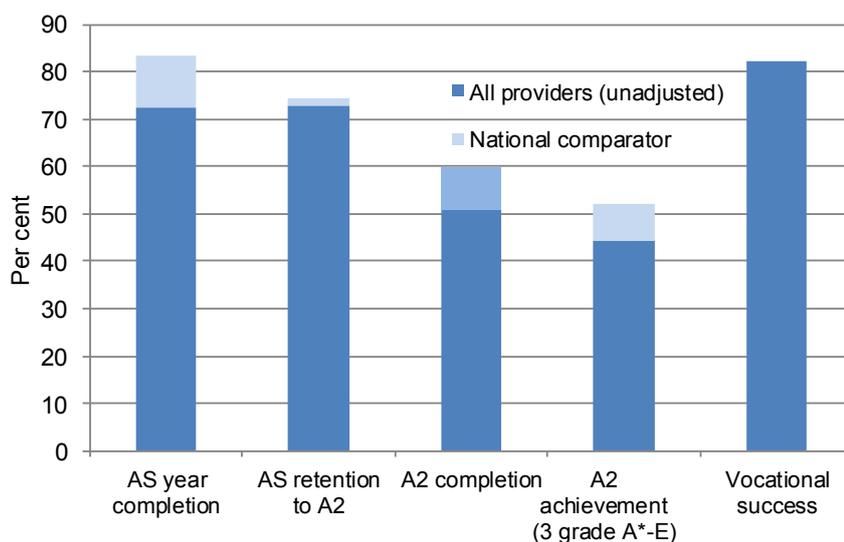


Consistent performance measures for post-16 learning: achievement and value added, 2016/17 (experimental statistics)

20 Sept 2018
SFR 81/2018

The Welsh Government has been working to develop a set of consistent performance measures (achievement, value added and destinations) for further education institutions and school sixth forms, to enable the publication of headline and provider level information on an annual basis. This publication provides a first set of experimental statistics while we finalise the measures and resolve outstanding methodology and data quality issues. This release relates to measures of achievement (i.e. learning programme completion and attainment of qualifications) and gives an update on value added. A separate release provides information on [learner destinations](#).

Summary achievement measures, 2016/17



General education (programmes focusing on AS/A level and equivalent qualifications)

- 83 per cent of those who enrolled in 2015/16 completed the year. Around three quarters of these continued onto the second year of the programme.
- Of those who enrolled in 2015/16, 60 per cent completed the two year programme (in 2016/17) and 52 per cent achieved the equivalent of 3 A levels at grade A*-E.

Vocational programmes (programmes focusing on vocational study)

- The learning activity success rate for those undertaking vocational programmes in colleges in 2016/17 was 82 per cent.

About this release

This release contains the first experimental statistics related to consistent performance measures for post-16 learning for school sixth forms and further education institutions.

The statistics are produced from number of sources - the post-16 data collection, Lifelong Learning Wales Record (LLWR) and Welsh Examinations Database (WED).

In this release

Introduction	2
General education programmes	3
Vocational programmes	9
Value added	11
Notes	12
Key Quality Information	14

Introduction

Background and context

Current arrangements for measuring performance in school sixth forms and in further education institutions are entirely separate. Performance measures are produced from different data-collection systems using differing analysis methodologies. This means that we are unable to compare outcomes in a meaningful way across learning settings, and that learners and parents do not have access to transparent information to inform their choices.

This inconsistency was identified as a weakness in various reviews of education in Wales, such as the [Robert Hill review](#), and the [Review of Qualifications for 14 to 19-year-olds](#).

To address this disparity, the Welsh Government has been working to develop a set of consistent measures (achievement, value added and destinations) for further education institutions and school sixth forms to enable the publication of all Wales and provider level information on an annual basis. The proposed suite of performance measures consists of:

- **Achievement** (The completion and attainment of learners undertaking A level, vocational and Welsh Baccalaureate programmes)
- **Value added** (The progress made by learners, over and above what would normally be expected based on their prior attainment and gender)
- **Destinations** (The proportion of learners who progress into further learning (including higher education) and/or employment). A separate statistical release for destinations can be found at [Consistent performance measures for post-16 learning - Learner destinations](#).

There is a 'mixed economy' of post-16 providers in Wales, with considerable variation in structures across different local authority areas. In some areas, there is a tertiary structure, meaning that schools serve pupils aged 11-16 with post-16 academic and vocational courses delivered by colleges. In other areas, both sixth forms and colleges co-exist. These different delivery structures will affect the nature of the cohort who start learning programmes in different providers, in terms of their characteristics and prior attainment, and this can have an impact on post-16 learning outcomes. Just over half of young people who continue in education after the age of 16 study in further education or work-based learning, and just under half in sixth forms.

