$VA_{ACVQ} = \frac{\sum_{1}^{N_{QualACVQ}} \left( \llbracket (VA \rrbracket_{Qual} - \mu_{Qual}) \cdot n_{Qual} \right)}{\sum_{1}^{N_{QualACVQ}} \left( n_{Qual} \cdot Vol_{Qual} \right)}$$

This step includes a small adjustment to correct for aggregation error. This means the student average VA score is 0 rather than the institution average. This may mean there is a small inconsistency with qualification type and individual qualification scores. For example, if an institution only offered A levels, then their A levels score could be slightly different from their aggregate academic score, even though they are calculated from the same results.

### Confidence intervals for 16 to 18 value-added

This is the final step of how the new L3VA calculation works.

### **Purpose**

The L3VA measure is used to determine how effective a school or college is in helping their students make progress. However, the VA scores of a school or college are derived from a given set of students' results for a particular test paper on a particular day. In addition, it is known that the school or college is not the only influence on students' attainment. In fact, there are many random factors that will make a considerable impact on students' attainment, such as their home life or any private tuition they receive. As such, confidence intervals are used to capture the uncertainty of the L3VA measure.

### Calculating confidence intervals around a school or college's qualification valueadded score

The information required to perform this calculation is detailed below:

Variable	Description
$\sigma^2$	National variance of error
n	Number of exam records in qualification per school/college
<u>u</u>	Array of exam record VA scores
Ψ	Standard error per qualification per school/college

Table B.10: Information required to calculate confidence intervals around a school or college's qualification value-added score

Using the standard error, it is possible to calculate confidence intervals around a school or college's qualification value-added score.

$$\psi = \sqrt{\sigma_n^2}$$

The 95% confidence interval around a school or college's qualification VA score is then given by:

$$U \pm 1.96 \psi$$

### Calculating confidence intervals around a school or college's qualification type value-added score

The information required to performance this calculation is as follows:

Variable	Description
$VA_{\mathit{QualSubj}}$	VA score for a particular qualification within a given qualification type at school/college level
$VA_{\scriptscriptstyle Qual}$	Aggregate VA score across qualifications within a given qualification type at school/college level
$n_{{\it ExamQualSubj}}$	Number of exams for a particular qualification at school/college level
$n_{\it ExamQuals}$	Number of exams across all qualifications within a given qualification type at school/college level
$\Psi_{\it QualSubj}$	Standard error for a given qualification at school/college level
$\Psi_{{\scriptscriptstyle V\!A_{\scriptscriptstyle Qual}}}$	Standard error for a given qualification type at school/college level
ω	Weighting factor for selected qualifications, $\omega = 1$ for all qualifications, except General Studies, where $\omega = 0.5$

Table B.11: Information required to calculate confidence intervals around a school or college's qualification type value-added score

It is then possible to calculate 95% confidence intervals around the school or college's qualification type VA score. To do this, the standard error for the qualification type needs to be determined first:

$$\psi_{VA_{Qual}} = \sqrt{\sum_{1}^{n_{ExamQualSubj}} \left(\frac{n_{ExamQualSubj}}{n_{ExamQuals}}\right)^{2} \cdot \psi_{QualSubj}^{2}}$$

With the standard error for the qualification type, the following equation can be used to calculate confidence intervals around the VA score:

$$VA_{Qual} \pm 1.96 \psi_{VA_{qual}}$$

### Calculating confidence intervals around a school or college's academic or applied general value-added score

The information required to perform this calculation is detailed below:

Variable	Description
$VA_{ACVQ}$	School or college's overall academic or applied general VA score (in grades)
$N_{QualACVQ}$	The number of academic or applied general qualifications for that school or college
$VA_{Qual}$	School or college's VA score for given academic or applied general qualification (e.g. A level physics VA score)
$\mu_{Qual}$	National average VA score for a given academic or applied general qualification
$n_{Qual}$	Number of entries within school or college within given academic or applied general qualification
$Vol_{Qual}$	The size of the qualification type for the given academic or applied general qualification, in relation to A Levels (for academic qualifications) or BTEC level 3 Subsidiary Diplomas (for applied general qualifications)
$\psi_{_{VA_{ACVQ}}}$	Standard error of overall academic or applied general value-added score (in grades)
$\psi_{Qual}$	Standard error for the VA score for the given academic or applied general qualification (in points, before rescaling to grades)

