

## Update on the development of consistent performance measures for learners aged 16 to 18<sup>1</sup>

Throughout 2010 work has been undertaken on a project to investigate the development of a set of consistent performance measures for learners aged 16 to 18. This article provides some background to the project, an update of the progress made, the difficulties encountered and some indication of future plans.

### Background

Performance measures for both schools and post-16 providers have been developed in isolation from one another, and as a result are produced using different methodologies that measure different things.

Sixth form indicators, which **schools** are required to publish in annual reports and prospectuses, include :

- the proportion of those entering the equivalent to 2 A levels achieving level 3 threshold
- the average points score for the cohort

Performance measures for **FE institutions**, along with **Work Based Learning (WBL) providers**, are based on the completion, attainment and success of individual learning activities.

The schools indicators measure the overall attainment of a pupil during their post-compulsory education. Post-16 indicators are more focussed on the success of providers at an award level for different qualifications.

There is a growing demand for a set of consistent performance measures that will inform comparison of sixth forms and FE institutions, specifically for 16-19 year olds. The development of 14-19 Learning Pathways through the Learning and Skills (Wales) Measure and the implications of the Transforming Education and Training in Wales policy mean that it is more important than ever to understand how all sectors are performing in a consistent manner. In particular there is demand to understand how learning partnerships and collaborations are performing. This demand is both internal and external to the Welsh Assembly Government, and it is fundamental that this information be available at a local level to support local delivery and monitoring.

To aid this comparison using data already available to us, this project looked at the viability of replicating i) the existing post-16 performance measures for schools and ii) the school performance measures for FE institutions.

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<sup>1</sup> Notes on the use of statistical articles can be found at the end of this document.

## ***i) Replicating Completion, attainment and success measures for schools***

There are three performance measures for FE institutions, looking at the following for individual learning aims:-

- Completion (Proportion of learning activities completed)
- Attainment (Proportion of completed learning activities attained)
- Success (Proportion of all terminated learning activities attained)

For FE colleges and WBL providers these are calculated using data from the Lifelong Learning Wales Record (LLWR). Schools do not submit returns to the LLWR but to the Pupil Level Annual School Census (PLASC). We attempted to match enrolment data from the Post-16 PLASC to attainment data from the Welsh Examinations Database (WED) to replicate the post-16 measures for school sixth forms.

The measure for **completion** is the simplest to consider in that it can be considered using data solely from the post-16 PLASC. Within the PLASC schools enter details of a pupil's individual learning activities, selecting the level and subject of study from drop-down lists, along with a completion status indicating whether that programme of study was terminated or completed. Whilst this is the easiest of the three measures and sounds straightforward to calculate, investigation of the data highlighted duplicate data (where pupils of one school took qualifications through another provider), which might be expected, but different completion statuses within that duplicate data (i.e one indicating it completed, the other terminated).

The other two measures – **attainment** and **success** - require details of any attainment attributed to a learning activity enrolment, therefore it requires the PLASC data to be matched to attainment data from WED. The initial level of matching achieved between the two data sources was as follows:-

- 65% of AS level records were matched between PLASC and WED
- 85% of A level records were matched
- 83% of GCSE records were matched
- 41% of BTECs were matched
- Similarly low match for other qualification types

Upon further investigation this relatively low level of matching can at least partly be attributed to recording mismatches between the two datasets. For example differences in the type of qualification (e.g., recorded as A-level on PLASC, and an AS- level attained). More of an issue however are differences in the subject of study – which is due to the minimised list of subjects available to select within PLASC.

Looking in at the detailed data, many of these mismatches are easy to solve – with the attainment data taking precedence on whether a course has been completed, and the type and subject of study. However, this is a very manually intensive process – looking at the detail of individual qualifications of individual learners – resolving these queries for just one school took more than one day of work.

Also contributing to the low level of matching were examples of attainment for an individual activity but no matching PLASC record, but additionally there were also learning activities recorded on PLASC but no attainment record.

In light of these data quality issues and the level of manual intervention that would be required to resolve them, this area of work has not been further pursued.

### ***ii) Replicating Level 3 threshold and points scores for FE institutions***

The other strand to the project was to consider the calculation of existing school performance measures for FE institutions.

There are two performance measures for school sixth forms:-

- the proportion of those entering the equivalent to two A levels achieving level 3 threshold
- the average points score for the cohort

For schools these are calculated using data from WED and PLASC. It was attempted to replicate these measures for FE institutions using WED.

WED, which was developed to fulfil school performance information requirements, for the first time in 2009 collected data for all candidates in Wales not just limited to the school sector, and is therefore now a potential source for replicating school measures for FE institutions.

An initial step in this area of work was to compare the data for FE institutions available through WED and LLWR. It was found that there were around 6,000 learners with attainment on LLWR not present on WED. A major reason for this is that whilst there are over 100 qualification bodies in total, the scope of WED is focussed on those known to have entries from schools, around 15 in 2010. Examples of some of the larger qualifications bodies present on LLWR but not on WED are Health and Safety Executive, Chartered Institute of Environmental Health, Pitman qualifications and Chartered Institute for IT.

LLWR was also considered as a source for this data, however, in total there were found to be over 4,000 more awards on WED than LLWR, and differences in the year of award between the two databases.

Due to the amount of relevant awards missing from WED and the level of mismatch between this and LLWR the project was halted at this early stage of investigation.

### **The way forward**

This project has been important in understanding the limitations of existing data sources and the barriers to developing consistent measures of performance. It is clear that there are fundamental data issues to address in terms of the data sources. Some of these are easier, in terms of either analytical resource or burden on data suppliers, to address than others.