The size of the learning providers included in the post-16 performance measures varies widely. Colleges' full-time learner numbers range from 1,300 to 7,500, while sixth forms range from 40 to 480 learners.

Post-16 learners in school sixth forms and further education institutions all undertake a programme of study, consisting of a combination of qualifications (or learning activities). There are a range of programmes, some of which focus on AS/A levels while others are based around the wide range of vocational qualifications offered. For the purposes of the achievement measures, programmes have been attributed as general education or vocational.

General education programmes include those where learners are studying AS/A levels either wholly or alongside qualifications of equivalent size and value, such as vocational qualifications or the Welsh Baccalaureate, intended to be a two year programme of study.

Vocational programmes are those where mainly vocational qualifications are undertaken, which vary in level and therefore length of study.

Achievement: General education programmes

The following Table 1 summarises data at Wales level related to the new achievement measures for general education programmes.

Two sets of results are presented, one that includes all schools and further education institutions (i.e. all providers) and a second '*national comparator*' where adjustments have been made to exclude providers with known or strongly suspected data quality issues and provide a better comparison. In total, there are 160 providers, consisting of 149 schools and 11 further education institutions, within the scope of this measure. To produce the national comparator, 37 providers were excluded (23 per cent) from the analysis, due to known or strongly suspected data quality issues, leaving 123 providers (77 per cent). The main data quality issue was around the recording of programme completion for sixth forms within the Post-16 collection, particularly in the AS year, which then removed learners from the subsequent elements of the measures. Due to the complexity of the measures in terms of methodology, and data sources, there will still be some remaining data issues even within the adjusted measure. This means that schools and colleges should still exercise caution in using these statistics to benchmark their learner outcomes. As the methodology for the measures has been developing we have been working with providers to ensure that we minimise data quality issues that will impact upon published statistics.

Table 1: Achievement of learners undertaking general education programmes

		3+ AS Level (or equivalent) programmes - 2015/16					A2 Level (or equivalent) programmes - 2016/17					
Cohort	Age group	Number of learners enrolled	% Early drop-out ³	Number of learners completing	% Completion (AS year)	Number of learners continuing from AS	% Retention	Number of learners completing	% Completion (A2 year)	% Achieving 3 A levels at grade A*-A (or equivalent) ⁴	% Achieving 3 A levels at grade A*-C (or equivalent) ⁴	% Achieving 3 A levels at grade A*-E (or equivalent) ⁴
National comparator ²	16	14,061	2%	11,502	84%	8,814	77%	8,554	97%	10%	56%	88%
	17+	2,000	6%	1,528	81%	889	58%	832	94%	4%	40%	76%
	All ages	16,061	3%	13,030	83%	9,703	74%	9,386	97%	10%	54%	87%
All providers ¹ (unadjusted)	16	16,763	2%	11,764	72%	8,814	75%	8,554	97%	10%	56%	88%
	17+	2,173	6%	1,580	77%	892	56%	835	94%	4%	40%	76%
	All ages	18,936	3%	13,344	72%	9,706	73%	9,389	97%	10%	54%	87%

		Two-year measures			
Cohort	Age group	% Completion ⁴	% Achieving 3 A levels at grade A*-A (or equivalent) ⁵	% Achieving 3 A levels at grade A*-C (or equivalent) ⁵	% Achieving 3 A levels at grade A*-E (or equivalent) ⁵
National comparator ²	16	62%	6%	35%	55%
	17+	44%	2%	18%	34%
	All ages	60%	6%	33%	52%
All providers ¹ (unadjusted)	16	52%	5%	29%	46%
	17+	41%	2%	16%	31%
	All ages	51%	5%	28%	44%

Sources: Lifelong Learning Wales Record (LLWR), Post-16 Collection, Welsh Examinations Database (WED)

¹ There were 160 providers for learners of all ages and aged 16. There were 137 providers for learners aged 17+.

² The 'adjusted' cohort excludes some providers with known or strongly suspected data quality issues. See the notes for further information.

³ The proportion of learners terminating their learning programme within 8 weeks of enrolment (early drop outs). These learners are excluded from subsequent calculations.

⁴ Calculated based on learners that completed an A2 programme.

⁵ Calculated based on learners that enrolled on an AS programme (excluding early drop-outs).

The measures present the number of learners enrolled on a general education programme of 3 or more AS levels (or equivalent qualifications) at the start of the 2015/16 academic year. Taking account of early drop out the table provides information related to those completing the first year of study (the AS years), those continuing into, and additionally completing, the second year of study (the A2 year). The proportion of the cohort achieving 3 A levels (or equivalent¹) at grades A*-A, A*-C and A*-E is also presented – on the basis of the AS cohort (measured at the eight week point) and the A2 cohort.