Table B.12: Information required to calculate confidence intervals around a school or college's academic or applied general value-added score

It is possible to calculate confidence intervals around each sector subject area (across qualification types) VA score. To do this, the standard error must first be calculated which is given by the formula below:

$$\psi_{VA_{ACVQ}} \ = \sqrt{\sum_{1}^{N_{QualACVQ}} \left(\frac{n_{Qual} \cdot Vol_{Qual}}{\sum_{1}^{N_{QualACVQ}} \left(n_{Qual} \cdot Vol_{Qual}\right)}\right)^2 \cdot \left(\frac{\psi_{Qual}}{Vol_{Qual}}\right)^2}$$

With the academic or applied general standard error, the following equation can be used to calculate confidence intervals around the VA score:

$$VA_{ACVQ} \pm 1.96 \cdot \psi_{VA_{ACVQ}}$$

### Understanding school and college confidence intervals

95% of the time, a school or college's true score will fall within the confidence interval.

A school or college's confidence interval is always centred on the school or college's VA score. For example, if a school or college's VA score is +1 and the size of their confidence interval is 0.5 grades, then the confidence interval ranges between +0.5 and +1.5 (i.e. half a grade either side of the VA score).

The size of the confidence interval is largely determined by the number of students in the school or college that completed the level 3 qualification. Schools and colleges with fewer students completing the qualification have wider confidence intervals because their VA score is based on a smaller number of students, and so there is less evidence on which to judge the school or college's effectiveness.

School and college confidence intervals can be interpreted to give one of three conclusions:

- a school or college is significantly below the national average;
- a school or college is *not significantly different* to the national average;
- a school or college is significantly above the national average.

The national average VA score is **0**.

### Calculation of statistical significance of value-added scores

A school or college qualification VA score (denoted U) is defined to be below the national average and statistically significant when their VA score is <u>below 0</u> and their upper end of the 95% confidence interval is below 0. This can be expressed formulaically as:

$$U < 0$$
 &  $(U + 1.96\psi) < 0$ 

A school or college qualification VA score (denoted U) is defined to be above the national average and statistically significant when their VA score is <u>above 0</u> and their lower end of the 95% confidence interval is above 0. This can be expressed formulaically as:

$$U > 0$$
 &  $(U - 1.96\psi) > 0$ 

### Statistical significance at qualification type level

A school or college qualification type VA score is defined to be below the national average and statistically significant when their VA score is <u>below 0</u> and their upper end of the 95% confidence interval is below 0. This can be expressed formulaically as:

$$VA_{Qual} < 0$$
 &  $(VA_{Qual} + 1.96\psi_{VA_{Qual}}) < 0$ 

A school or college qualification VA score defined to be above the national average and statistically significant when their VA score is <u>above 0</u> and their lower end of the 95% confidence interval is above 0. This can be expressed formulaically as:

$$VA_{Qual} > 0$$
 &  $(VA_{Qual} - 1.96\psi_{VA_{Qual}}) > 0$ 

### Statistical significance at academic or applied general level

A school or college academic or applied general VA score is defined to be below the national average and statistically significant when their VA score is <u>below 0</u> and their upper end of the 95% confidence interval is below 0<sup>20</sup>. This can be expressed formulaically as:

$$VA_{ACVQ} < 0 \& \left( VA_{ACVQ} + 1.96 \cdot \psi_{VA_{ACVQ}} \right) < 0$$

A school or college academic or applied general VA score is defined to be above the national average and statistically significant when their VA score is <u>above 0</u> and their lower end of the 95% confidence interval is above 0. This can be expressed formulaically as:

$$VA_{ACVQ} > 0 \& \left( VA_{ACVQ} - 1.96 \cdot \psi_{VA_{ACVQ}} \right) > 0$$

<sup>20</sup> We base calculations on rounded figures (to 2 decimal places). For example, in the rare case that the upper CI is -0.000001, it is not regarded as significantly below average as the rounded upper CI is 0.00, therefore the CI range includes 0.

