



## JOB SKILLS, QUALIFICATION USE AND TRAINING IN WALES:

### Results from the Skills and Employment Survey 2012

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#### **Headlines**

Work is an important feature of the modern Welsh economy. A lot is known about pay, but less is known about other features of work such as what skills do jobs require, how relevant are qualifications for work, and how does training and learning compare with other parts of Britain. This Report provides some answers.

- Jobs are less skilled in Wales than in the Rest of Britain or London and the South East, with part-time jobs in Wales among the lowest skilled of all.
- The mismatch between the supply of, and the demand for, qualifications is proportionately larger in Wales than in other parts of Britain. However, the overqualified in Wales are better able to use their skills once in work; this reverses a pattern found in 2006.
- The intensity of training is lower in Wales and it fell faster between 2006 and 2012 than anywhere elsewhere. Both the requirement to learn at work and the capacity to learn from other colleagues also fell.

#### **Penawdau**

Mae gwaith yn nodwedd bwysig o economi fodern Cymru. Gwyddom lawer am gyflogau, ond nid ydym yn gwybod cymaint am nodweddion eraill gwaith fel pa sgiliau sydd eu hangen ar gyfer swyddi, pa mor berthnasol yw cymwysterau ar gyfer gwaith, a sut mae hyfforddiant a dysgu'n cymharu â rhannau eraill o Brydain. Mae'r adroddiad hwn yn rhoi rhai atebion.

- Mae swyddi llai medrus yng Nghymru o gymharu â gweddill Prydain neu Lundain a de-ddwyrrain Lloegr, ac mae swyddi rhan-amser yng Nghymru ymhliith y rhai lleiaf medrus.
- O ran cyfran, mae mwy o wahaniaeth rhwng y cymwysterau sydd ar gael a'r galw am gymwysterau yng Nghymru nac yn rhannau eraill o Brydain. Fodd bynnag, mae'r rhai sydd â mwy o gymwysterau na'r hyn sydd ei angen yn gallu defnyddio eu sgiliau'n well ar ôl dechrau gweithio; mae hyn yn gwrthdroi'r patrwm a welwyd yn 2006.
- Mae dwyster hyfforddiant yn is yng Nghymru a lleihaodd yn gyflymach rhwng 2006 a 2012 nac y gwnaeth mewn unrhyw le arall. Gwelwyd gostyngiad hefyd yn yr angen i ddysgu yn y gwaith a'r gallu i ddysgu gan gydweithwyr.

## **1. The Importance of Job Skills, Qualification Use and Training**

Politicians often have lofty ambitions of making Wales a ‘high quality, high skilled economy’. Indeed the last administration’s aim was for Wales to become ‘a strong and enterprising economy with full employment based on high-quality, highly-skilled jobs’. The world has changed considerably since then. Most notably, the UK economy has experienced the longest and deepest recession in living memory and has been slow to recover. However, the importance of high skilled jobs is as strong as ever. They bring rewards to all. For workers they offer higher pay and greater fulfilment. For businesses they lay the foundations on which to compete in high end product markets, and for government they demonstrate that public investment in education and training is being put to good use.

## **2. Previous Evidence**

Despite the political emphasis placed on making Wales a ‘high-quality, high skilled’ economy, the vision has never been translated into measurable targets against which progress can be judged. This research aims to provide some of the tools to make such an assessment which go beyond measuring work quality in terms of pay alone. Previous analyses have shown that overall pay rates in Wales are around 90% of the UK average and that Wales has a disproportionate number of low paid workers. While detailed analyses of these patterns are available from other sources, pay is only one aspect of job quality. Here, we consider how work in Wales differs from other parts of Britain in terms of job skills, qualification use, and training and learning. We, therefore, address the question of whether jobs in Wales are of a lesser quality in these ways as well.

## **3. The Skills and Employment Survey 2012: A Source of New Evidence**

Every five or six years a survey is carried out which collects data on the employment experiences of British workers. In 2012 the sixth of these surveys was carried out. Like its predecessors, the Skills and Employment Survey (SES2012) is a nationally representative sample survey of individuals in employment aged 20-65 years old. In addition to funding for British-wide polls, funds to boost the Welsh sample were successfully sought in 2006 and 2012. In 2006, the Future Skills Wales Partnership funded the boost, while in 2012 boost funds came from the Wales Institute for Social and Economic Research, Data and Methods (WISERD). This Report is based on

two samples: 7,213 individuals in paid work and aged 20-65 years old living in Britain in 2006 (407 of whom were in Wales); and 3,200 similarly aged workers in 2012 (587 of whom were in Wales). For each survey, weights were computed to take into account the differential probabilities of sample selection, and response rate variations between groups and regions.