Key points: Achievement of learners undertaking general education programmes

<p>AS completion: 83 per cent of those who enrolled onto a general education programme in 2015/16, completed the first year (the AS year of study).</p>
<p>Retention to A2: Around three-quarters of those who completed the first year returned to the second (A2) year in 2016/17.</p>
<p>A2 completion: 97 per cent of those who returned for the A2 year completed it, representing 60 per cent of those who enrolled in 2015/16.</p>
<p>A2 achievement: 87 per cent of those who returned and completed the A2 year achieved 3 A levels at grades A*-E or equivalent¹, 54 per cent 3 grade A*-C and 10 per cent A*-A.</p> <p>Of those who initially enrolled for the 2 year programme this represents 52 per cent A*-E, 28 per cent A*-C and 6 per cent A*-A.</p>
<p><i>All measures exclude early drop-outs (by 8 weeks) from the programme and are presented on an adjusted basis (excluding around a quarter of providers with identified data quality issues)</i></p>

¹ This includes qualifications which are of comparable size and value to A2 level, and which are counted towards the general education achievement measure; for example, BTEC Subsidiary Diplomas and the Advanced Welsh Baccalaureate Skills Challenge Certificate.

The following charts show the provider distribution for retention and achievement measures. Around a quarter of providers with known or strongly suspected data quality issues are excluded from the analysis. Due to the complexity of the measures in terms of methodology, and data sources, there are will be some remaining quality issues even within those providers included within the adjusted measure, and the data is presented at this stage to give an indication of the variation.

Retention

Chart 2: Providers' retention rates (AS to A2 programmes)

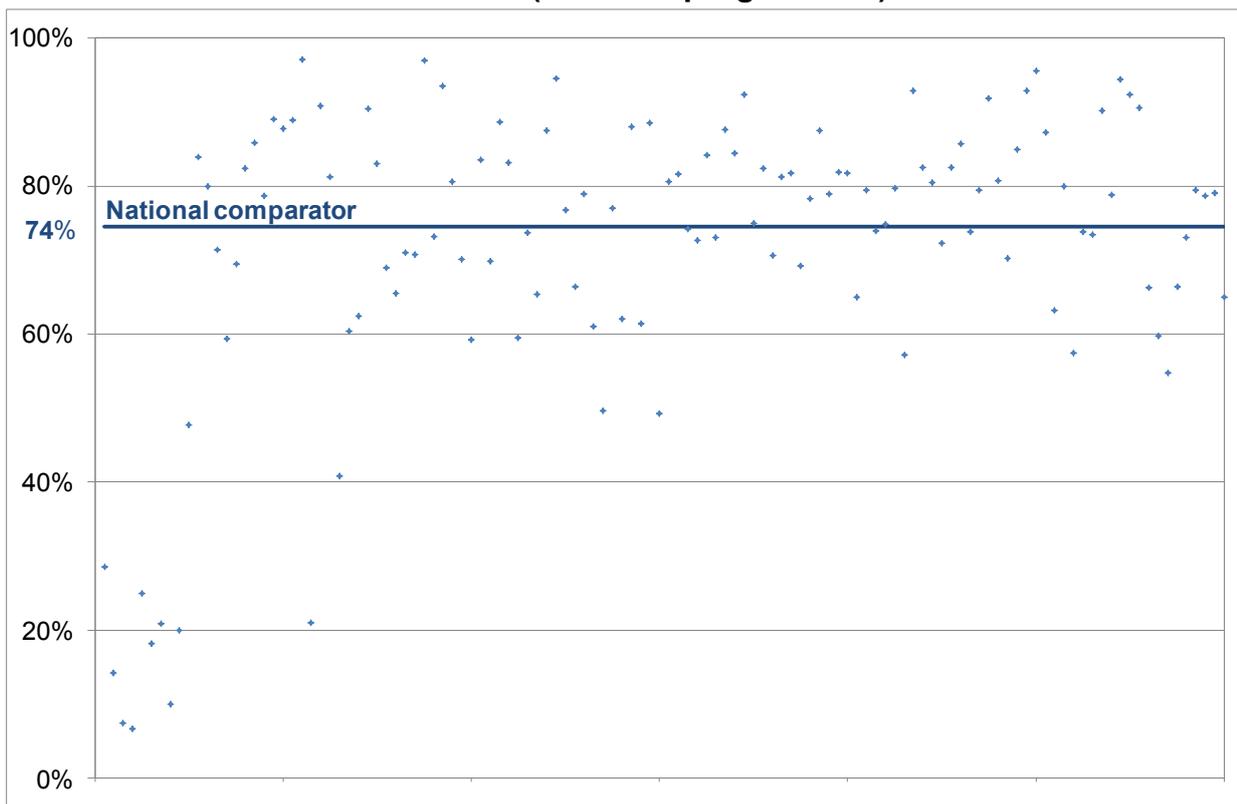


Chart 2 above shows the provider distribution of retention rates – that is, the percentage of learners who completed the AS year in 2015/16 who continued onto the A2 year in 2016/17.