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# Annex C: English and maths progress measure methodology (measure suspended until 2023 to 2024 performance measures)

### Measure suspended until 2023 to 2024 performance measures

This section explains how we have calculated the English and maths progress measures in previous years. We are not producing these measures for the 2021 to 2022 performance measures cohort and this information is here for information only. See the <u>main section on the English and maths progress measure</u> for more information.

### **English and maths progress overview**

### How the measure works

The English and maths progress measure is made up of two distinct measures, one for maths and the other for English, and an individual student can be in scope for one, both or neither measure depending on their achievement in English and maths by the end of KS4.

Students in overall scope for each measure have their progress assessed by comparing their best grades by the end of KS4 to those achieved by the end of post-16 study<sup>21</sup>.

By aggregating student progress scores to give overall English and maths progress scores for each school and college, the effectiveness of the school or college can be measured and they can be held accountable.

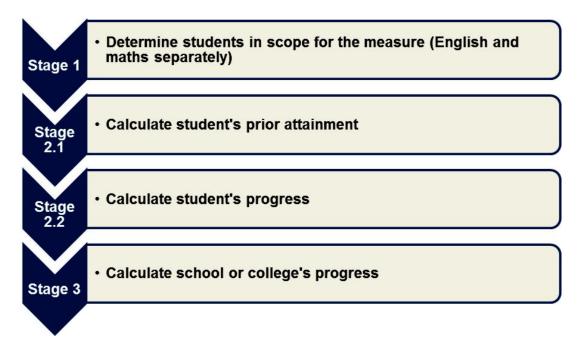
#### **Data sources**

The primary source of information underpinning the English and maths progress measure is current and historical exam data sourced from Awarding Organisations. This data is used to determine students' prior attainment (and so whether in scope of the measure), and the progress students make in the 16 to 18 phase.

In addition, funding data collected by the Education and Skills Funding Agency (ESFA) is used to determine whether any student is exempt from the requirement to study English

<sup>&</sup>lt;sup>21</sup> Note, because only a student's best performance is considered, both during KS4 and in the 16 to 18 phase, formal discounting as implemented in attainment measures is not required here.

and/or maths post-16 irrespective of their prior attainment. The English and maths accountability measure broadly aligns with the ESFA condition of funding rules which require students without prior attainment of GCSE A\*-C or grades 9-4 in English and/or maths to be studying these subjects as part of their study programme in each academic year.



### Calculating the English and maths progress measures

The following sections give more detail on what is involved when determining which students are in scope of the progress measure, and for those in scope, calculating both their level of prior attainment and progress made in the institution post-16.

### Students included in the measures, exclusions and exemptions

Students are potentially in scope for either the English or maths progress measures if they did not achieve a GCSE grade A\*-C or 9-4 or equivalent by the end of KS4 in that subject.

Students that have a level 2 functional skill and do not have a GCSE grade 3 by the end of KS4 are out of scope of the measure. This was introduced in 2020 with the change in the condition of funding which allowed a student to meet the condition of funding with a level 2 functional skill during their 16 to 18 phase.

Students for whom no recorded prior achievement exists in exam records are excluded from the measure.

Exam results have been combined with ESFA funding data to identify students that schools and colleges have confirmed as exempt from the requirement to study English and maths in the 16 to 18 phase, in particular:

- students with learning difficulties and/or disabilities, who are assessed as not able to study either GCSE or stepping stone qualifications;
- students with overseas qualifications that are established as equivalent to GCSE grade C or grade 4.

In addition, there are students for whom condition of funding rules do not apply. This includes students on study programmes under 150 hours, and students not on a study programme generally, for example those on an apprenticeship programme. From 2017 performance measures – where ESFA funding data confirms the condition of funding does not apply – these students will also be exempted.

Where an apprenticeship student has been recorded on the ILR or school census and have been included in the English and maths progress measure, Schools and colleges can submit a request to remove these students from the English and maths measure.

A student is considered enrolled on an apprenticeship programme in the reporting years if:

- They have a continuing or completed apprenticeship recorded in the ILR for two academic years; OR
- They have no ESFA core learning aim recorded in the ILR alongside their apprenticeship programme in the same academic year; OR
- They are recorded in the ILR on an apprenticeship programme at the same provider as their ESFA learning aims.

