



Further Education: Outcome-based success measures quality and methodology information

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Official Statistics

About this document

This document provides a range of information on the quality of the further education: outcome-based success measures data, and the methodology used to produce it. It is based on the Office for National Statistics' guidelines for measuring statistical quality.

It provides an overview of the data sources used in the production of the statistics, along with information on data issues, data definitions, publication cycle and supplementary data produced.

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1. Introduction

This quality and methodology document provides an overview of the data used in the production of the Further Education (FE) outcome-based success measures statistics. It provides information on the methodology used to calculate the measures, as well as information on the data sources, data issues and data definitions.

This document is based on the Office for National Statistics' [guidelines for measuring statistical quality](#).

Background and context

The FE outcome-based success measures present statistics on the employment, earnings and learning outcomes of FE learners. This release updates the regular series of outcome-based success measures, which have been published annually since 2014¹.

The Small Business, Employment and Enterprise Act 2015 allows the sharing of data between the Department for Education (DfE) and the Department for Work and Pensions (DWP) and Her Majesty's Revenue and Customs (HMRC). The resulting matched dataset is called the Longitudinal Education Outcomes (LEO) dataset.

The privacy statement explaining how personal data in this project is shared and used is published at: <https://www.gov.uk/government/publications/longitudinal-education-outcomes-study-how-we-use-and-share-data>

The LEO dataset links information about individuals, including:

- Personal characteristics such as age, sex and ethnicity.
- Education, including schools, further education colleges and higher education institution attended, courses taken, and qualifications achieved.
- Benefits claimed.
- Employment and income.

It is created by combining data from the following sources:

- The National Pupil Database (NPD) held by the Department for Education (DfE).
- Higher Education Statistics Agency (HESA) data on students at UK publicly funded higher education institutions and some Alternative Providers held by DfE.
- Individualised Learner Record Data (ILR) on students at further education institutions held by DfE.
- Employment data (P45 and P14) held by Her Majesty's Revenue and Customs (HMRC).
- The National Benefit Database, Labour Market System and JUVOS data held by the Department for Work and Pensions (DWP).

By combining these sources together using unique identifiers, we can look at outcomes for further education learners.

This publication uses data from the LEO dataset, linking together learning data with benefits data and employment and earnings data to produce statistics on the employment, earnings and learning outcomes of FE learners. Work will continue to improve the statistics as knowledge of the underlying data source develops.

The data are complex and have many uses such as providing information to prospective learners about the outcomes of previous learners, and how these may vary by subject and location. The data have robust coverage allowing for detailed estimates by provider, local area, and qualifications. The current release includes revised estimates for academic years prior to 2016/17 to make use of enhancements made to the data since the last publication.

¹ <https://www.gov.uk/government/collections/statistics-outcome-based-success-measures>

The measures in this publication show the destination and earnings outcomes for FE learners without controlling for factors such as learner demographics. Separate research² from LEO has previously estimated the labour market returns to different FE qualifications controlling for learners' individual characteristics. This showed that when comparing learners with similar characteristics, those who achieve further education qualifications are better off than those who start but do not achieve, and that these benefits occur across a broad range of sectors. On average, 3-5 years later, achievers of intermediate apprenticeships earn 11% more and achievers of advanced apprenticeships earn 16% more.

This publication covers learners that achieved apprenticeships, adult (19+) FE and Skills learners and completers of traineeships. The destinations of other learners are covered in the following releases:

- [Destinations of key stage 4 and key stage 5 pupils](#) showing the number of young people going into education, employment or training the year after finishing key stage 4 (after year 11) and key stage 5 (after A levels or other level 3 qualifications)
- [Higher education graduate employment and earnings](#) showing employment and earnings of higher education graduates at different points after graduation.

2. Data sources

The statistics in the publication are produced using the Longitudinal Educational Outcomes (LEO) dataset. The LEO dataset has been brought together by different government departments and is being used to improve the information available on a range of topics across different policy areas.

The LEO dataset links information about individuals, including:

- Personal characteristics such as gender, ethnic group and age.
- Education, including schools, colleges and higher education institution attended, courses taken, and qualifications achieved.
- Employment and income.
- Benefits claimed.

Coverage and robustness of the data

The measures are calculated using administrative data sources already held by the Government, placing no additional burden on providers, individuals or employers to collect new information. Learner records are linked to DWP and HMRC data to observe benefit and employment activity, and to other education datasets to observe learning activity before and after training. Over 98% of learners are matched to DWP or HMRC data, rising to almost 100% for apprenticeships, and so provide representative coverage of activity for FE learners.

It should be noted that the match rate would never be expected to reach 100% for a number of reasons including inaccurate recording of personal information in the datasets used in the matching exercise.

Table A: Match rates to LEO dataset by year

Academic Year	Provision	Number of learners ³	Match rate to LEO dataset
2016/17	All learners	1,017,810	98.9%
	FE & Skills	723,290	98.6%
	Apprenticeships	277,300	99.8%
	Traineeships	17,210	99.8%
2015/16	All learners	1,061,070	99.0%
	FE & Skills	773,050	98.7%
	Apprenticeships	270,780	99.8%
	Traineeships	17,240	99.8%

² Bibby, D., Buscha, F., Cerqua, A., Thomson, D. and Urwin, P. (2014), "Estimation of the labour market returns to qualifications gained in English Further Education" <https://www.gov.uk/government/publications/further-education-comparing-labour-market-economic-benefits-from-qualifications-gained>

³ Number of learners may differ to the figures provided in the 'Further education and skills' publication as the 'Outcome based success measures' reports only a learners highest and latest aim.

2014/15	All learners	1,282,420	98.9%
	FE & Skills	1,012,110	98.7%
	Apprenticeships	257,900	99.8%
	Traineeships	12,410	99.5%
2013/14	All learners	1,536,640	98.9%
	FE & Skills	1,276,130	98.7%
	Apprenticeships	254,920	99.7%
	Traineeships	4,640	99.8%

Employment, earnings and benefit data

Employment and earnings data

Beginning in April 2013, the P45 reporting system was phased out in favour of the Real Time Information (RTI) system, which requires employers to submit information to HMRC each time an employee is paid. This system has now reached full deployment, however data predating this is still based on employer submissions of P14 and P45 data.

