

Skills in Focus

What has been happening to training? The workers' perspective.

Professors Francis Green and Alan Felstead

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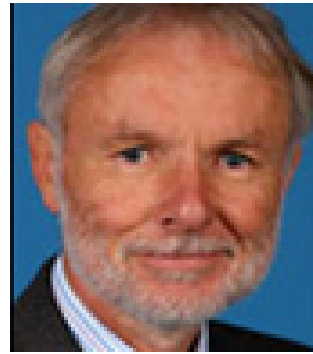


About the Authors



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His research focuses on: the quality of work; training, skills and learning; non-standard employment; and the spaces and places of work. He has completed over 30 funded research projects (including nine funded by the Economic and Social Research Council), produced six books, and written over 200 journal articles, book chapters and research reports. His recent books include: *Improving Working as Learning* (London: Routledge, 2009); and *Changing Places of Work* (London: Palgrave, 2005). He has delivered many keynote addresses to conferences around the world, including China, Singapore, South Africa, Australia and Europe, and has given labour market advice to policy-makers inside and outside the UK.



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About Skills in Focus

The Skills in Focus series is intended to support informed debate around current and future skills issues. The Joint Skills Committee is jointly sponsored by the Scottish Funding Council and Skills Development Scotland. The Committee works closely with the Scottish Government, employers, business organisations and students to ensure that Scotland has the right high-level skills and an employable and adaptive workforce.

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Foreword



Introduction

Paul McKelvie OBE is Vice Chair of the Board of the Scottish Funding Council (SFC), a member of the Board of Skills Development Scotland (SDS) and Scotland Commissioner to the UK Commission for Employment and Skills. He is also the Chair of the Joint Skills Committee.

The Joint Skills Committee is a statutory committee of the Funding Council. It operates as a joint committee advising the Boards of SFC and SDS on skills issues. The Committee also has a central role in stimulating debate about skills in Scotland. The Skills in Focus seminar series is part of the Joint Skills Committee's contribution to that debate.

Foreword

Professors Alan Felstead and Francis Green are internationally renowned experts on skills, training and the nature of work. They are based at the Cardiff School of Social Sciences and the Centre for Learning and Life Chances in Knowledge Economies and Societies (LLAKES) respectively.

Alan and Francis identify what has been happening to training in Scotland and Britain based on evidence from a number of surveys including the Quarterly Labour Force Survey and the Skills and Employment Survey. They use the evidence to

show that in Scotland training episodes are getting shorter, that there has been a decline in the proportion of training that is off-the-job and a potentially concerning decline in training volumes.

Alan and Francis offer four potential explanations for the decline in training volumes:

1. Managers becoming less optimistic about the value of skill formation for their business;
2. Workforce increasingly composed of more-educated workers who learn more quickly thus requiring less training time;
3. A radical transformation of the training function in Britain, greatly improving the private efficiency of training;
4. Training is gradually being displaced by learning through participation in workplace activities, through working in teams and involvement in communities of practice.

I would like to thank Alan and Francis for providing an overview of what has been happening to training in Scotland. They highlight the need to monitor both training volumes and the quality of training in addition to participation rates. Observing the shifting contribution of training to skills formation is very important if we are to understand training's role in the growth of the Scottish economy.

Paul McKelvie OBE Chair of the Joint Skills Committee

What has been happening to training? The workers' perspective.

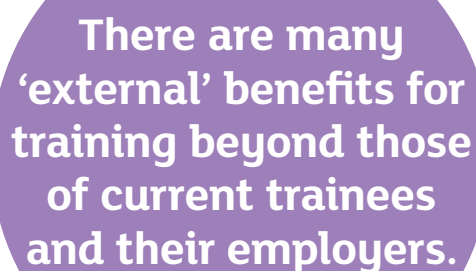
1. Introduction.

The importance of expanding workforce skills for the success of modern knowledge-based economies is widely accepted. To this end a good deal of attention is paid in public discussions to the education and vocational training system, and how effectively it delivers the quality and quantity of skills that employers need. The focus of this paper, by contrast, concerns the ongoing training received by those in employment, not only the young but workers of all ages, looking both at Scotland and at Britain as a whole.