### Qualifications included in the measures: students in scope

ESFA guidance<sup>22</sup> sets out the full list of qualification types equivalent to GCSE grade 9-4 for the purpose of prior attainment. Principally these are qualifications in maths, English language and English literature from Ofqual approved GCSEs graded A\*-C (and 9-4 for new reformed GCSEs), level 1/level 2 certificates grade A\*-C, and some level 3 qualifications such as A/AS levels, International Baccalaureate including maths components, and Core Maths.

The guidance is used to inform a list of specific qualifications that the student's exam record is checked against to determine whether the student is in scope for the English and maths progress measures. The check is made against all examination results achieved by the student up to and including key stage 4.

English literature GCSE counts for prior attainment; a student with either an English language or literature GCSE at A\*-C or 9-4 by the end of key stage 4 is out of scope of

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<sup>&</sup>lt;sup>22</sup> ESFA guidance is published <u>here</u>.

the English progress measure. However, English literature GCSE does not count for progress.

### Qualifications included in the measures: starting point

When assessing a student's starting point for the calculation a similar process occurs as when assessing whether a student is in scope for the measure. However, the list of qualifications used to establish their level of prior attainment is wider, in particular including Basic Skills, Key Skills and Functional Skills. This is to recognise that whilst students may end key stage 4 with no GCSE passes in English and/or maths, achievement in other qualifications provide evidence of their level of ability when starting post-16 study.

### Qualifications included in the measures: progress

During post-16 study, students for whom the condition of funding applies must be enrolled on an approved qualification. The list of qualifications approved for teaching under the condition of funding is maintained on the <u>Learning Aims Reference Service</u> (LARS).

This list of qualifications approved for teaching is used to determine which individual qualifications 'count' for progress in the measure. Any post-16 attainment in an English or maths qualification that is not approved for teaching as set out on LARS is not captured in the progress measure.

Qualifications are approved for a set period of time and are organised in LARS based on whether the qualification is approved in a given academic year. As such, the student's exam record for a given academic year is compared to the list of approved qualifications for that academic year, and the student's best result (in terms of performance points) is recorded and used when calculating progress.

<u>Detailed condition of funding rules</u> set out the expectation that students with a prior attainment grade D or grade 3 study GCSEs rather than stepping-stone qualifications, and the treatment of unregulated level 1/ level 2 qualifications.

### Calculating progress

In the most straightforward cases, the calculation of progress simply subtracts their performance post-16 from their prior attainment at KS4. For example:

- If an individual student moves from a grade 2 to a grade 4 they would receive a progress score of +2 as they have made two grades progress;
- If the student starts at grade 2 but achieves a grade 1 during post-16 they would receive a progress score of -1.

We do not wish institutions to be disproportionately penalised where a student is unable to enter for an English or maths exam or where factors outside of an institution's control lead to a bad result. This is achieved by applying a cap to the measure so that -1 grade is the maximum negative progress score applied to an individual student. Students not entered for any exams automatically score -1. For example:

- A student who enters with a grade 3 but achieves a grade 1 when they retake has their progress capped to -1 grade (rather than -2);
- A student who enters with a grade 3 but does not sit the exam has their progress capped to -1 grade (rather than -3).

Applying this cap means that schools and colleges that take on students with poor motivation are treated fairly. This is important as the measure includes all students who do not have a C/4 grade or above in English and/or maths, in line with the condition of funding, regardless of whether or not they enter for an examination.

### Students attending multiple institutions post-16

The highest English and maths grade a student has achieved when they enter an institution is the baseline for the calculation. This may be the grade a student achieved at key stage 4 or a grade achieved with a different institution at an earlier stage of 16 to 18 study. This ensures the measure only counts the progress an institution makes with a student to improve their English and/or maths.

A consequence is that an individual student might be in scope for the measure at the end of key stage 4 for their first institution attended – and progress in that institution will be included in performance measures – but if the student achieves the 9-4 (or A\*-C) standard or level 2 functional skills (where they do not also have a GCSE grade 3) in the first institution then the student is out-of-scope of the measure at their second institution.