RTI offers substantial improvements to the P45 system in terms of data coverage, since employers must now provide information on all their employees if even one employee of the company is paid above the Lower Earnings Limit. The move to RTI will mean that data coverage is high for the tax years from 2014/15 onwards that are used in this publication.

The data are primarily collected for the purposes of collecting taxes, so business rules have been applied to improve the quality of any suspect employment records to enhance the data. This makes use of algorithms developed by researchers, and uses similar processes as documented in the research in [Estimation of the labour market returns to qualifications gained in English further education](#)⁴.

Benefit data

Benefit data are taken from the underlying DWP payments systems and are supplemented by the information entered by Jobcentre advisers. The data therefore captures basic information accurately, but non-compulsory fields in either the labour market system or the payment system may be incomplete. Due to the size and technical complexity, these systems are not accessed directly, but at regular intervals, scans are taken that build up a longitudinal picture from repeated snapshots of the data.

Start dates are entered on to the system and are accurate dates of benefit payment, thus provide certain timing and duration of a benefit claim. However, while Job Seeker's Allowance (JSA) dates have very few discrepancies, due to the way the data are scanned the end dates recorded for other benefits may diverge to some extent from the events they are recording. The potential discrepancy varies from up to two weeks for Employment Support Allowance (ESA) to up to six weeks for Incapacity Benefit (IB).

The Universal Credit Official Statistics dataset has been used to allow those claiming Universal Credit to be included in this publication. This is a relatively new dataset and we are continuing to work closely with colleagues at the Department of Work and Pensions to explore how best to use Universal Credit data in destination measures.

The universal credit data is retrospectively updated each month when a new caseload snapshot is produced, but the full back series is not updated each time – one month is updated retrospectively and one new month is added.

Education data

The national pupil database

Data from the national pupil database (NPD) were used to calculate education history.

⁴ <https://www.gov.uk/government/publications/further-education-comparing-labour-market-economic-benefits-from-qualifications-gained>

The NPD is a longitudinal database linking pupil/student characteristics (e.g. age, gender and ethnicity) to school and college learning aims and attainment information for children in schools in England.

Five administrative data sources used in compiling the NPD have been used to determine education history, namely:

- Individualised learner record (ILR) covering English colleges, further education (FE) providers and Specialist post-16 institution (SPIs)
- School census (SC) covering English schools. This includes state-funded and non-maintained special schools and pupil referral units (PRU)
- Awarding body data for independent schools
- Alternative provision (AP) census
- Higher Education Statistics Agency (HESA) covering United Kingdom higher education institutions and English higher education alternative providers.

The matching of these databases was undertaken at individual level using personal characteristics such as name, date of birth and postcode.

Individualised Learner Record data

The Education and Skills Funding Agency requirements for personal data, including National Insurance numbers, vary by the type of provision provided.

Other personal details fields have high completion rates although there is some use of defaults where information is not known and particular groups such as offender learners have information withheld.

The dates of learning can be assumed accurate to within a week. Key data fields are tied to funding therefore there is a strong incentive for providers to ensure the information returned is accurate.

ILR - New Full Level 2 and Full Level 3 methodology in 2016/17

The 2016/17 Full Level 2, and Full Level 3 figures have been calculated using a new methodology.

As a result, from 2016/17 some people who would have previously been included in the Full Level 2 and Full Level 3 figures in this release are no longer included following changes to funding rules on funding vocational qualifications. In effect these learners have been 'reclassified' from Full Level 2 and Full Level 3 to Level 2 and Level 3, respectively, following changes made by the ESFA to the qualification reference data used to calculate the Full Level 2 and Full Level 3 measures in this release.

This methodology change affects the Education and training participation figures (Table NA04).

Time lags

All data used in this process are drawn from administrative sources, which take time to process and collate. Therefore, there are time lags between the reference period and availability of the dataset for analysis.

- **Benefit data** taken from the National Benefits Database contain lags in completeness. At least 3 months is allowed for receipt of backdated claims and data are lagged by around 4 months. Data used in this publication is complete to the end of December 2018, and was released at the end of April 2019.
- **Employment data** have cleaning rules applied, which identify old records when updated with new information. As new information can come through about a job after it has ended this is a source of constant change and historically the data has been considered complete after approximately six months due to retrospection. HMRC started to implement Real Time Information (RTI) in April 2013, which provides more frequent feeds of employment and earnings data and has reduced the lag of the P14/45 data used in this publication to 3 months.

Self-assessment data covers the whole tax year and becomes available at the beginning of the following tax year, as a result the self-assessment data has a 12 month time lag.

- **Earnings data** are less timely than employment data, and in the past, it has taken up to fifteen months after the end of the tax year for the data to be considered complete. HMRC started to implement Real Time Information (RTI) in April 2013, which provides more frequent feeds of employment and earnings data and has reduced the lag of the P14/45 data used in this publication to 3 months.
- **Individualised Learner Record data** are collated from returns by colleges with the provisional data collected to date generally published on a quarterly basis. Returns are not generally complete until up to six months after the end of the academic year, which runs from 1st August to 31st July. This publication uses data that covers the whole academic year, which became available from November 2018.
- **Higher Education Statistics Authority data** are collated from returns by institutions and data for the full academic year are available approximately six months after the end of the academic year.

Revisions to data

The historical data prior to academic year 2016/17 have been revised as part of this publication, taking into account:

- improvements made in the matching and processing of the administrative data sources,
- the additional detailed destination measures included in this year's publication, and
- the switch from reporting on all learners who completed their aim, to only those who achieved their aim (except for Traineeships for whom the publication continues to report on completers).

At a national level, there has been a small change to the sustained positive destination rate because of these revisions with the sustained positive destination rate unchanged in 2014/15, but an increase of 1 ppt in 2013/14 and 2015/16.

3. Matching process

The ILR student records are matched to DWP's Customer Information System (CIS)⁵ using an established matching algorithm based on the following personal characteristics: National Insurance Number (NINO), forename, surname, date of birth, postcode and sex.