## **4. Concepts and Variables**

Our measures of skills, qualification use, and training and learning focus on objective measures reported by respondents. ‘Job skills’, for example, refer to the abilities workers require to carry out their current job competently. These can be categorised further as ‘broad skills’ (an overall average of job requirements) and ‘generic skills’ (certain skills which are used across a wide range of settings).

Three indicators for broad skills are used: education, prior training, and initial post-entry learning. For the first, respondents were asked: ‘If they were applying today, what qualifications, if any, would someone need to get the type of job you have now?’ We ranked the qualifications given and put them into five categories. These ranged from degree or equivalent to those who said that no qualifications would be needed. Each level was given a score, with ‘4’ at the top and ‘0’ at the bottom. The required qualification index refers to the average of these scores. We also present data on: (1) aggregate level imbalances in the supply of, and demand for, qualifications; (2) rates of ‘overqualification’ – that is, workers who have a qualification higher than the level required for entry; and (3) rates of ‘real overqualification’ – that is, workers who are overqualified and say they use ‘very little’ or ‘a little’ of their skills at work.

The second broad skills indicator, prior training, comes from the question: ‘Since completing full-time education, have you ever had, or are you currently undertaking, training for the type of work that you currently do?’ If ‘yes’, respondents were asked ‘How long, in total, did (or will) that training last?’ Seven responses were possible ranging from no prior training (scoring ‘0’) needed at one end of the spectrum to over two years (scoring ‘6’) at the other. The training time index refers to an average of these scores.

The third broad skills indicator, initial post-entry learning, is based on the question: ‘How long did it take for you after you first started doing this type of job to learn to do it well?’ Six responses were possible ranging from ‘less

than a month' (scoring '1') to over 'two years' (scoring '6'). The learning time index refers to an average of these scores.

Previous surveys in the series pioneered the development of measures of generic skills at work. Respondents were asked: 'in your job, how important is [a particular job activity]'. Examples of the activities included: 'using a computer'; 'analysing complex problems'; and 'adding, subtracting, multiplying or dividing numbers'. The 2012 questionnaire covered 44 activities. Factor analysis produced ten types of generic skills. For presentational purposes, we report the proportion of respondents who said that these skills were 'essential' to their jobs. Those using computers at work were also asked whether they drew on either 'complex' or 'advanced' skills to do so.

Evidence on training is often taken from surveys which are much larger and more frequent than the ones reported here. However, emphasis is usually given to the incidence of training with less attention paid to its intensity and outcomes. Respondents were asked: 'In the last year, have you done any of these types of training or education connected with your current job?'. Respondents were provided with six concrete activities designed to elicit respondent recall. They were then asked on how many separate days they were involved in each. From this we calculate the average number of days on which training occurred ('training intensity').

It is increasingly becoming recognised that learning can take on many forms at the workplace beyond traditional training events and activities. To gauge this form of learning,

respondents were asked whether they strongly agreed, agreed, disagreed or strongly disagreed with a number of statements. These included: 'My job requires that I keep learning new things'; and 'I am able to learn new skills through working with other members of my work group'. Here, we report the proportions who 'strongly agreed' with these statements, with the latter proportions referring to those who worked in teams.

