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An ESRC Data
Investment

Better Knowledge Better Society

Data Brief 4: Lifelong
Learning Wales Record

Funded by



September 2015

Available in Welsh on request

The Lifelong Learning Wales Record (LLWR) contains individual learner records for all post-compulsory learners in Wales enrolled on Further Education (FE), Work-Based Learning (WBL) and Community Learning (CL) programmes funded by the Welsh Government's Department for Education and Skills. The LLWR includes some key information relating to the characteristics of post-compulsory learners, their programmes and activities and contains detailed attainment data, allowing for analysis at both the overall learning programme level but also at individual award/module level.

This data brief summarises the data items that are available and particular issues surrounding the use of the LLWR.

Mae Cofnod Dysgu Gydol Oes Cymru yn cynnwys cofnodion am bob dysgwr unigol hŷn na'r oedran addysg orfodol sydd wedi cofrestru ar raglenni Addysg Bellach, Dysgu yn y Gweithle, a Dysgu yn y Gymuned a ariennir gan Adran Addysg a Sgiliau Llywodraeth Cymru. Mae'n cynnwys gwybodaeth allweddol am nodweddion dysgwyr sy'n hŷn na'r oedran addysg orfodol, eu rhaglenni a'u gweithgarwch, ac mae'n cynnwys data cyrhaeddiad manwl gan ganiatáu dadansoddi'r data ar lefel y rhaglen ddysgu yn ei chrynswth a hefyd ar lefel cymhwyster neu fodiwl unigol.

Mae'r crynodeb data hwn yn crynhoi'r eitemau data sydd ar gael ac yn nodi problemau penodol ynglŷn â'r Cofnod.

Introduction

The Lifelong Learning Wales Record (LLWR) contains individualised data for learners enrolled at Further Education Institutions (FEIs), Work-Based Learning (WBL) and Community Learning (CL) providers in Wales from 2003/04 onwards.

Data collected under the LLWR system forms part of the Welsh Government's (WG) procedures for funding, planning, performance monitoring and strategic development within the post-compulsory education sector. The LLWR is also used by Welsh Government to produce official statistics on post-compulsory (non-higher education) learners in Wales.

Compared to similar data collections in England, analysis of LLWR data outside of the Welsh Government has not been widely adopted.

Supporting documentation and metadata for the LLWR is publicly available on the Welsh Government's website¹. The user support manual for the LLWR gives a detailed breakdown of all variables currently collected, as

well as discontinued historic variables. The manual is updated annually, in line with changes to data collection procedures. In terms of access of the LLWR, its use for academic research is covered by the terms contained within the privacy notice². The privacy notice includes the onward disclosure of personal information for the purpose of linking records to other data sources for statistical research. The LLWR data is therefore able to contribute to the development of new linked databases that support the needs of educational researchers.

¹ <http://gov.wales/topics/educationandskills/learningproviders/datacollection/llwr09/?lang=en>

² <http://gov.wales/docs/dcells/publications/140311-llwr-privacy-notice-2014-en.pdf>