The national comparator retention rate for the providers included in the analysis between 2015/16 completers and 2016/17 was 74 per cent and is shown on the chart.

Achievement

The following charts present the provider distribution of achievement rates – that is the percentage of those enrolled in 2015/16 who achieved three A levels or equivalent¹, at grades A*-A, A*-C and A*-E, with the national comparator retention rate shown for each.

Chart 3: Providers' achievement, percentage of learners achieving three A levels at grade A*-A (or equivalent)¹

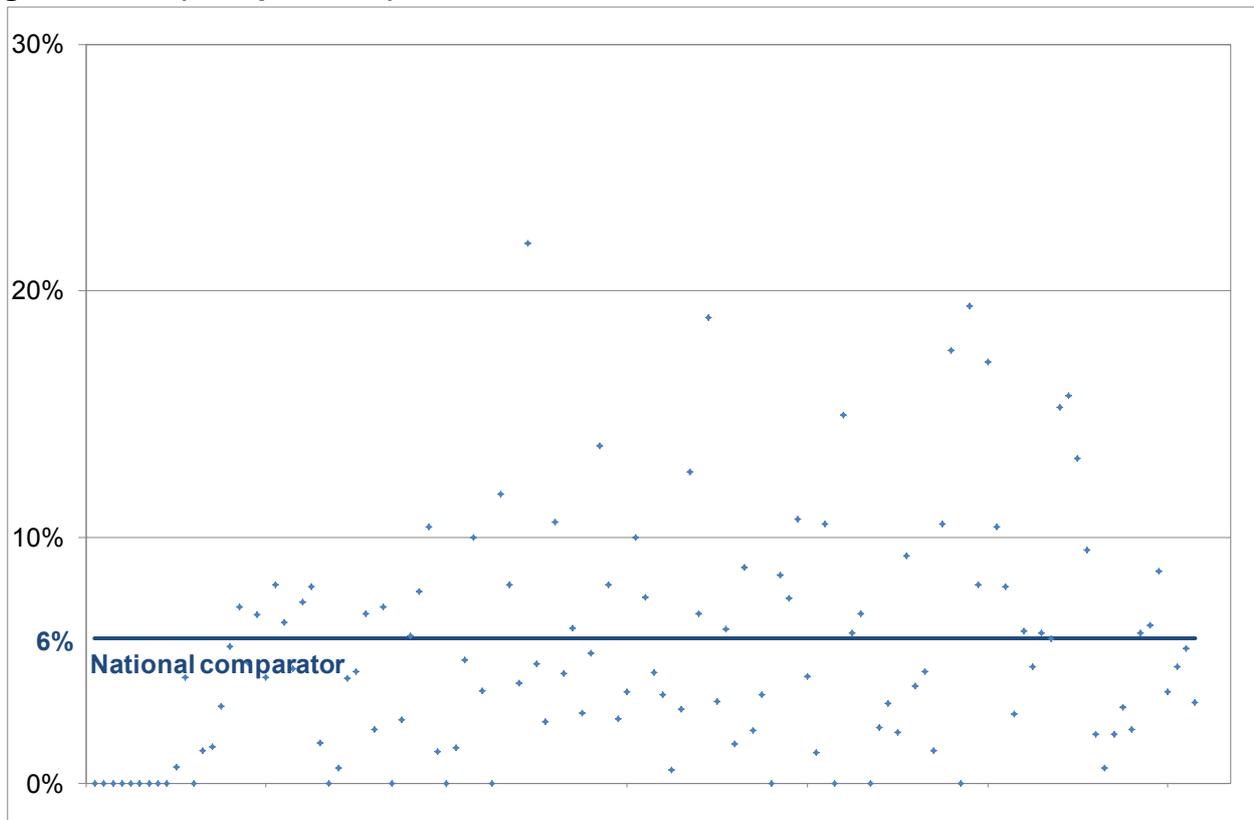


Chart 4: Providers' achievement, percentage of learners achieving three A levels at grade A*-C (or equivalent)¹