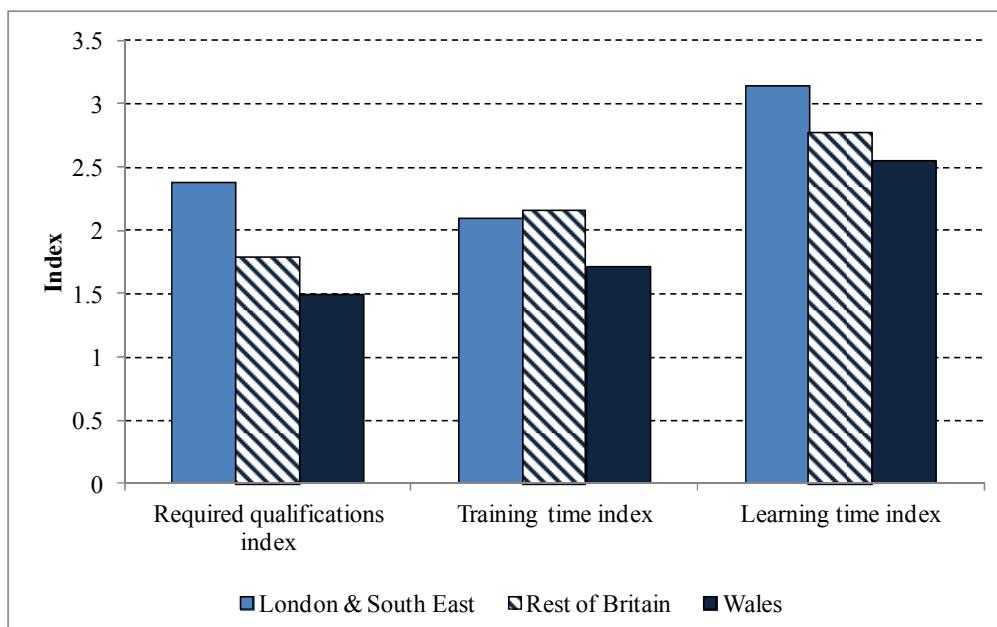
## 5. Findings

### *Job Skills*

Previous analyses of this survey series have shown that the skills content of jobs in Wales was lower than elsewhere in Britain. Furthermore, the trend data suggest that the skill content of Welsh jobs fell between 1992 and 2006, while it rose elsewhere. In some respects, the 2012 results offer a modicum of comfort. While it is still the case that jobs in Wales are less demanding in terms of the qualification levels required on entry, they require similar levels of prior learning and initial post-entry learning to jobs in other parts of Britain.

The fact that part-timers are in significantly less skilled jobs than their full-time counterparts is a well-known British finding. However, the contrast is more pronounced in Wales. Part-timers in Wales do badly compared to their counterparts elsewhere on all three broad skill measures (see Figure 1). The gaps are large. This suggests that low skills are more prevalent among part-time jobs in Wales than in other parts of Britain.

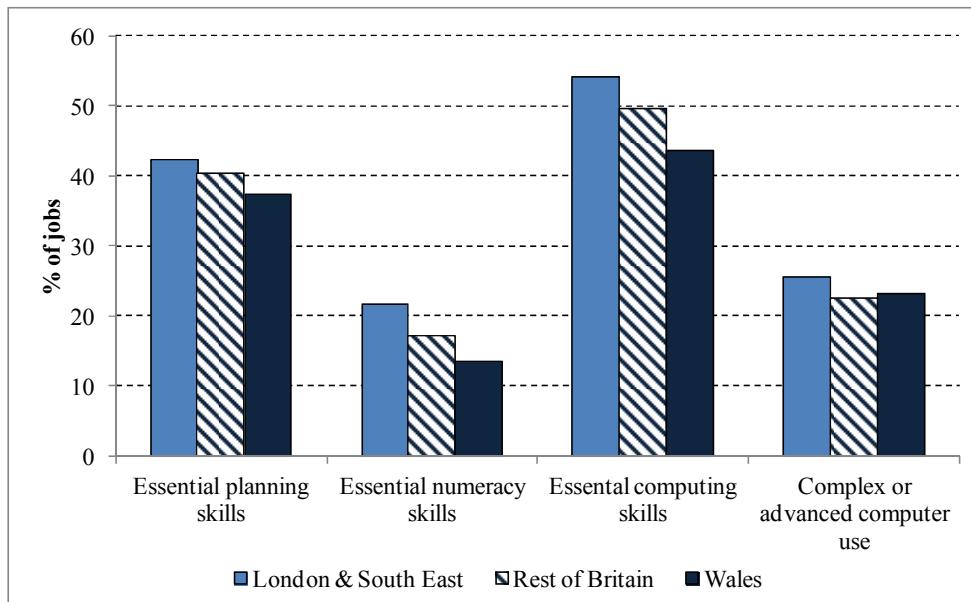
**Figure 1: Broad Skills Indices across Britain, Part-time Workers, 2012**



However, measuring the skills content of jobs according to the importance of activities for effective work performance suggests that jobs in Wales remain lower skilled. Figure 2 takes two of the ten generic skills along with computing skills measures and plots the results. Wales comes below that of the other parts of Britain on three out of four measures. To make matters worse, between 2006 and 2012 nine out of ten generic skills indicators moved downwards in Wales, while there was little movement across Britain as a whole.