Some of these characteristics are simplified to make the matching process less time-intensive and allow more matches, for instance if a surname misspelt in one of the datasets. Only the first initial of the forename is used, the surname is encoded using an English sound-based algorithm called SOUNDEX⁶, and for most matches only the sector of the postcode is used.

All records accessed for analysis are anonymous so that individuals cannot be identified. The personal identifying records used in the actual matching process are accessed under strict security controls.

There are five match processes carried out, ranging from the highest quality and most likely to be accurate (Green) to the lowest quality and most likely to be a false match (Red-Amber). Table B shows the criteria for each match type.

Once the ILR records have been matched to the CIS the corresponding tax and benefits records for that individual can then be linked to their ILR record.

Table B: Criteria for each type of match

Match quality	NINO (National)	Forename (initial)	Surname (SOUNDEX)	Date of birth	Sex	Postcode (sector)
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⁵ The CIS is a computer system used by the Department for Work and Pensions to store basic identifying information about customers and provides information on all individuals who have ever had a national insurance number

⁶ SAS function that turns a surname into a code representing what it sounds like, which allows some flexibility for different spellings. For example Wilson=Willson

	Insurance number)					
1. Green	✓	4 or 5 ✓✓✓✓✓				
2. Amber	✓	3 ✓✓✓				
3. Green-Amber	x	✓	✓	✓	✓	✓
4. Amber-Red	x	✓	✓	✓	1 ✓	
5. Red-Amber	x	x	x	✓	✓	✓ (full postcode)

4. Measures

Learners in scope for the measures

The destination measures cover all age apprenticeships, and adult (19+) Further Education (FE) and Skills learners that achieved an FE learning aim funded by the Education and Skills Funding Agency (ESFA), and all age Traineeships who completed their aim. For each learner their highest and latest learning aim is selected for the purposes of this publication, as such figures are expected to be lower than those presented in the '[Further education and skills](#)' publication where each learning aim is reported on.

Eligible learning is identified using the Individualised Learning Record (ILR), in particular the achievement status and end date fields to identify learners that achieved.

Adult learners are those that are at least academic age 19 in the year they complete their training, i.e. in the case of learners completing in 2013/14 this covers learners aged 19 or older on 31 August 2013. Outcomes are reported at a learner basis and learners appear once for each provider where they have completed a course.

The measures do not cover learners funded through the Offenders' Learning and Skills Service (OLASS), or 16-19 FE and Skills learners.

The earnings measures include estimates on the earnings outcomes of learners that have an earnings record on the P14 (HMRC data), a record of sustained employment on the P45 (HMRC data) and no record of further study at a Higher Education institution. These figures focus on learners that achieved a Full Level 2, Full Level 3 or Level 4+ qualification in academic years 2010/11 to 2016/17 and their observed earnings after training up to the 2016/17 tax year.

Learners with multiple learning aims

Outcomes are reported on a learner, rather than a learning aim basis. In the case where a learner achieves multiple aims within the academic year, outcomes are reported against their highest-level aim, unless they completed a traineeship in the year. Where a learner achieves two aims at the same level, the outcome is reported against the most recently achieved aim. The hierarchy used to select between aims is below

- Highest qualification
 - Higher Apprenticeship
 - Level 4 (or higher)
 - Advanced Apprenticeship
 - Full Level 3 (including academic qualifications, e.g. A-Levels)
 - Other Level 3
 - Intermediate Apprenticeship
 - Full Level 2 (including academic qualifications, e.g. GCSEs)
 - Traineeships
 - Level 2 ESOL
 - Level 2 English and Maths
 - Other Level 2

- Entry or Level 1 ESOL
 - Entry or Level 1 English and Maths
 - Other Entry or Level 1
 - Unassigned
- Most recently achieved aim (if achieving more than one at the same level)

Where a learner achieves more than one aim at the same level and on the same date, outcomes are reported against the aim with the lowest aim sequence number (a unique number used when recording aims in the ILR).

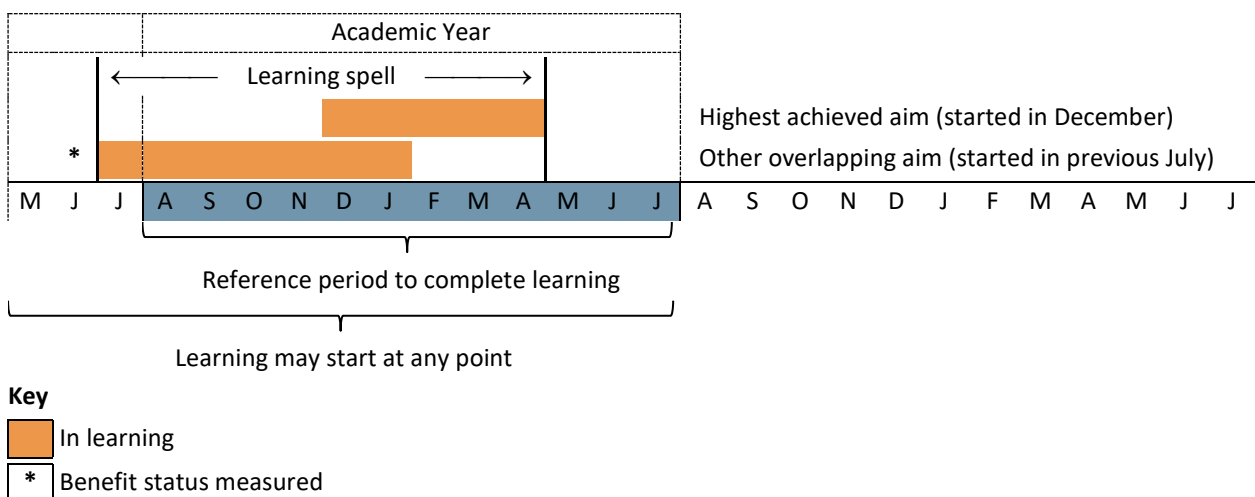
Benefit learners

Benefit learner status is determined using ILR data matched to DWP’s Customer Information System, rather than through any fields on the ILR itself. The DWP data are seen as more robust, and do not rely on the learner disclosing this information to their training provider. Learners are included in this measure if, on the day their training starts, they are claiming either

- Job Seeker’s Allowance (JSA), or
- Employment Support Allowance (ESA) and in the Work-Related Activity Group (WRAG), or
- Incapacity Benefit (IB), or
- Carers allowance (ICA), or
- Income support (IS), or
- Pension credit (PC), or
- Pass-ported injury benefit (PIB), or
- Severe disability allowance (SDA), or
- Jobseekers Training allowance JTA, or
- Universal Credit and in conditionality groups; “Searching for Work”, “Working with Requirements”, “Planning for Work” and “Preparing for Work”.