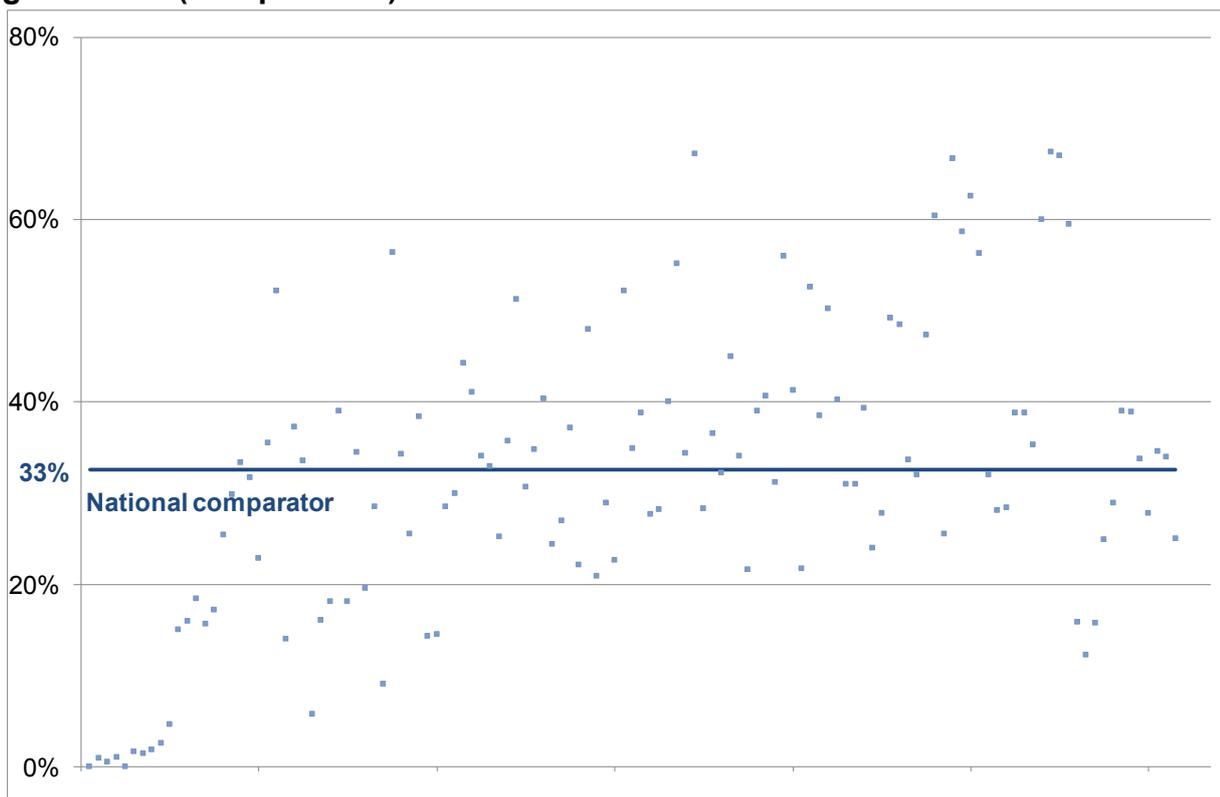
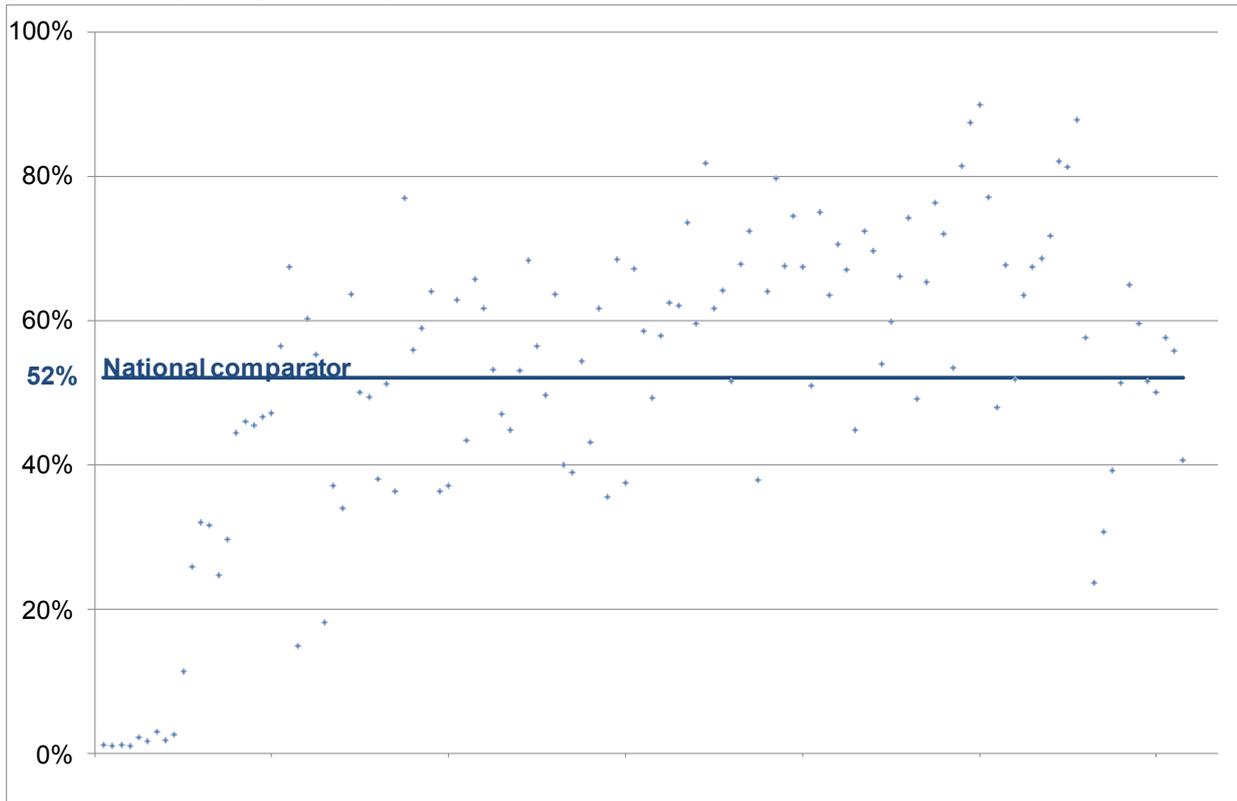