Sometimes it is held that the training of employed persons is largely a matter for employers and their employees only to decide, according to judgements as to what is best needed for businesses and personal development respectively. Yet, while it is true that employers usually know their own businesses well, there is a wider picture that can sometimes only be seen from the perspective of local, sectoral and economy-wide organisations. There are many 'external' benefits for training beyond those of current trainees and their employers. People move around sharing their knowledge, and their

new-found skills from training are of value to future employers. Meanwhile individuals often cannot afford the current sacrifices to acquire new skills without assistance, and cannot borrow simply on the strength of uncertain future pay-offs. Furthermore, there is always a certain rationale for basic regulations over health and safety issues, which occasionally require training. So policy-makers have long been involved in some forms of support for the training that takes place within private employment, whether it be through subsidies for apprenticeships, tax incentives, occupational licensing rules, levy-grant systems or other means. To understand and support good policy-making we need to monitor the changing contribution of training to skills formation, if we are to understand and aid training's contribution to the growth of the UK economy (UKCES, 2010; 2009a), we also need to understand better how the benefits of training are distributed between employers, employees and society more generally.

Both the magnitude and the dynamics of Britain's training effort are hard to ignore. For example, in the mid to late 1990s the average worker was spending about 1.1 hours a week in training; over a career, this adds up to the



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equivalent of spending another two and a half years' in school. Similarly, estimates of employer spending on training in England - £40.5 billion in 2011 - might be compared with the annual maintained schools budget - £33.5 billion.¹ Looked at from the perspective of a policy-maker wanting to upskill the British workforce, a focus entirely on education could only be expected to have an effect over the long term, since it takes time for new cohorts of school-leavers to appear on the labour market. Most of the workforce of 2030 is already at work. Given training's importance, one of the concerns about the consequences of the 'great recession' begun in late 2008 was that it would lead to a wholesale collapse in

training efforts with long-term consequences for workforce skills.

How far has training in Britain, and in particular in Scotland, been contributing to the skill formation needs of the economy? To answer this question is not as easy as might at first appear. Unfortunately, one cannot just look the figures up at the website of the Office for National Statistics. Rather, it has become necessary to dig deeper into a range of surveys. Even before that, it is important to clarify the relevant concepts and measures surrounding training.

The aim of this Skills in Focus paper is to describe what has been happening to training in Scotland and more widely in Britain, according to a number of surveys of individuals. The urgency of this task is revealed by our main finding – which we must confess we did not anticipate when we set out – namely that there has been a very substantial decline in the volume of training taking place in Britain, including Scotland. After explaining the details of this finding, we then consider possible explanations, its significance and its potential implications.

¹ The largest element of training expenditure in England is the wages of trainees and trainers. See Davies et al. (2012).

2. Concepts and measures

To understand training's contribution to national skill formation, the main variables to measure are the quantity (or volume) and the quality of training.

The quantity of training is most commonly measured by the participation rate – the proportion of the population that engaged in training over a specified period. However, this is rather simplistic and, as it turns out, misleading metric of training and its contribution to skill formation. In international comparisons, participation in training in the UK has been comparatively high, but the duration of training has been well below average (Centre for Educational Research and Innovation, 1998). We need also to know the duration of training episodes. Together, training participation and duration combine to give the volume of training, the amount of time spent training within the specified period.

The quality of training refers to its effectiveness in raising skills. This could either be measured for each time unit of training undergone (to be referred to as “unit training quality”), or for the total training in the given time period (to be referred to as “total training quality”). While quality is very important, it is also the most difficult aspect of training to monitor. In practice we have to rely mainly on

individuals' reports about their experiences, though some notice needs to be taken of the extent to which training is certified. The amount of evidence on quality is rather limited, and we present what is available.

Together, training volume and total training quality are the key concepts of theoretical and practical interest in relation to the underlying concern with how far the national training effort contributes to skill formation. However, two others are considered in this paper, that helps to embellish the picture of change. The ‘demand for training’ by individuals – that is, how much they would like to receive in their current situation – is of interest because it helps to show whether any changes in the volume of training are derived in part from changes in employees' development aspirations. Also relevant to understanding training trends is the ‘adequacy’ of training, which is a match concept. Training is adequate if it is sufficient to deliver an optimal rate of skill formation; this concept can be applied to all workers, whether or not they received some training. Adequacy reflects how well or badly the training market is functioning. It is typically measured using employees' or line managers' reports.