We are planning to pursue two avenues in the near future:-

We are looking to widen the coverage of WED for this Summer's awards. Data for all candidates in Wales is already collected from the main awarding organisations, but we will be extending this to some of the other larger providers relevant to the FE sector.

A further action for the longer term is to explore the direct input of qualifications data from WED into LLWR, which would align the two datasources more closely but also be beneficial to colleges by removing the need for manual input of qualifications, and to review how these sources can work complementary to the Qualification and Credit Framework service layer repository.

However, as our project to produce a set of consistent measures from the existing school and FE performance measures has largely drawn a blank, we now need to consider a more fundamental look at what we would like a set of consistent measure for learners aged 16 to 18 to look like, and how they are derived. The policy teams who lead on the development of school and FE performance measures will be working with practitioners to start redesigning the measures for attainment of 16-18-year-olds. This will start with a joint school/FE steering group in autumn 2010. The long-term aim is to develop a new set of measures which will reflect changes in the delivery of learning, particularly the emergence of new partnership models of delivery and the introduction of the Qualifications and Credit Framework.

This issue also forms part of our consultation on education and lifelong learning statistics, available at <http://wales.gov.uk/consultations/statistics> from 8 September to 30 November 2010. We would welcome any thoughts on what the consistent measures should look like and your views on the relative priority that should be attached to this area of work.

## Glossary of terms

**LLWR - Lifelong Learning Wales Record** - the LLWR is an electronic collection of data relating to learners in further education, work-based learning, adult community learning, and higher education delivered by further education institutions. It consists of four linked datasets for learners, learning programmes, learning activities and awards. The LLWR is a 'live' system which can be continually updated by learning providers, rather than a census system which collects returns at fixed points during the year. The data collected is used as the basis for the funding, planning and quality assurance of post-16 learning.

**PLASC - Pupil Level Annual School Census** - PLASC is an electronic collection of pupil and school level data provided by all maintained sector primary, secondary, nursery and special schools in January each year. PLASC was introduced as part of the Assembly's Information Management Strategy which aims to reduce administrative burdens and improve access to high quality management information through the collection of individual level data, in electronic format so that it can be shared and used many times to meet multiple needs. PLASC data is linked with pupil level attainment data in the National Pupil Database to provide a powerful contextual research and comparison tool for schools, LEAs and policy makers.

Schools record data on pupils and the school throughout the year in their Management Information System (MIS) software. This data is collated into an electronic PLASC return and submitted to the Welsh Assembly Government through DEWi, a secure online data transfer system developed by the Welsh Assembly Government. Various stages of automated validation and sense-checking are built into the process to ensure a high quality of data to inform policy making and funding.

**Post 16 PLASC** - all maintained mainstream secondary schools with designated sixth forms are required to provide additional information via a PLASC return detailing the learning activities undertaken by all pupils taught in National Curriculum Year group 12 or above. This additional information is collected in September each year, updated as part of the January PLASC process and then had completion status information added in June each year. The data is used primarily to inform funding calculations for post 16 education.

**Qualification and Credit Framework** - the QCF is a regulated framework for Wales, England and Northern Ireland. It is a new way of recognising skills and qualifications, by awarding credit for qualifications and units, to enable learners to gain qualifications at their own pace along flexible routes. In Wales, the QCF forms part of the Credit and Qualifications Framework for Wales.

**WED - Welsh Examinations Database** - WED is a cumulative database that contains the entries and achievements in examinations of all pupils in Wales since 1992. Every year each pupil's record is updated with results from approved qualifications, from all the major awarding organisations in England, Wales and Northern Ireland. The information is used to compile the secondary school performance information for Wales, as well as feeding into the National Pupil Database.

## Notes on the use of statistical articles

Statistical articles generally relate to one-off analyses for which there are no updates planned, at least in the short-term, and serve to make such analyses available to a wider audience than might otherwise be the case. They are mainly used to publish analyses that are exploratory in some way, for example:

- Introducing a new experimental series of data;
- A partial analysis of an issue which provides a useful starting point for further research but that nevertheless is a useful analysis in its own right;
- Drawing attention to research undertaken by other organisations, either commissioned by the Welsh Assembly Government or otherwise, where it is useful to highlight the conclusions, or to build further upon the research;
- An analysis where the results may not be of as high quality as those in our routine statistical releases and bulletins, but where meaningful conclusions can still be drawn from the results.

Where quality is an issue, this may arise in one or more of the following ways:

- being unable to accurately specify the timeframe used (as can be the case when using an administrative source);
- the quality of the data source or data used; or
- other specified reasons.

However, the level of quality will be such that it does not significantly impact upon the conclusions. For example, the exact timeframe may not be central to the conclusions that can be drawn, or it is the order of magnitude of the results, rather than the exact results, that are of interest to the audience.

The analysis presented does not constitute a National Statistic, but may be based on National Statistics outputs and will nevertheless have been subject to careful consideration and detailed checking before publication. An assessment of the strengths and weaknesses in the analysis will be included in the article, for example comparisons with other sources, along with guidance on how the analysis might be used, and a description of the methodology applied.

Articles are subject to the release practices as defined by the release practices protocol, and so, for example, are published on a pre-announced date in the same way as other statistical outputs. Missing value symbols used in the article follow the standards used in other statistical outputs, as outlined below.

- .. The data item is not available
- . The data item is not applicable
- The data item is not exactly zero, but estimated as zero or less than half the final digit shown
- \* The data item is disclosive or not sufficiently robust for publication