Chart 5: Providers' achievement, percentage of learners achieving three A levels at grade A*-E (or equivalent)¹



¹ This includes qualifications which are of comparable size and value to A2 level, and which are counted towards the general education achievement measure; for example, BTEC Subsidiary Diplomas and the Advanced Welsh Baccalaureate Skills Challenge Certificate.

Achievement: Vocational programmes

Vocational programmes are those where mainly vocational qualifications are undertaken, which vary in level and therefore length of study. Given the variation in length of study the measure for vocational programmes is presented on a one year basis only, reflecting the way in which these programmes are funded. Almost all vocational programmes take place in further education institutions, and at this stage the coverage of the measure is limited to those and excludes the small number in school sixth forms. See notes for further detail.

[Table 2](#) shows the number of learners enrolled and completing vocational programmes in 2016/17 by level and age group. Additionally shown is a learning activity success rate for those enrolled (excluding early drop outs) - that is, of individual learning activities started, how many were successfully completed and attained. The learning activity success ranged from 78 per cent for Level 2 programmes to 91 per cent for the Entry level.

Table 2: Achievement of learners undertaking vocational programmes by age group, 2016/17

Programme level	Age group	Number of learners enrolled	% Early drop-out ¹	Number of learners completing	% Learning activity success ²
Level 3	Under 18	13,443	6%	11,511	82%
	19 to 24	2,940	8%	2,418	79%
	25 to 49	828	11%	650	83%
	50 plus	73	12%	53	84%
	Total	17,284	6%	14,632	82%
Level 3 Access	Under 18	136	7%	106	76%
	19 to 24	798	12%	577	77%
	25 to 49	877	15%	648	82%
	50 plus	24	14%	19	86%
	Total	1,835	12%	1,350	79%
Level 2	Under 18	7,106	9%	5,680	77%
	19 to 24	1,635	13%	1,199	77%
	25 to 49	1,200	14%	888	82%
	50 plus	73	6%	60	84%
	Total	10,014	9%	7,827	78%
Level 1	Under 18	5,812	11%	4,571	81%
	19 to 24	814	16%	604	83%
	25 to 49	516	19%	379	87%
	50 plus	23	15%	15	69%
	Total	7,165	11%	5,569	82%
Entry Level	Under 18	1,525	7%	1,280	89%
	19 to 24	853	4%	761	94%
	25 to 49	543	14%	431	91%
	50 plus	38	15%	27	94%
	Total	2,959	7%	2,499	91%

Source: Lifelong Learning Record Wales (LLWR)

¹ The proportion of learners terminating their learning programme within 8 weeks of enrolment. These learners are excluded from subsequent calculations.

² Based on all qualifications for entry level programmes, main qualifications only for all other programmes.

Progress with Value Added measures

Alongside developing achievement measures, we are developing a bespoke post-16 value added model for providers in Wales, and have appointed external contractors to undertake this work for us. In simple terms, value added is a measure of the extent to which a learner's qualification outcome differs from that which would have been *expected* of them. In this case the expectation is derived from the progress made by similar learners in the same year. The aggregation across learners of the differences between their actual and expected outcomes gives provider-level value added measures. Positive value added scores indicate that learners achieved a higher than expected point score and negative scores indicate that they achieved a lower than expected point score.