Once again, a factor which may lie behind this comparative performance is the plight of part-timers in Wales. Compared to other parts of Britain part-time work in Wales involves much lower skilled work, as measured by most of the generic skill indicators. This suggests that part-time jobs in Wales are especially low skilled. Furthermore, training and learning opportunities for part-timers are unlikely to close the gap since part-timers are least likely to be among the beneficiaries.

**Figure 2: Selected Generic and Computing Skills across Britain, 2012**



#### *Qualification Use*

Due to imperfect information and failures in job search activities, it is not always possible for people to find employment that effectively uses the skills and educational qualifications they have. Comparing the number of people with qualifications against the number of jobs requiring qualifications at particular levels, we derive aggregate mismatch estimates.

In 2012 there were around 122,000 more people in Wales with degree-level qualifications than there were jobs requiring degrees on entry. This was up from 82,000 in 2006. The imbalance between the number of people holding degrees and the number of jobs requiring degrees is widening. On the other hand, in 2012 there were 284,000 jobs in Wales that did not require qualifications on entry, but only 82,000 people had no qualifications at all. Nevertheless, the qualification mismatch at this level fell from 247,000 in 2006 to 202,000 in 2012. The imbalance between the number of people with no qualifications and the number of jobs requiring no qualifications is, therefore, narrowing.

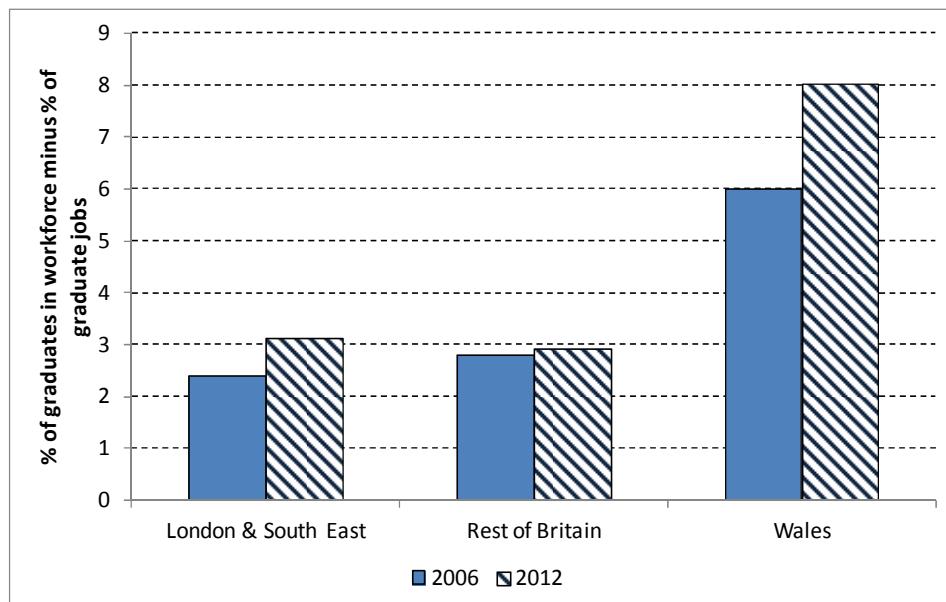
Rather than presenting these mismatches in terms of absolute numerical estimates, another way is to examine the percentage point differences between qualification supply and qualification demand. This suggests that aggregate mismatches are greater in Wales than in London and the South East at both ends of the labour market. In 2012 there was an eight percentage point gap in Wales between the proportion of graduate-level jobs and the proportion of graduates in the workforce – up by two percentage points on the gap recorded in 2006 (see Figure 3). The gaps elsewhere were far lower.

However, the Welsh results show that across the whole spectrum of qualifications, overall rates of overqualification fell. Between 2006 and 2012 there was a three percentage point fall in the proportion of respondents reporting that they possessed qualifications in excess of those required for job entry (see Table 1). Furthermore, real overqualification fell from 16% in 2006 to 10% in 2012. On this evidence, then, qualification mismatches in Wales are less of an issue when assessed in terms of skills

utilisation. Finally, the bottom row of Table 1 reports a rise in the proportion who report that both their qualification level matches the level required on entry and they are able to use quite a lot or more of their skills at work. This

suggests that once in work job skills and workers are becoming better matched in Wales. Moreover, the rate of improvement is higher than elsewhere.