If a learner achieves two eligible aims in the academic year, and those aims overlap (so that the learner is studying two aims for at least some part of the year) then the learner’s benefit status is measured the day of the earlier start date. For example if a learner achieved two eligible overlapping aims in the year 2014/15, and the highest aim started on 1 December 2014 but the other started on 1 July 2014, then their benefit status would be measured on the earlier date, on 1 July 2014.

Figure 1: Example of when benefit status is measured for learners with multiple overlapping aims.



Destination measures

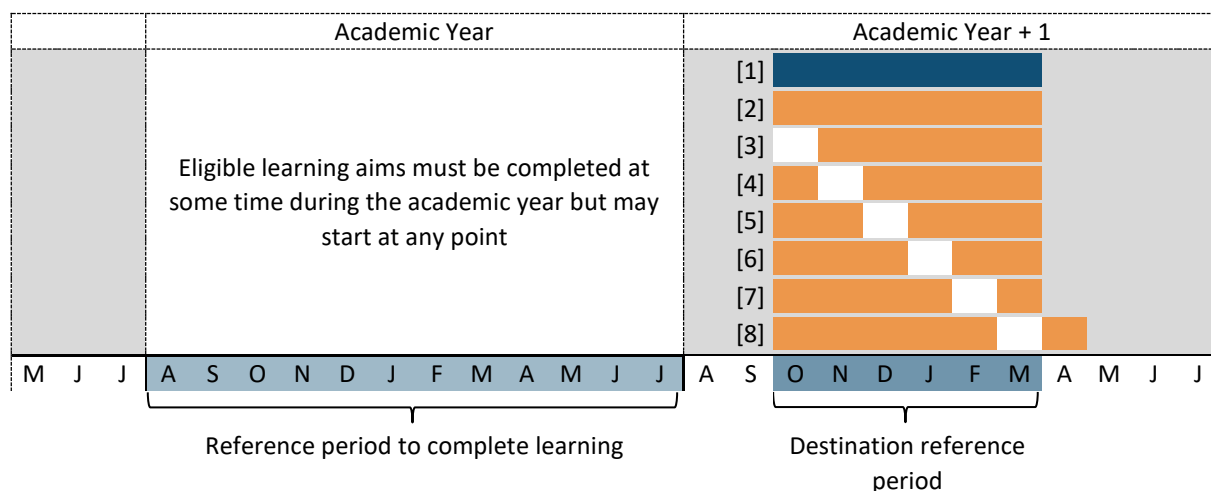
Destination measure - sustained employment

The sustained employment measure aims to count the proportion of learners in sustained employment following the completion of their course. Employment destinations are produced by matching ILR data to HMRC tax records (further details are provided later).

The definition of sustained employment is consistent with the definition used for 16-19 accountability. This looks at employment activity in the six month October to March period following the end of the academic year in which the learning aim took place. For 2016/17 achievers to be counted as in sustained employment:

- A learner must have completed a self-assessed return for tax year 2015/16, or
- A learner must be in paid PAYE employment in five out of the six months between October 2017 and March 2018.
- A learner needs to be in paid PAYE employment for at least one day in a month for that month to be counted.
- If a learner is employed in the five months between October 2016 and February 2017, but not in March 2017, then they must also be employed in April 2017.

Figure 2: The eight possible scenarios that would lead to a learner being classified as in sustained employment.



Key

- In self-assessed employment data for tax year following academic year
- In PAYE employment
- Not in employment
- Not within reference period

The measure allows for a one-month pause in PAYE employment to reflect that there may be more volatility in initial employment post learning. Where the pause is in March, activity in April is checked to see if it is a short pause or a more substantial break.

Destination measure - self-employed

If a learner is found in HMRC self-assessment data in the tax year following the achievement of their course they are flagged as self-employed and are subsequently counted in the sustained employment measure.

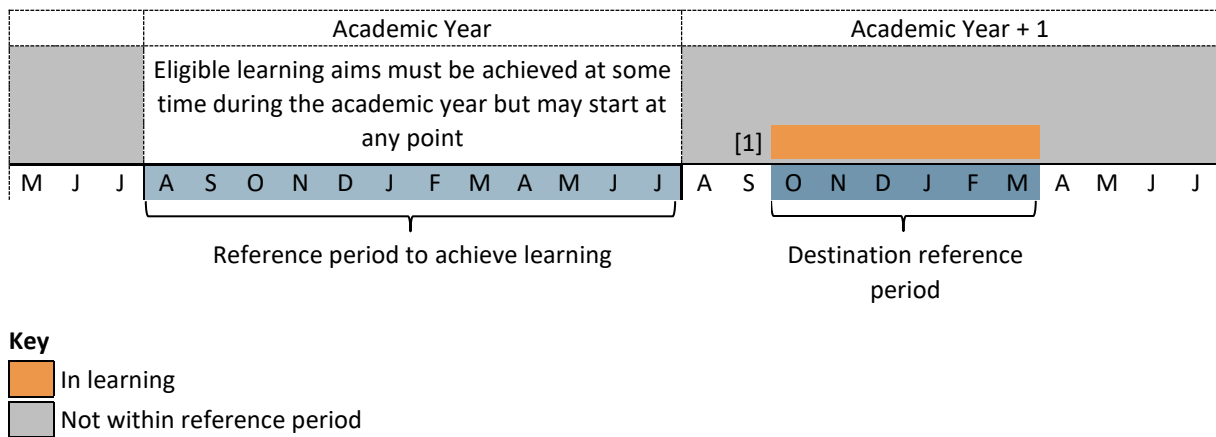
Destination measure – sustained further/higher education learning

The 'sustained further education learning', and 'sustained higher education learning' measures aim to count the proportion of learners in sustained FE or HE learning, regardless of economic activity, following the achievement of their course. Learning destinations are produced by matching ILR data to ILR data (the following year) and Higher Education Statistics Authority (HESA) data, respectively.