3. Data sources

To study training trends in Britain, the two main

Box 1: Data source references

British Household Panel Survey

<https://www.iser.essex.ac.uk/bhps>, consulted 1/3/2013

European Social Survey

<http://www.europeansocialsurvey.org/>, consulted 1/3/2013

European Working Conditions Survey

Eurofound (2012). Fifth European Working Conditions Survey. Luxembourg, Publications Office of the European Communities.

Quarterly Labour Force Survey (QLFS)

Office for National Statistics. Social Survey Division and Northern Ireland Statistics and Research Agency. Central Survey Unit, Quarterly Labour Force Survey. Colchester, Essex: UK Data Archive [distributor], various, since 1995.

Skills and Employment Survey (SES)

Reports at <http://www.llakes.org/> and at <http://www.cardiff.ac.uk/socsi/ses2012/>

surveys we use are the Quarterly Labour Force Survey (QLFS) and the Skills and Employment Survey (SES). We further examined three other series of surveys of individuals: the British Household Panel Study; the European Social Survey and the European Working Conditions Survey. References to descriptions of each series are listed in Box 1. These survey series have in common that they all claim to be of high quality and to be representative of either Britain or the UK as a whole or of one or more nations within the UK. They all ask their employed respondents at least one question

about any training they have taken part in to do with work, but the questions vary between surveys. Though we do not report on them here, we further examined some employer surveys and some other employee surveys which cover the recent period. Each survey uses its own variant for the definition of training, but all give a similar picture about the pattern of change to the reports of individuals.

The advantage of individual reports of their training experiences is that, in addition to reporting formal courses of education and training, they are arguably reliable informants

concerning informal training and of individually-funded training activities, especially if they are reminded to mention these. Individuals can also give first-hand assessments of their experiences. Where individuals are understandably weak is in anticipating the future skill needs of their organisations, but this is not our focus here.

4. Participation

To capture training comprehensively the Skills and Employment Surveys (SES) specify several explicit types of job-related training: training off-the-job, receiving instruction while on the

job, self-teaching with manuals, internet etc., following a correspondence or internet course, taking an evening class, other job-related activity. Using this data Figure 1 shows that the annual training participation rate (among those aged 20 to 65 in Britain) rose a little, from 65% in 2006 to 68% in 2012. Participation especially rose, from 28% to 32%, in self-teaching modes of training, using electronic or written materials or courses, while other modes were largely stable. Both the European Working Conditions Survey and the European Social Survey show something similar, namely that there was very little change in the annual