The analysis depends on linking a number of data sources at learner level (further information in Notes) to enable the creation of prior attainment summaries, the identification of post-16 enrolments, outcomes and learner contextual factors. The model aims to provide subject level detail for individual providers and therefore, to provide sufficient entries for many subjects and enable reliable subject-level value added analysis, data for Wales has been pooled with anonymised data for England from the National Pupil Database data for key stage 4 and key stage 5.

The current coverage of the model is learners aged 16 to 18 on 31 August at the start of the academic year, and identified as at the end of two years of Level 3 study from their attainment. In terms of qualifications those with three or more pass grades, and sufficient entries across Wales and England are included, which are predominantly AS/A-levels and BTECs.

The real value of value added information is in the local context for providers to highlight the strengths and weaknesses of provision for different subjects and learner groups. Providers have been given their own value added analysis for this first year, with information related to the 3 indicators:-

- Average grade per entry (AGE) at subject level;
- Total points per learner (TVL) at learner level; and
- Total volume of entries (TVE) at learner level.

Building on feedback from the first year, and ongoing discussions with the contractor, we are continuing to develop the model and improve how results are reported and interpreted, including at Wales level – which will be taken forward for the 2017/18 data. We are also considering the value of publishing all-Wales statistics for this measure.

Notes

This statistical release primarily summarises data relating to the 2016/17 academic year. AS level learning programmes undertaken in 2015/16 are also included in Table 1 in order to present outcomes over the full two years of A level study.

The key data sources used in this release are as follows:

- a. [Post-16 Data Collection](#): every October, all maintained schools with sixth forms and middle schools with pupils in years 12, 13 and/or 14, are required to report all learning programmes and activities undertaken by learners in the previous academic year.
- b. [Lifelong Learning Wales Record \(LLWR\)](#): contains data on further education, work-based learning and adult learning, collected on a 'rolling' basis throughout the year with regular statistical freezes. It provides the official source of statistics on post-16 (non-higher education) learners in Wales.
- c. Welsh Examinations Database (WED): contains data on examination entries and outcomes collected from a number of awarding organisations over the summer.
- d. [Pupil Level Annual Schools Census \(PLASC\)](#): every January, all maintained schools are required to report learner level data including pupil characteristics such as gender and ethnicity.

Achievement

General Education Programmes ([Table 1](#))

The number of learners enrolling on AS level learning programmes in school sixth forms is drawn from the Post-16 Data Collection relating to the 2015/16 academic year. Those learners completing the AS programme are then matched to learners enrolling on an A2 level learning programme in the 2016/17 Post-16 Data Collection in order to measure retention and A2 completion. Those learners completing the A2 programme are then matched to the Welsh Examinations Database in order to capture attainment over the two years of A level study.

For further education institutions the same methodology is applied but with all data being drawn from the LLWR.

The achievement measures include only those qualifications approved and designated for use in Wales. An examination is discounted when a pupil achieves a higher grade or higher level qualification in the same subject group. If a qualification is discounted then it does not count towards the statistics published in this release. Qualifications of comparable size and value to A2 level, are counted towards the general education achievement measure; for example, BTEC Subsidiary Diplomas and the Advanced Welsh Baccalaureate Skills Challenge Certificate.

Vocational Programmes ([Table 2](#))

The number of learners in further education institutions enrolling on vocational learning programmes during the 2016/17 academic year is drawn from the LLWR. Learning activity success is also derived from the LLWR for those learners still enrolled on their learning programme after eight weeks.

It is not currently possible to derive the measures for schools due to limitations with the data obtained via the Post-16 Data Collection. The Post-16 Data Collection captures the learning activities undertaken by learners but not the outcomes achieved. Learning activities are recorded under learning activity reference codes. It is not possible to match these learning activities to WED where qualifications are recorded under their respective Ofqual Qualification Number or Qualifications Wales Approval/Designation (QWAD) Number.

From 2017/18, the Post-16 Collection will capture the QWAD for each learning activity recorded as part of the data collection which will enable us to match to outcomes captured through WED.

Data coverage

Learners undertaking multiple learning programmes with the same provider

Where a learner undertakes more than one learning programme with the same provider during an academic year (for example changing from a four AS level programme to a three AS level programme), the most recent learning programme undertaken is counted in the performance measures.

Learners transferring between providers

Where a learner enrolls on a learning programme then withdraws/transfers from that programme and subsequently takes up learning at a different provider, both learning programmes will count towards the performance measures.

Definitions

Terminology

Data are presented on an 'academic year' basis referring to the period 1 August to 31 July.

Early Drop-out

Learning activities with an expected length of 24 weeks or greater that ended within 8 weeks of their start date without completing have been classified as early drop-outs, and have been excluded from subsequent calculations.