The definition of sustained learning for both measures is consistent with the definition used for 16-19 accountability. This looks at learning activity in the six month October to March period following the end of the academic year in which the learning aim took place. For 2016/17 achievers to be counted as in sustained learning:

- A learner must be in further education training (sustained further education) in each of the six months between October 2017 and March 2018.
- A learner must be in higher education training (sustained higher education) in each of the six months between October 2017 and March 2018.
- A learner needs to be in learning for at least one day in a month for that month to be counted.

Figure 3: The single scenario that would lead to a learner being classified as in sustained learning.



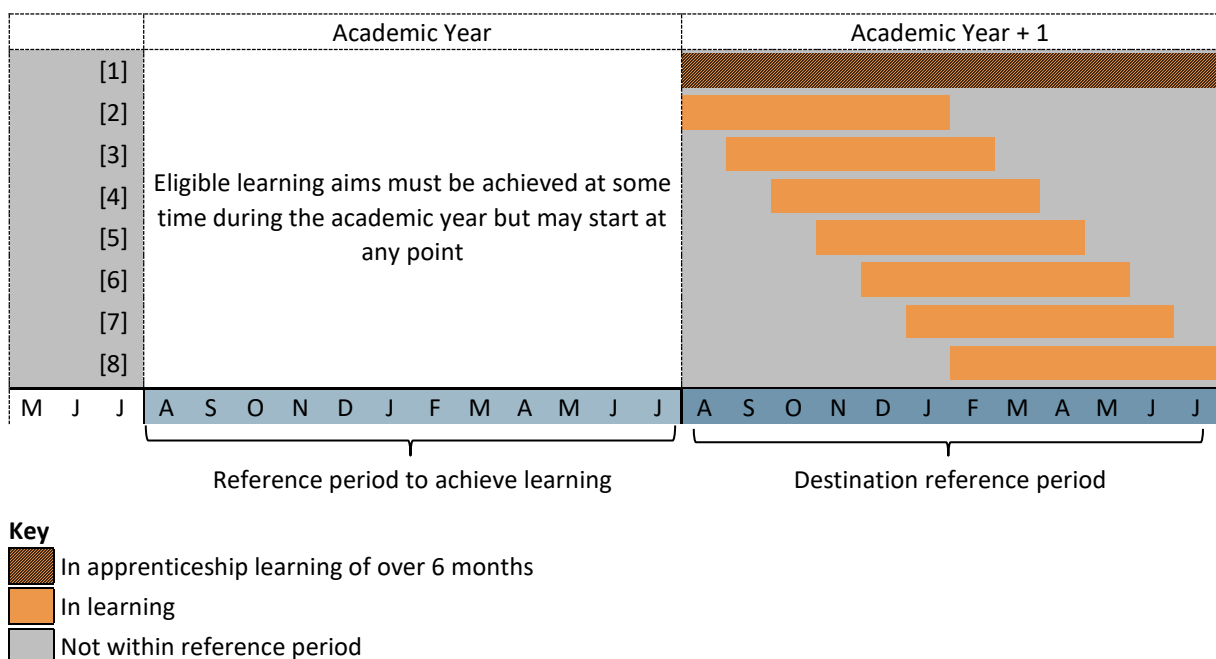
Destination measure – sustained apprenticeship

The ‘sustained apprenticeship’ measures aims to count the proportion of learners who went on to study a sustained apprenticeship, following the achievement of their course. Learning destinations are produced by matching ILR data to ILR data (the following year).

The definition of sustained apprenticeships is consistent with the definition used for [‘Destinations of KS4 and KS5 pupils’ publication](#). This looks at apprenticeship activity in the year after the end of the academic year in which the learning aim took place. For 2017/18, achievers to be counted as in a sustained apprenticeship:

- A learner must have had any 6 months consecutive apprenticeship learning.
- A learner needs to be in learning for at least one day in a month for that month to be counted.

Figure 4: The single scenario that would lead to a learner being classified as in a sustained apprenticeship.



Destination measure – sustained learning

The 'sustained learning' measure takes into account the 'sustained further education', 'sustained higher education', and 'sustained apprenticeship' measures. If a learner has met the criteria for one or more of these measures they will be included in the 'sustained learning' measure.