When a student attends multiple institutions post-16, requiring both their scope and starting point to be re-assessed, the only new exams taken into account after key stage 4 are those approved for teaching post-16 under the condition of funding, i.e. the qualifications listed on LARS online that 'count' for progress.

### Points awarded for stepping stone qualifications

Stepping stone qualifications such as functional skills and free standing maths are taken into account when calculating the progress made by students. This is done by using a capped version of the "challenge points"<sup>23</sup> from the performance points system, as illustrated in the table below which shows the points that will be used from 2020. As part of a review for summer 2019, the points applied to all qualifications used in the

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<sup>&</sup>lt;sup>23</sup> Challenge points are points awarded for grades awarded in qualifications regardless of their size. More detail can be found in the guide to performance points.

calculation of English and maths progress will change from 2020. This follows wider consultation with stakeholders.

### The changes included:

- Increasing the relative progress points for attaining Functional Skills Level 1 and Level 2 qualifications so schools and colleges can further support students to take the level 2 qualification which is most appropriate for them.
- Reflecting the new GCSE grading system and making the points consistent by moving from the old 8-point scale to the new 9-point scale, with each grade worth one point.
- Recognising progress made between each entry level. From 2020 tables, Entry Level 1 will receive 0.25, Entry Level 2 0.5 and Entry Level 3 0.75 points.

A comprehensive list of points to be used in performance measures can be found here <a href="https://www.gov.uk/government/publications/16-to-18-english-and-maths-progress-measure-qualifications">https://www.gov.uk/government/publications/16-to-18-english-and-maths-progress-measure-qualifications</a>, this will be updated when the progress measure resumes. A summary table of the points can be seen below:

#### Points from 2020

Points awarded	9-1 GCSEs	Legacy GCSEs	Functional Skills	Free Standing maths	ESOL	AQA use of maths
9	9					
8.5		A*				
8	8					
7	7	Α				
6	6					
5.5		В				
5	5					
4	4	С				
3.5			L2			
3	3	D		L2 (all grades)	L2 (all grades)	A*/A/B/C
2	2	Е	L1			
1.75				L1 (A-C)	L1 (D/M)	D/E
1.5		F				F
1.25				L1 (D)	L1 (pass)	
1	1	G				G
0.8				L1 (E)		
0.75			EL 3		EL 3	
0.5			EL 2		EL 2	
0.25			EL 1		EL 1	

Table C1: English and maths measure points from 2020

Whilst stepping stone qualifications are typically smaller than GCSEs, capped points do not factor in size, as all approved qualifications have sufficient breadth to meet the existing requirements of funding.

The measure only looks at the highest value outcome a student has attained in the institution attended. A student achieving a level 1 functional skill and a GCSE D/3 grade will be assigned 3 points in the calculation – the value of the GCSE D/3 grade.

Detailed worked examples, including what happens when students attend multiple institutions, are shown below

### Students in scope for the measures, but studying level 3 qualifications

In addition, a student may meet the condition of funding through approved level 3 qualifications (Core maths at level 3, A or AS levels, the International Baccalaureate, OCR Maths for Engineering level 3 certificate and OCR Cambridge Pre-U maths). The points awarded for approved level 3 qualifications are capped at 9 pts from 2020 (8 pts in 2017, 2018 and 2019 tables).

### **Calculating school or college progress**

Once the student progress scores have been calculated, the average of all the student progress scores is then calculated within the school or college.

The table below shows an example for a school or college with 5 student progress scores:

Student / School or College	Score
Student 1 English progress	+1.0
Student 2 English progress	+1.0
Student 3 English progress	+0.4
Student 4 English progress	-1.0
Student 5 English progress	-1.0
School or college progress score for English	+1.0 +1.0 +0.4 -1.0 -1.0 5 = +0.08 grades

Table C2: Worked example of calculating school or college English and maths progress

From 2018, the headline English and maths progress performance measures (average progress) will be supplemented by contextual data showing the proportion of students in scope for either the English and/or maths measures that entered an approved qualification. This will highlight the percentage of students in an institution that study English and maths and take examinations in these subjects.

### Worked examples: English and maths progress

### Individual student progress in the same institution throughout

As the table below illustrates, the progress calculation uses the student's best result whilst at a particular institution.