Figure 1: Annual training participation in Britain, 2006 and 2012

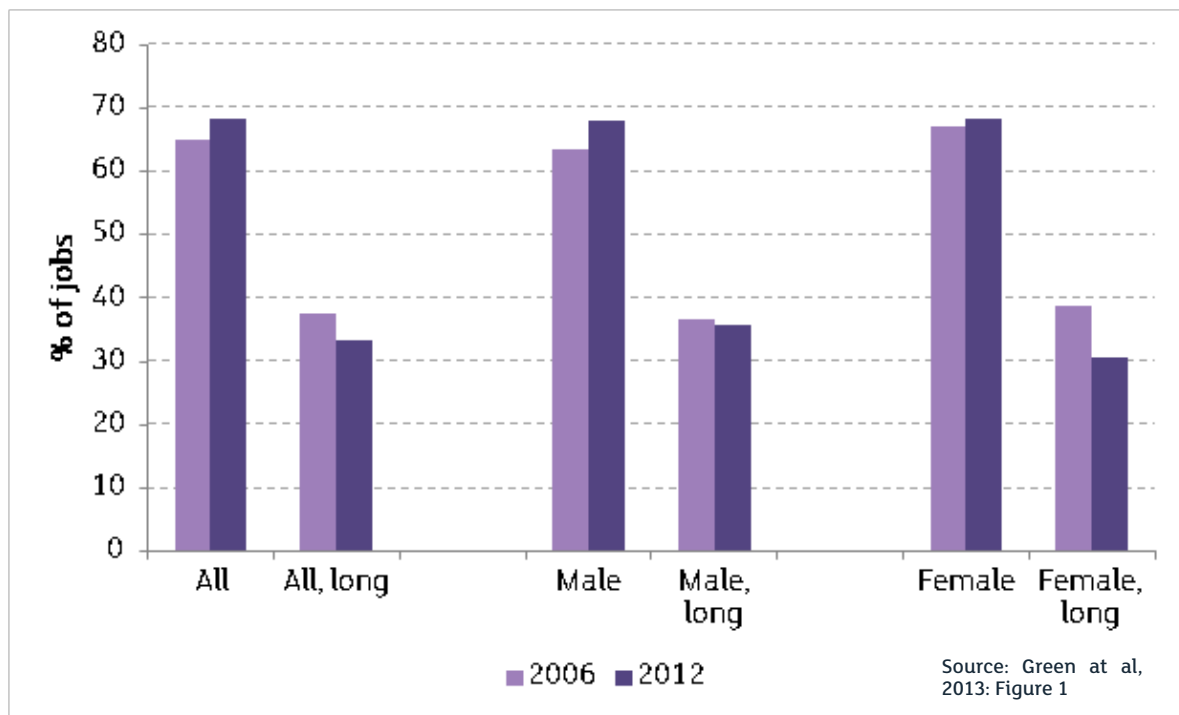
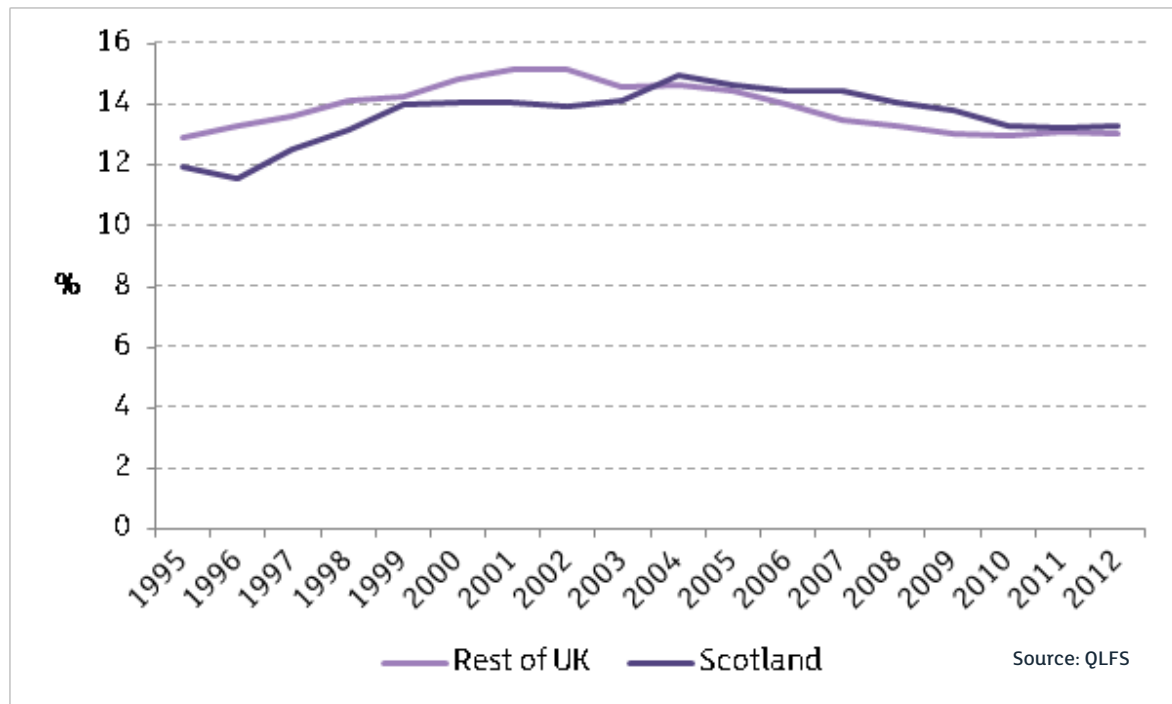


Figure 2: Four-week training participation in the UK, 1995-2012



participation rate in training during the late 2000s.

The SES surveys also asked respondents to report the number of separate days during the year in which they took part in each form of training. We can use this to calculate the participation in 'long' training, defined as lasting 10 days or more: in 2006 59% of training recipients had received such 'long' training; however, this proportion fell to 51% in 2012. As a result, as Figure 1 shows, the proportion participating in long training actually fell from 37.7% to 33.5%. The fall was especially sharp for women. This decline gives our first hint of what has been happening to the training

volume.