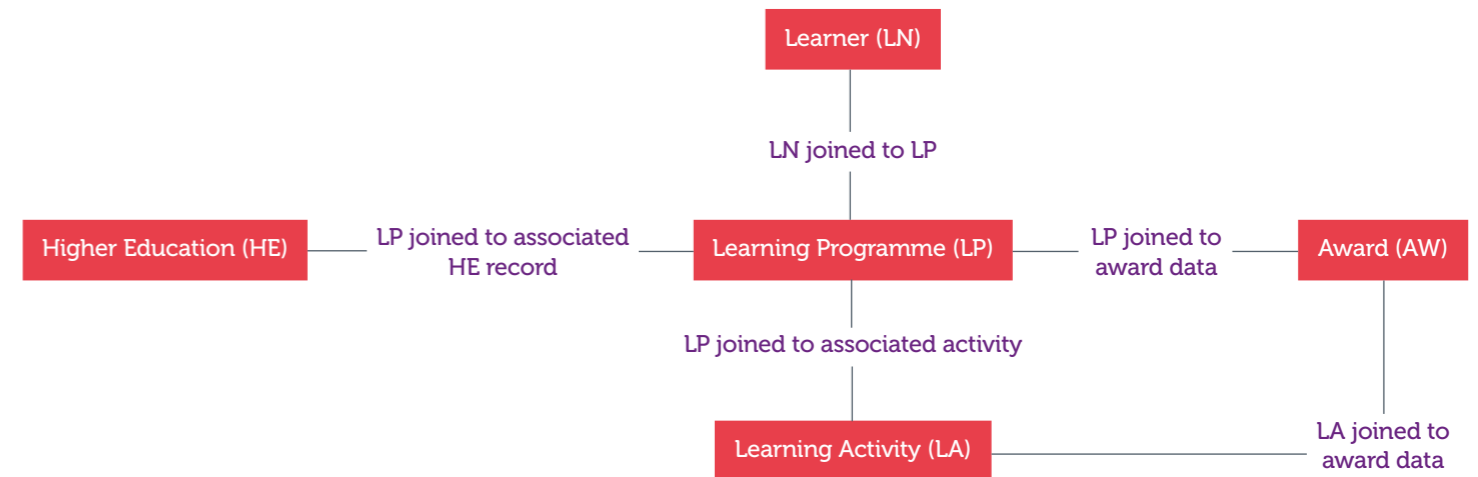
Structure and Contents of the Lifelong Learning Wales Record

The LLWR is composed of four main datasets which provide information on the learner, their educational activities, and their attainment data. Specifically, these datasets are:

- ▶ **the Learner (LN) dataset** includes information about the learner such as name, date of birth, ethnic origin and gender.
- ▶ **the Learning Programme (LP) dataset** gives information about the current programme of learning being undertaken by the learner and any characteristics which may change over time. Included within this are variables for disability status and learning difficulties as these may change during the course of the learning pathway.
- ▶ **the Learning Activity (LA) dataset** collects data on the individual activities or courses undertaken by the learner on his/ her programme of learning.
- ▶ **the Award (AW) dataset** provides information on the awards for which the learner is entered and those achieved.

In addition to learning provision relating to FE, WBL and CL, the LLWR also has a separate dataset relating to learning programmes and activities at Higher Education (HE) level, but where the learning is being delivered at a Further Education Institution (FEI). It is noted that the LLWR is designed to collect data on learners undertaking learning activities funded by the Department for Education and Skills. Though the majority of adult post-compulsory education provision falls under the remit of this funding private sixth forms and colleges do not; this may affect the ability of analyses to make claims regarding all post-compulsory learners in Wales.

Figure 1: Relationship between datasets composing the LLWR



In terms of the structure of the LLWR, a Unique Learner Identifier (ULI) allows information held on the same learner to be linked between the different datasets. The LLWR exists as a series of separate datasets which, in the majority of cases, need to be combined prior to analysis in order to construct a useable dataset. Figure 1 indicates the linkage structure between datasets. Within each dataset, data are stored in a 'long-format', meaning that each new learner/programme/activity is represented as a new line within the dataset.

Learners have one record on the learner dataset however they may have several entries within the LP dataset where they have undertaken more than one learning programme. Furthermore, they are likely to have multiple entries on the learning activity dataset, as an individual learning programme may have several activities associated with it. On entry onto an award, further records will appear on the award dataset (AW), with these relating to each activity and also the programme.

Researchers wishing to obtain a complete picture of transitions made from compulsory to post-compulsory education and training must use combined information from both

the LLWR and the National Pupil Database (NPD). This in itself is not a straightforward exercise due to the different recording structures used for qualifications in the LLWR compared to the NPD. ADRC-W will work to develop a derived integrated database of participation in post-compulsory education.

Though not a limitation, the structure of the LLWR requires forethought as to which datasets need to be combined and which observations within datasets are needed. Within the datasets each new observation – be that learner, programme or activity – is represented as a new case, and so the data needs to be sorted beforehand in order to obtain the required cases. The data may also need to be manipulated in order to create a 'wide-format' file – where each individual is a single row within the dataset and repeated observations appear as new columns of data – allowing for ease of longitudinal analysis.