Scenario	Prior Attainment	Attainment whilst at institution:	Attainment whilst at institution: Year 2	Attainment whilst at institution:	Student progress	
Student A	GCSE grade 3 3 pts	GCSE grade 2 2 pts	GCSE grade 4 4 pts	N/A	4 - 3 = 1	
Student B	GCSE grade 2 2 pts	GCSE grade 3 3 pts	GCSE grade 2 2 pts	N/A	3 - 2 = 1	
Student C	GCSE grade 1 1 pts	ESOL Entry L2 0.5 pts	ESOL L1 Merit 1.75 pts	ESOL L2 Pass 3 pts	3 – 1 = 2	
Student D	IGCSE grade 2 2 pts	FSM L1 Grade E 0.8 pts	No entries	FSM L1 grade E 0.8 pts	0.8 - 2 = -1 (capped)	
Student E	GCSE grade 1 1 pt	No entries	No entries	No entries	-1 (no entries)	
Student F	GCSE grade 5 5 pts	Not in scope	Not in scope	Not in scope	N/A	

Table C3: Calculating individual student progress in the English and maths progress measure, where the student has been in the same institution throughout

- For Student A the GCSE grade 4 (4 points) achieved in Year 2 (after KS4) discounts the grade 2 (2 points) achieved in Year 1.
- As long as the student is aged 16 to 18, it does not matter in which year the best results was achieved, so in the case of Student B and Student D the progress calculation uses their best achievements in Year 1, Year 2 and Year 3 respectively
- Student D gives an example of capping progress, where uncapped the student's progress would be -1.2, but is capped at -1
- Student E who had no entries in the 16 to 18 phase automatically scored -1

### Individual student progress in multiple institutions

Calculating student progress when they attend multiple institutions in the 16 to 18 phase is slightly more complicated as the student's overall progress may be split across more than one institution, and each institution is only credited for progress made in that institution.

The table below considers another scenario (Student G), and retaining the exam profile throughout, imagines instead that the student attended 1, 2 or 3 different institutions in the 16 to 18 phase.

Scenario	Prior attainment	Attainment in 16 to 18 phase: Year 1	Attainment in 16 to 18 phase: Year 2	Attainment in 16 to 18 phase: Year 3	Progress in Institution A	Progress in Institution B	Progress in Institution C
Student G: 1	1 pt	Institution A: 2 pts	Insitution A: 3 pts	Insitution A: 2 pts	3-1 =2	N/A	N/A
Student G: 2	1 pt	Institution A: 2 pts	Institution B: 3 pts	Insitution B: 2 pts	2-1 =1	3-2 =1	N/A
Student G: 3	1 pt	Institution A: 2 pts	Insitution A: 3 pts	Insitution B: 2 pts	3-1 =2	2-3 = -1	N/A
Student G: 4	1 pt	Institution A: 2 pts	Institution B: 3 pts	Insitution A: 2 pts	Better of: 2-1 =1 or 2-3 = -1	3-2 =1	N/A
Student G: 5	1 pt	Institution A: 2 pts	Institution B: 3 pts	Institution C: 2 pts	2-1 =1	3-2 =1	2-3 =-1

Table C4: Calculating individual student progress in the English and maths progress measure, where the student has moved institutions during 16 to 18 study

- Scenario 1 works in the same way as the examples A-F, so 3 points is the best result in the 16 to 18 phase and the key stage 4 prior attainment of 1 points is subtracted.
- Scenario 2 has the student move institutions after Year 1. Progress in the first
  institution uses Year 1 attainment (2 points) from which the key stage 4 prior
  attainment of 1 is subtracted; however the best achievement in the second
  institution (3 points) takes into account the progress made in the first institution,
  and so the prior attainment subtracted is now 2 points
- Scenario 4 is the most complex situation that is encountered and occurs when a student attends the same institution in Year 1 and Year 3, but another in Year 2
- The student makes progress in Year 1 (1 pt). However, in Year 3 the student goes backwards compared to their Year 2 in a different institution (-1 point). In this situation, where progress is both positive and negative, we report the positive progress in performance measures for Institution 1.
- If the student had made positive progress in both Year 1 and Year 3 in Institution 1 then both sets of progress would be added together and reported against Institution 1.