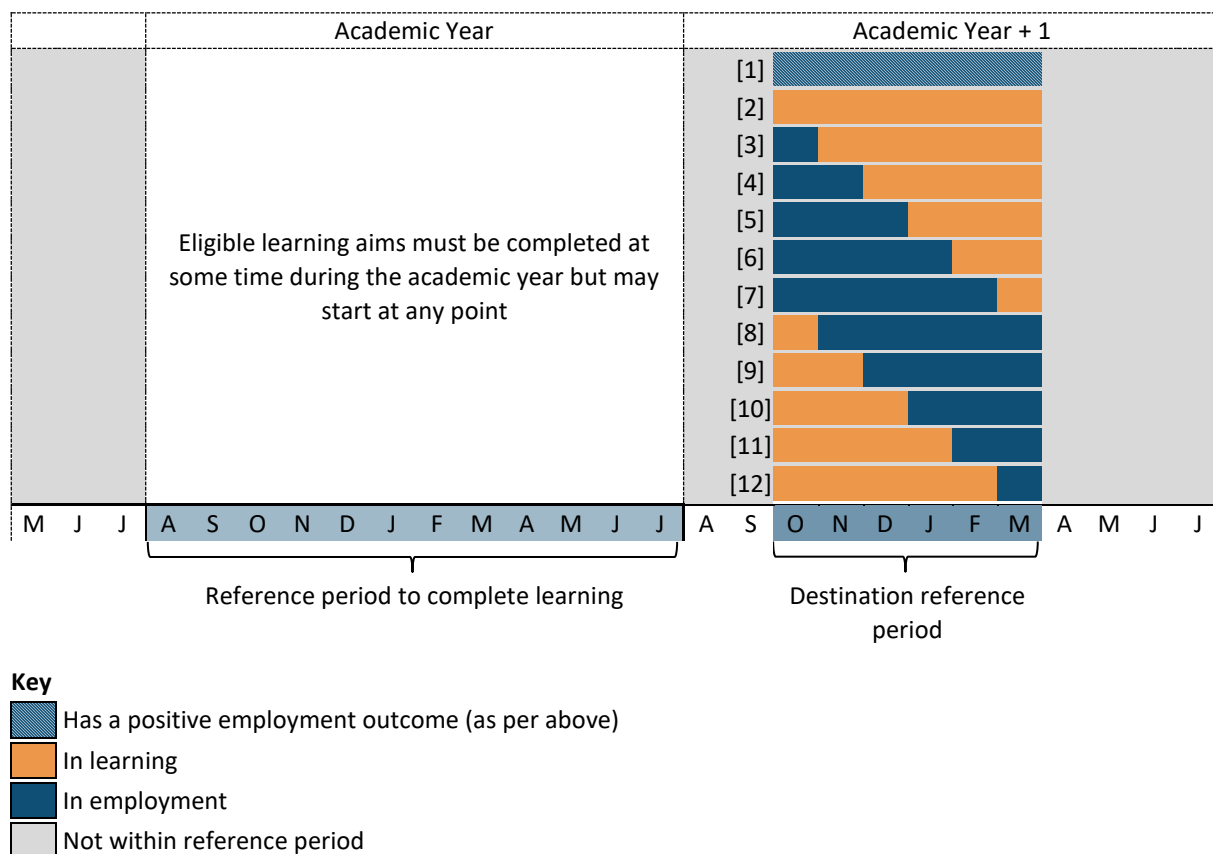
Destination measure – sustained positive destination

The 'sustained positive destination' measure aims to count the proportion of learners with a sustained positive outcome, either into learning or employment (or both). For 2016/17 completers to be counted as having a sustained positive destination, a learner must either

- Have a sustained positive employment outcome, or
- Have a sustained positive learning outcome (including sustained apprenticeship), or
- Be engaged in either learning (Further education or higher education) or paid employment in each of the six months between October 2017 and March 2018.

Under the final scenario, learners may only 'switch' between learning and employment once. For example, if they are in learning for 2 months, then employment for 4 months they are counted as having a sustained positive destination. However if they are in learning for 2 months, then employment for 2 months, then learning 2 months, they are not counted as having a sustained positive destination.

Figure 5: The twelve possible scenarios that would lead to a learner being classified as having a sustained positive destination



Destination measure – not recorded as a sustained positive destination

The 'not recorded as a sustained positive destination' measure has been provided to give an overview of the full cohort, including those learners that did not go onto a sustained positive destination. This measure encompasses three distinct groups:

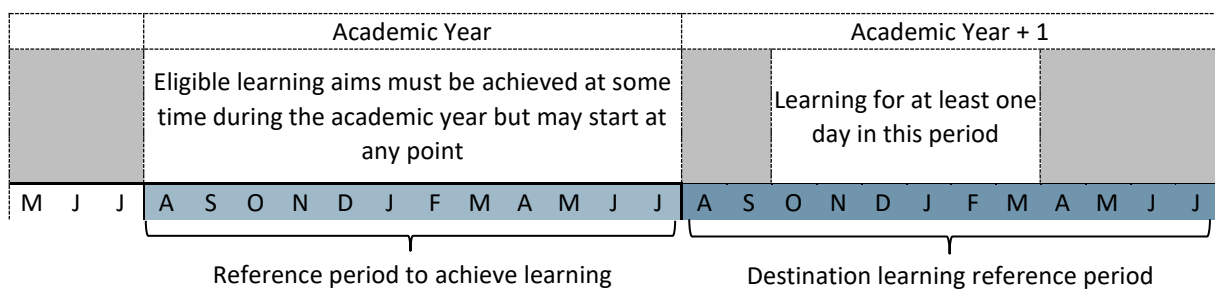
- **Education or employment not sustained** – learner had a positive destination but it did not span the whole period necessary to be counted as sustained.
- **Education or employment not sustained and on benefits** – learner had a positive destination but it did not span the whole period necessary to be counted as sustained, and the learner was also in receipt of benefits during the destination reference period (see ‘Benefit learners’ section below for a breakdown of included benefits).
- **In receipt of benefits only** – learner had no evidence of a positive destination, but was in receipt of benefits during the destination reference period (see ‘Benefit learners’ section below for a breakdown of included benefits).

Destination measure – any learning (sustained and non-sustained)

The ‘learning’ measure aims to count the proportion of learners who are in any learning, regardless of economic activity, following the achievement of their course. This uses the same data sources as the sustained learning measure, but looks across the whole of the following academic year to be counted as in learning:

- A learner must be in learning (in either Further Education or Higher Education) in any of the twelve months between August 2017 and July 2018.
- A learner only needs to be in learning for a single day in a month for the learning to be counted.

Figure 6: The scenario that would lead to a learner being classified as learning.



Key

■ | Not within reference period

Destination measure - no activity captured in data

The ‘no activity captured in data’ measure has also been provided to give an overview of the full cohort, and includes those learners who do not appear to have any learning or economic activity in the destination reference period.

Table C: Classification of outcomes

Classification	Sustained Employment	Sustained Learning	Any employment or learning	In receipt of benefits
No activity captured in data	x	x	x	x
In receipt of benefits only	x	x	x	✓
Education or employment not sustained and on benefits	x	x	✓	✓
Education or employment not sustained	x	x	✓	x
Sustained learning	x	✓	✓	x
	✓	✓	✓	x
	✓	✓	✓	✓
Sustained employment	✓	x	✓	x
	✓	✓	✓	x
	✓	x	✓	✓
	✓	✓	✓	✓

Sustained positive destination	Unmatched to CIS	✓	✓	Unmatched to CIS
	✓	✓	✓	✗
	✓	✗	✓	✗
	✓	✓	✓	✓
	✗	✓	✓	✗
	✗	✓	✓	✓
Sustained positive destination (combination of non-sustained learning and employment across reference period)	✗	✗	✓	✗
	✗	✗	✓	✓

Progression measures

New to the publication this year are a series of ‘progression’ measures, which use a learner’s educational history to determine whether they are progressing to a higher level of learning in their destination year (2017/18), after achieving their aim in the reporting year (2016/17).