As alluded to in Section 2, the contents of the LLWR database are complex. Individuals within the LLWR can be registered in multiple learning programmes with multiple learning providers and learning programmes are themselves comprised of multiple

learning activities. Whilst the learning programme will be associated with a main qualification (e.g. the award of an NVQ Level 3), the activities undertaken as part of that programme may be undertaken at a variety of levels with activities associated with varying levels of attainment often being undertaken simultaneously.

As well as complexities associated with the contents of the LLWR database, researchers must also be aware of the complexities associated with how learners engage with Further Education Institutions. For example, entry to Further Education following the completion of compulsory education has been demonstrated to be more protracted than the 'conventional' pathways exhibited by students within Sixth Forms; i.e. entry during the academic year immediately following compulsory education. Researchers should also be aware that some students appear in the LLWR before they complete compulsory schooling. Such observations may represent pupils pursuing less conventional learning trajectories that are better suited to their needs and abilities, such as those supported by 14-19 Learning Pathways that can provide both formal and non-formal elements and which can be accessed via a variety of institutions³.

³ <http://www.wlga.gov.uk/14-19-learning-pathways>

Observations within the LLWR

Table 1 provides an overview of the number of unique learners, programmes and activities recorded on the LLWR between 2003/04 and 2013/14. The LLWR offers the opportunity to conduct analyses of post-compulsory learning on samples which far outweigh those obtainable from survey methodologies.

There has been a downward trend in learners, their associated learning programmes, and activities, since a peak in 2005/06. Further analysis suggests that this decline has been driven by changes in the type of service provision with a reduction in part-time learning at Further Education since 2005/06⁴.

In addition to the differences between the levels of data held in the LLWR (learner/programme/activity/award) there are also differences in type of post-compulsory service provision within Wales which is covered in the LLWR.

As an indication of the size of different service provision in Wales, Table 2 gives a breakdown of the learners, programmes and activities by provision/provider type for 2013/14. By far the largest provision type in 2013/14 was FE, followed by WBL. Together these account for roughly 87 and 92 percent of Welsh Government funded post-compulsory programmes and activities, respectively.

Within the LLWR there are differences between provider and provision type; definitions used for either will vary with the researcher's interests. Provider type can be used to define where the service provision took place. For example, though a learner may be undertaking HE programmes/activities (HE provision), these are provided at an FEI, and the learners are therefore enumerated as being provided by an FEI.

Table 1: Number of learners, programmes and activities recorded on the LLWR; by year

Year	Learners	Learning Programmes	Learning Activities
2003/04	264,735	358,180	701,565
2004/05	299,690	401,895	874,890
2005/06	311,145	421,145	964,215
2006/07	295,905	400,885	940,260
2007/08	263,180	340,225	851,755
2008/09	251,575	319,560	827,310
2009/10	241,805	308,800	860,815
2010/11	240,370	312,450	856,105
2011/12	228,430	295,175	816,405
2012/13	229,555	298,740	842,000
2013/14	223,140	292,260	785,665

Table 2: Number of programmes and activities recorded on the LLWR; by provision type, 2013/14

Provider/ Provision Type	Learners	Learning Programmes	Learning Activities
Further Education	167,715	180,980	495,540
Community Learning	28,050	36,605	52,710
Higher Education	^a	1,640	6,970
Work-based Learning	65,875	73,035	230,440
Total Provision	223,140^b	292,260	785,665

a. Included in learner count for Further Education as HE provision is at Further Education Institutions

b. Count of unique learners, removing multiple counts for learners attending more than one provider/provision type

⁴ <http://gov.wales/statistics-and-research/further-education-work-based-learning-community-learning/?lang=en>

When looking at the learning programme and activity level, it becomes easier to categorise the provision type by the level of study, enabling programmes and activities to be enumerated at HE level, as shown in Table 2.