### Multiple institutions and moving out-of-scope of tables

If a student attends multiple institutions, it becomes possible that they move out-of-scope. The table below illustrates this in the case of student H who achieves 4 points in year 2 (equivalent to GCSE grade 4) and so is out-of-scope of the progress measure by the time they attend institution 2.

Scenario	Prior attainment	Attainment in 16 to 18 phase: Year 1	Attainment in 16 to 18 phase: Year 2	Attainment in 16 to 18 phase: Year 3	Progress in Institution A	Progress in Institution B	Progress in Institution C
Student H	1 pt	Institution A: 2 pts	Insitution A: 4 pts	Insitution B: out of scope	4-1 =3	N/A	N/A

Table C5: Calculating individual student progress in the English and maths progress measure, where the student has moved institutions during 16 to 18 study, and moves out of scope while in one institution

### Condition of funding details: points to note

### Students with a GCSE grade D/3

The condition of funding states that a student with a grade D/3 at GCSE at key stage 4 should study for GCSE qualifications in the post-16 phase rather than stepping stone qualifications from 2015 to 2016. This requirement also means that a student cannot be taken out of scope of the progress measure by achieving a functional skill level 2 if they already have a GCSE grade 3.

### Unregulated level 1/ level2 certificates in the English and maths measure

Unregulated level 1/level 2 certificates are included in the list of qualifications through which a student's prior attainment is determined. They are treated as equivalent to a GCSE in that students holding an unregulated level 1/level 2 certificate at grades 9-4 by age 16 in maths and either English language or literature (9-4 passes in *both* language and literature are not needed) are not required to study maths and/or English in the 16 to 18 phase, and are excluded from this measure.

Where a student's highest prior attainment is an unregulated level 1/level 2 certificate at grade 3 or below, they will have to study English and/or maths, and for the purposes of determining the baseline for this measure their unregulated level 1/level 2 certificate grade equates to the same GCSE grade.

However, unregulated level 1/level 2 certificates are not approved for teaching post-16 as an equivalent to GCSEs under the condition of funding and will not contribute to a student's calculated progress in the English and maths measure.

## Level 3 maths attainment (measure suspended until 2024 to 2025 performance measures)

This measure supports our ambition for the overwhelming majority of young people in England to study maths to age 18 by 2020. New, high-quality 'Core Maths' qualifications provide an option to continue the study of maths for those students with at least a grade C/4 at GCSE, but who do not wish to take A level or AS level maths. This measure is designed to reward schools and colleges for supporting students to develop the advanced mathematical skills that are valued by universities and employers.

This measure shows the percentage of students who achieved GCSE maths A\*-C (or equivalent) or grade 4 or above by the end of key stage 4, who go on to achieve an approved level 3 maths qualification.

Students are only included in this measure if they are also reported in headline attainment measures (i.e. they have also entered either an approved level 2 or level 3 qualification in the 16 to 18 phase).

The same list of qualification types used to assess prior attainment in the English and maths progress measure is also used in the level 3 maths measure. As such most students will either be included in the maths progress measure (those without a GCSE A\*-C or equivalent or without GCSE grades 9-4) or in this level 3 maths attainment measure (those with a GCSE A\*-C or equivalent or with a GCSE grade 9-4). No students will be included in both measures.

Approved maths qualifications at level 3 will be flagged in guidance once the measure returns:

https://www.gov.uk/government/publications/16-to-19-qualifications-discount-codes-and-point-scores

### Calculating the level 3 maths measure

In the most straightforward cases, the calculation simply divides the number of students who pass an approved level 3 maths qualification by the number of students in scope for the measure.

However, if a student already has an approved level 3 maths qualification (from either key stage 4 or an earlier 16 to 18 institution) that student remains in scope for the current institution *only* if they achieve another approved level 3 maths qualification.

This special treatment for students who already have an approved Level 3 maths qualification is to avoid penalising institutions where, for example, students do not repeat an AS Maths qualification gained at KS4 in the 16 to 18 phase. If a student changes institutions in the 16 to 18 phase in between AS and A level maths, the A level attainment will count positively towards the second institution's performance in this measure.



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