These measures are only applicable to a subset of the learners included in the ‘outcome-based success measures’ publication, as for the figures to be meaningful the department must have a learner’s entire educational history on record. As such, learners have only been included in this analysis when:

- the learner’s full academic record is recorded in the NPD and ILR datasets, and
- learners were born in or after 1988. This is as far back as the department’s data collection reaches, meaning the department would not hold the full educational history of learners born before this period and could not guarantee full coverage of their prior attainment.

Progression measure – achieving at this level for the first time

This measure denotes whether the aim the learner achieved in the reporting year was the learner’s first time achieving at that level.

It is calculated by comparing the level of the learning aim in the reporting year, to the highest level the learner has achieved prior to the beginning of the reporting year.

When the level of learning in the reporting year is higher than the learner’s previous highest level of attainment, they are counted as ‘achieving this level for the first time’.

For example, if a learner had previously achieved a Full Level 2 qualification, and in the academic year 2016/17 (reporting year) they were studying a Level 3 learning aim, they would be counted as ‘achieving this level for the first time’. Conversely, if the learner was studying a Level 2 or lower aim in 2016/17 they would not be classed as having achieved this level for the first time.

Progression measure - progression from achieved aim

The ‘progression from achieved aim’ measure compares the level of the highest and latest achieved aim in the reporting year, to the highest level of learning the learner is studying in the destination year.

As a result, this measure is only calculated for learners who went on to a learning destination following achieving their learning aim in the reporting year.

To be counted in the ‘progression from achieved aim’ measure, the level of the learning aim a learner has gone on to study in the destination year must be higher than the aim they achieved in the reporting year.

For example, if a learner achieved a Full Level 2 learning aim in the academic year 2016/17, then they would be counted in this measure if they were studying for a Level 3 or higher aim in 2017/18.

For the purposes of this measure, Full Level 2, and Full Level 3 are treated as higher than Level 2 and Level 3 respectively.

Progression measure – progression for learner overall

The ‘progression for learner overall’ measure compares the level of learning of the aim the learner is studying for in the destination year to the highest level the learner has achieved prior to the destination year.

As a result, this measure is only calculated for learners who went on to a learning destination following achieving their learning aim in the reporting year.

To be counted in the ‘progression for learner overall’ measure, the level of the learning aim a learner has gone on to study in the destination year must be higher than the highest level of learning they have achieved over the course of their educational history.

For example, if a learner achieved a Full Level 2 learning aim before the beginning of the 2017/18 academic year, then they would be counted in this measure if the learning aim they were studying for in 2017/18 was Level 3 or higher.

Table D: Comparison of progression measures

Measure	Learning before reporting year		Learning in reporting year		Learning in destination year	
	A	compared to	B	n/a		
Achieving at this level for the first time	A	compared to	B	n/a		
Progression from achieved aim	n/a		B	compared to	C	
Progression for learner overall	A&B			compared to	C	

Aim titles

The qualification data have been aggregated by the qualification level and either the framework title (for Apprenticeships) or the aim title as recorded on the Learning Aims Database.

Outcomes by learner categories

In addition to the level of learning and provision type, the characteristics and background of learners also affect the outcome rates for each provider. For example, providers offering a higher proportion of apprenticeships are likely to have higher employment rates after learning than those offering entry-level courses to the unemployed.

To account for this natural variation in outcomes, we have developed a new measure that splits a provider’s outcomes into categories based on learner characteristics and the type of training offered:

Learner categories:

- Learners reported to have a Learning Difficulty and/or Disability (LLDD)
- Advanced and Higher Apprenticeships
- Full Level 3 or higher skills
- Access to HE
- Other Level 3
- Intermediate Apprenticeships
- Full Level 2 skills
- Traineeships
- English & Maths
- ESOL
- Other provision below Full Level 2

Apprenticeships and ‘full’ skills courses are then further broken down into their Sector Subject Areas to create 53 distinct learner categories. A full list of learner categories and their associated quintile thresholds can be found in the reference table accompanying the publication⁷.

The measure reports on a learner, rather than a learning aim basis, and the learner categories are listed in order of precedence so for example, outcomes for learners reported to have a learning difficulty and/or disability (LLDD) who completed an intermediate apprenticeship will be reported within the LLDD category only.

Outcomes for each category are measured separately, depending on whether the learner was in receipt of benefits before they started training (i.e. whether they were classed as being a ‘benefit learner’). A ranked distribution of providers by learning category is then constructed for each cohort, based on the **Sustained Positive Destination Rate**. Ranked providers are divided into five equal groups (or **quintiles**) based on performance for each learner category.

After creating a ranking for every learning category, we calculate the percentage of learners in each quintile for each provider, and report how much of a provider’s outcomes fall within each quintile.

A worked example

Using the above methodology, we use outcomes for a fictional provider to calculate how much of their provision falls into each quintile of performance:

Provider A has 1,000 learners in 2014/15, of which 50 were on out-of-work benefits before they started training. These rates are reported for all providers:

Figure 7: Sustained positive destination rate by learner category and benefit status for ‘Provider A’

Provider Name	Learner Category	Benefit learners	Number of achievers	Sustained positive destination rate
Provider A	All	Total	1000	88%
Provider A	All	Not on benefits at start of learning	950	88%
Provider A	All	On benefits at start of learning	50	81%

These learners can be separated into the different learner categories, and English and Maths provision can be further broken down into benefit learners and non-benefit learners creating five different learning categories in total:

Figure 8: Sustained positive destination rate by learner category for ‘Provider A’

Types of provision offered at provider A:	Completers	Sustained positive destination rate
Group 1: Advanced and Higher Apprenticeship: Business, Administration and Law	690	87%
Group 2: Advanced and Higher Apprenticeship: Health, Public Services and Care	230	94%
Group 3: English and Maths (excl. benefit learners)	20	73%
Group 4: LLDD learner	10	56%
Group 5: Benefit learners in English and Maths	50	76%

For each of the above learning categories Provider A is then ranked (based on the sustained positive destination rate) against all providers offering the same provision. Once ranked, providers are grouped into one of five quintiles of performance so that providers whose outcomes are in the top 20% are assigned to the top quintile while providers whose outcomes are in the bottom 20% are assigned to the bottom quintile.