FE provision comprises a range of institutions providing part-time and full-time education. In 2012/13 there were 19 FE institutions in Wales providing the greater part of post-16 education for their area – however this number has declined since 2008, from 25 FE institutions, as institutions have merged⁵.

CL is a broad term that can encompass a wide range of provision. For instance it could include Adult Basic Education (ABE) and English for Speakers of Other Languages (ESOL) provision or learning delivered at outreach centres of FE institutions. In 2012/13, sixteen of the twenty-two Local Authorities in Wales delivered CL either directly or in collaboration with FE institutions. Learners on WBL programmes are those who are enrolled on designated programmes, such as apprenticeships, where the majority of learning is delivered within a workplace setting. However, although the more formal 'taught' element of the WBL experience may be undertaken at a FEI, data is submitted under WBL provision and not by the FEI.

The Administrative Data Research Centre Wales (ADRC-W) is one of four UK centres that make up the Administrative Data Research Network (ADRN). Together these Centres provide a safe, secure and transparent data linkage service for accredited, approved research using de-identified UK administrative data.

The Administrative Data Research Centre Wales does not hold datasets. It works closely with government departments to make them available to researchers, but this is negotiated on a case-by-case basis.

This report may be cited as: ADRC-W (2015) Lifelong Learning Wales Record. Administrative Data Research Centre Wales, Data Brief No. 4.

This report, along with other titles in this series is downloadable free from ADRN at <https://adrn.ac.uk/about/research-centre-wales/resources/> or by emailing ADRCWales@Swansea.ac.uk.

⁵ National Assembly for Wales (2013) Further Education structure in Wales. Cardiff: National Assembly for Wales, Research Service

⁶ <http://www.wiserd.ac.uk/research/education/current-projects/impact-and-effectiveness-widening-access-he-wales/>

⁷ <http://wales.gov.uk/statistics-and-research/evaluation-education-maintenance-allowance-assembly-learning-grant/?lang=en>

⁸ Patrignani, P. and Conlon, G. (2011) *The Long Term Effect of Vocational Qualifications on Labour Market Outcomes*. London: Department for Business, Innovation and Skills

⁹ DWP (2012) *Further Education and Benefit Claimants – Emerging Findings from the Data Matching Project Update to 2010-11*. London: DWP

¹⁰ Singleton, A.D. (2012) The geodemographics of access and participation in Geography. *The Geographical Journal*. 178(3):216-229

¹¹ HEFCE (2012) *Widening participation and non-continuation indicators for further education colleges: Overview of trends*. Bristol: HEFCE

HE provision enumerated within the LLWR accounts for HE level activities/ programmes which are undertaken at FEIs. Learners can be defined as undertaking HE learning in two main ways, dependent on which aspect of their learning is of primary interest. Firstly, the learner can be recorded as being engaged in HE level learning if the learning programme they are working toward is defined as being at HE level e.g. HE degree, or Foundation degree. Secondly, a HE learner can also be defined as one where any of their learning activities are at HE level i.e. above NQF (National Qualifications Framework) level 3.

Examples of Research Using Post-Compulsory Education Data

The LLWR has not been widely used to research post-compulsory education in Wales. However, the Welsh Government has previously supported the construction of a linked database of school and student records that includes data from the NPD with individual learner records from the LLWR for young people who were registered at post-compulsory educational institutions, and also individual student records from the Higher Education Statistics Agency (HESA). The database allowed researchers to trace the educational

trajectories of three cohorts of young people who were in Year 11 (the final year of compulsory schooling) during 2004/5, 2005/6 and 2006/7. This dataset was used to support research into widening access to HE⁶ and the effectiveness of financial support provided to students in post-compulsory education⁷.

In England, post-compulsory education data – under the Individualised Learner Record (ILR) – have been linked with administrative sources in order to explore a variety of topics including; labour market effects of post-compulsory provision⁸, links between FE and benefits claimants⁹, the geography of access and participation in specific subjects¹⁰, assessment of widening access indicators to FE¹¹.