**Figure 3: Degree Mismatch across Britain, 2006-2012**



**Table 1: Underutilisation of Skills at Work across Britain, 2006-2012**

	Percentage of Jobs					
	London & South East		Rest of Britain		Wales	
	2006	2012	2006	2012	2006	2012
Overqualification rate	36.7	30.2	40.0	39.1	40.5	37.5
Real overqualification rate	12.8	10.9	13.0	12.8	15.5	9.5
Qualification and skill matched	52.5	56.4	49.4	50.7	43.2	52.5

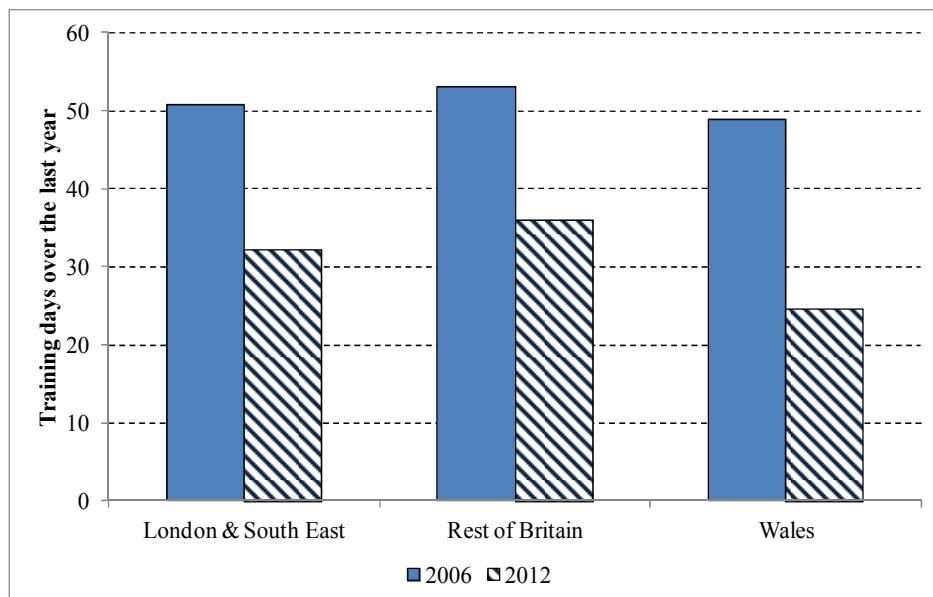
### *Training and Learning*

The results suggest that training incidence in 2012 was lower in Wales than elsewhere – 64% compared to 69% in the Rest of Britain and 67% in London and the South East. The intensity of training was also lower in Wales, taking place on eleven fewer days than in the Rest of Britain and six fewer than in London and the South East. Furthermore, the fall in training intensity was sharpest in Wales where it halved (see Figure 4). To exacerbate the problem, the prevalence of informal learning fell in Wales as measured by the requirement to learn at work and the capacity to learn from others in the work group. In London and the South East learning in these ways increased over the same time period, while in the Rest of Britain the picture was more mixed.

### **6. Policy Implications**

These results show that there is a long way to go before Wales can claim to be a ‘high-quality, high skilled’ economy. Such a vision is easier to say than deliver. However, the good news is that, despite producing more qualified workers than employers say they want, overqualified workers in Wales are better able than their counterparts elsewhere to put their skills and experiences to good use. While this is welcome, it has to be placed against alongside the consistent finding that part-time jobs in Wales are of a much poorer skill quality than similar jobs elsewhere and the finding that training and learning is weaker in Wales. The obvious policy implication here is that in order to upskill the Welsh economy more needs to be done to lift the skills of all jobs in Wales, but especially those jobs held by part-timers.

**Figure 4: Training Intensity across Britain, 2006-2012**



#### Reports in the Series

Welsh Reports	National Reports
<i>Skills and the Quality of Work in Wales, 2006-2012: Main Report.</i> <i>Job Skills, Qualification Use and Training in Wales.</i> <i>Well-being, Insecurity and Attitudes to Work in Wales.</i>	1. <i>Skills at Work in Britain.</i> 2. <i>Training in Britain.</i> 3. <i>Job Control in Britain.</i> 4. <i>Fear at Work in Britain.</i> 5. <i>Work Intensification in Britain.</i> 6. <i>Job-related Well-being in Britain.</i>

All titles, along with technical reports, are downloadable free from the project website at: [www.cardiff.ac.uk/socsi/ses2012/](http://www.cardiff.ac.uk/socsi/ses2012/)

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