⁷ <https://www.gov.uk/government/collections/statistics-outcome-based-success-measures>

The reference table shows the sustained positive destination rate thresholds that were used to define quintiles, and is replicated below for the learner categories we are interested in for Provider A:

Figure 9: Sustained positive destination thresholds

Learner Category	Learner type	20th Percentile	40th Percentile	60th Percentile	80th Percentile
Advanced and Higher Apprenticeships: Business, Administration and Law	All (excl. benefit learners)	92%	93%	95%	96%
Advanced and Higher Apprenticeships: Health, Public Services and Care	All (excl. benefit learners)	91%	92%	93%	94%
English & Maths	All (excl. benefit learners)	71%	75%	79%	85%
LLDD learner	All (excl. benefit learners)	56%	63%	69%	75%
English & Maths	Benefit Learners	45%	50%	56%	62%

Comparing the sustained positive destination rates in figure 8 against the quintile thresholds in figure 9 allows us to calculate how Provider A's outcomes compare against other providers for each learner category.

Figure 10: Example comparing outcomes for 'Provider A' against quintile thresholds

Framework group	Completions	Quintile					Sustained Positive Destination Rate
		Bottom	2nd	3rd	4th	Top	
Advanced and Higher Apprenticeship: Business, Administration and Law	690	690	.	.	.	.	87%
Advanced and Higher Apprenticeship: Health, Public Services and Care	230	.	.	.	.	230	94%
English and Maths (excl. benefit learners)	20	.	20	.	.	.	73%
LLDD learner	10	.	10	.	.	.	56%
English and Maths (benefit learners)	50	50	76%

Total number of learners	1000	690	30	0	0	280
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Percentage of learners	100%	69%	3%	0%	0%	28%
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The outcomes table shows the distribution of each provider of all their learners.

Earnings measures

This report presents the **median annualised earnings** of learners. The **median** is calculated by ranking all learners' annualised earnings and taking the value at which half of learners fall above and half fall below. In addition to the median, the annualised earnings for the top 25% (or **upper quartile**) and bottom 25% (or **lower quartile**) are also presented to help users understand more about how earnings are distributed.

In the case of all earnings measures, the estimates only include that achieved a Full Level 2, Full Level 3 or Level 4+ qualification and have an earnings record on the P14 (HMRC data), a record of sustained employment on the P45 (HMRC data) and no record of further study at a Higher Education institution.

Annualised earnings are calculated for learners that started or left employment part way through the tax year by adjusting their recorded earnings to the equivalent earnings had they been employed for the entire tax year. The PAYE records from HMRC do not include reliable information on the hours worked in employment so it is not possible to accurately distinguish between learners in full time and part time employment. Therefore **part time earnings** are not adjusted to the full time equivalent amount.

Where there are high levels of part time employment within a group of learners, the median annualised earnings will be lower as a result. This is the case for sector subject areas like child development and wellbeing where many of the employment opportunities are part time. It is important to note that the number of people in part time employment may be as much due to the preferred working pattern of the learners as what is being offered by employers.

The earnings estimates do not include any income that was recorded through the **self-assessment** tax system. This means that earnings will be underreported for learners who have self-assessment income in addition to earnings from paid employment collected by the PAYE system. Learners that recorded their income entirely through the self-assessment tax system are not included in the estimates.

Self-assessment information on sole traders has been used in the employment outcomes for the destination measures. For earnings, overall there is a much smaller impact of including self-assessment information. Therefore as self-assessment information is only available from the 2013/14 tax year onwards, the earnings estimates only use PAYE records in order to provide a consistent five year time series. The earnings estimates are based on information recorded through the Pay-As-You-Earn (PAYE) system used to collect Income Tax and National Insurance from employment by Her Majesty's Revenue and Customs (HMRC).

The PAYE records from HMRC do not include reliable information on the hours worked in employment so it is not possible to accurately distinguish between learners in full time and part time employment.

They show what learners actually earned post study and include learners who may not have been employed in the same sector in which they achieved their apprenticeship or training.

The estimates do not include any income that was recorded through the self-assessment tax system.

Therefore part time earnings are not adjusted to the full time equivalent amount. Where there are high levels of part time employment within a group of learners, the median annualised earnings will be lower as a result.

This is the case for sector subject areas like child development and wellbeing where many of the employment opportunities working with children are part time.

It's important to note that the number of people in part time employment may be as much due to the preferred working pattern of the learners as what is being offered by employers.

5. Users of these Statistics

The publication provides an understanding the long-term trends of learners into all types of employment and attracts a wide variety of users who use the statistics in various ways. This includes to help inform learners, employers and providers (e.g. to inform learner choice between providers or qualifications). These statistics also help the Department for Education (DfE) develop and monitor further education policy, and inform Ofsted briefing documents for Further education and skills inspections.

6. Accompanying Tables

A list of accompanying tables relating to the statistical publication can be found on the GOV.UK website with the most recent publication: <https://www.gov.uk/government/collections/statistics-outcome-based-success-measures>

7. Get in touch

Media enquiries

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

Tel: 020 7783 8300

Other enquiries/feedback

Nicholas Treece, Further Education, Department for Education, 2, St Pauls Place, 125 Norfolk St, Sheffield S1 2JF.

Email: FE.OUTCOMESDATA@education.gov.uk



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About this publication:

enquiries Nicholas Treece, Further Education, Department for Education, 2, St Pauls Place, 125 Norfolk St, Sheffield S1 2JF.
email FE.OUTCOMESDATA@education.gov.uk
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