Key quality information

This section provides a summary of information on this output against five dimensions of quality: Relevance, Accuracy, Timeliness and Punctuality, Accessibility and Clarity, and Comparability and Coherence.

Relevance

The measures set out in this publication are primarily used:

- by the Welsh Government to monitor providers' performance and as baseline information to set targets for improvements as part of the Quality and Effectiveness Framework for post-16 learning;
- by Estyn, to inform inspection judgements on standards; and
- by providers themselves, as a management tool to measure their own performance and benchmark themselves against sector averages, as part of their annual self-assessment cycles.

The measures are also used both within and outside the Welsh Government to monitor educational trends and as a baseline for further analysis of the underlying data. Some of the key users are:

- Ministers and Officials in the Welsh Government;
- Assembly Members and researchers in the National Assembly for Wales;
- other government departments;
- local authorities and regional education consortia;
- students, researchers, and academics;
- schools and further education institutions;
- the research community;
- individual citizens, private companies, and the media.

Accuracy

Current arrangements for measuring performance in school sixth forms and in further education are entirely separate. Performance measures are produced from different data-collection systems using differing analysis methodologies. This means that we are unable to compare outcomes in a meaningful way across learning settings, and that learners and parents do not have access to transparent information to inform their choices.

To address this disparity, the Welsh Government (WG)'s Further Education & Apprenticeships team and Knowledge and Analytical Services have been working to develop a set of consistent measures (achievement, value added and destinations) for further education institutions and sixth forms to enable the publication of all Wales and provider level information on an annual basis.

The figures in this release reflect the final position of the 2016/17 data year. During the analysis and quality assurance, some issues were identified about the quality of the data and a decision was made to exclude those schools/FEIs with known or strongly suspected data quality issues,

from the analysis. The main data quality issue was around the recording of programme completion within the Post-16 collection, particularly in the AS year, which then removed learners from the subsequent elements of the measures.

Occasionally, revisions can occur due to errors in our statistical processes or when a data supplier notifies the Welsh Government that they have submitted incorrect information. In these cases, a judgement is made as to whether the change is significant enough to publish a revised statistical release. Where changes are not deemed to be significant, figures will be corrected if they appear in future releases.

Experimental statistics

These statistics are published as experimental statistics reflecting the complexity of the different data-collection systems and the different methodologies that are still in development at this stage and the data quality issues encountered. Following the first year, the methodologies and publication will be reviewed and finalised. As the methodology for the measures has been developing we have been working with providers to ensure that we minimise data quality issues that will impact upon published statistics going forward. We will work towards assessment as National Statistics going forward. We welcome any feedback on any aspect of these statistics which can be provided by email to post16ed.stats@gov.wales

Timeliness and punctuality

The data in this release refers to the 2016/17 data and are presented on an 'academic year' basis.

Accessibility and clarity

This statistical release is pre-announced and then published on the Statistics and Research section of the Welsh Government website.

Comparability and coherence

2016/17 is the first year of reporting these new measures. The underlying cohort, and methodology differ from the existing performance measures for schools and further education institutions, and therefore cannot be directly compared. Whilst these new consistent measures are bedding in, the existing [school performance measures](#) and [learner outcomes for further education institutions](#) also continue and provide a historic time series. These are bespoke measures and there is no direct comparison with other countries of the UK. Information on the UK Government Department for Education approach to 16 to 18 measures is here :-

<https://www.gov.uk/government/publications/16-to-19-accountability-headline-measures-technical-guide>

And further education outcome-based success measures is here:-

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

Additional Information

Consultation

The Welsh Government has consulted on a new set of consistent performance measures for school sixth forms and further education institutions. The [summaries of the responses](#) can be accessed on our website. [Progress reports on the development of the new measures](#) are also available.

The Cabinet Secretary issued a [Written Statement](#) on 10 July 2017 to adopt the three new measures: learner achievement, post-16 value added, and destinations.

Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators (“national indicators”) that must be applied for the purpose of measuring progress towards the achievement of the Well-being goals, and (b) lay a copy of the national indicators before the National Assembly. The 46 national indicators were laid in March 2016.

Information on the indicators, along with narratives for each of the well-being goals and associated technical information is available in the [Well-being of Wales report](#).

Further information on the [Well-being of Future Generations \(Wales\) Act 2015](#).

The statistics included in this release could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local well-being assessments and local well-being plans.

Further details

The document is available at: <https://gov.wales/statistics-and-research/consistent-performance-measures-post-16-learning-achievement-value-added/?lang=en>

Next update

To be confirmed for the academic year 2017/18. It is intended that this will include the publication of information at provider level.

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