Over a long period the Quarterly Labour Force Survey (QLFS) is the key source of regular information about training participation. For large samples it records whether participants had "taken part in any education or any training connected with your job, or a job that you might be able to do in the future". Unfortunately, in a third of cases responses are obtained from other members of the household acting as proxies; this procedure somewhat reduces the reliability of the data, especially for informal and on-the-job training. Figure 2 presents the participation rate among employed people over a four-week period. For

the rest of the UK the rate was rising through the 1990s, going from 12.8% in 1995, arriving at a peak of 15.1% in 2001. It then fell by more than two percentage points to 13.0% in 2010. Thereafter it has remained roughly steady. For Scotland the pattern of a rise and fall was similar except that the 1990s rise was rather greater in Scotland, catching up with the rest of the UK, and its peak of 14.9% was reached a little later, in 2004.

The steady rise during the 1990s was generally

seen as a positive development for Britain's stock of skills. In contrast the slow reversal in the 2000s has not so far generated much concern. It can be seen from the Figure that there is no evidence of any sharp breaks around the time of the economic crisis in 2008-9, something that we have looked at in some detail in another study (Felstead et al., 2012). If anything, it seems that training among employed people levelled off about a year or two into the period of economic stagnation. The worst fears about a training disaster appear

Figure 3: Four-week training participation by age group in Scotland, 1995-2012

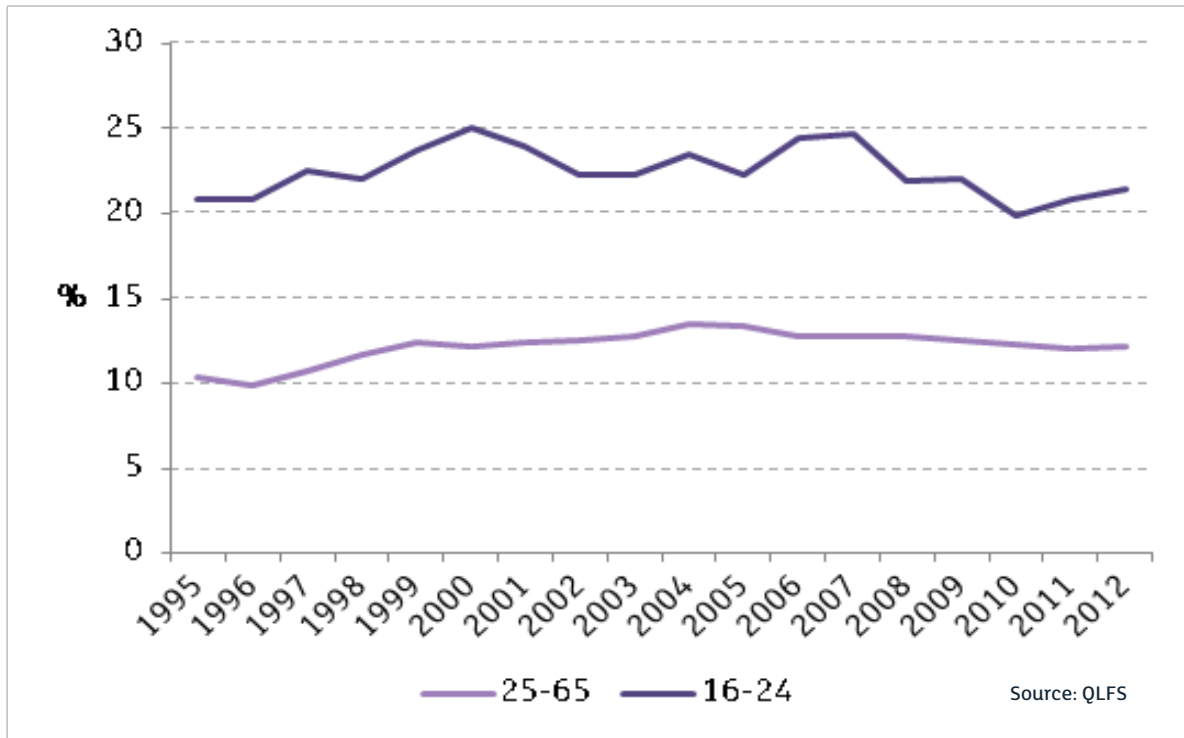
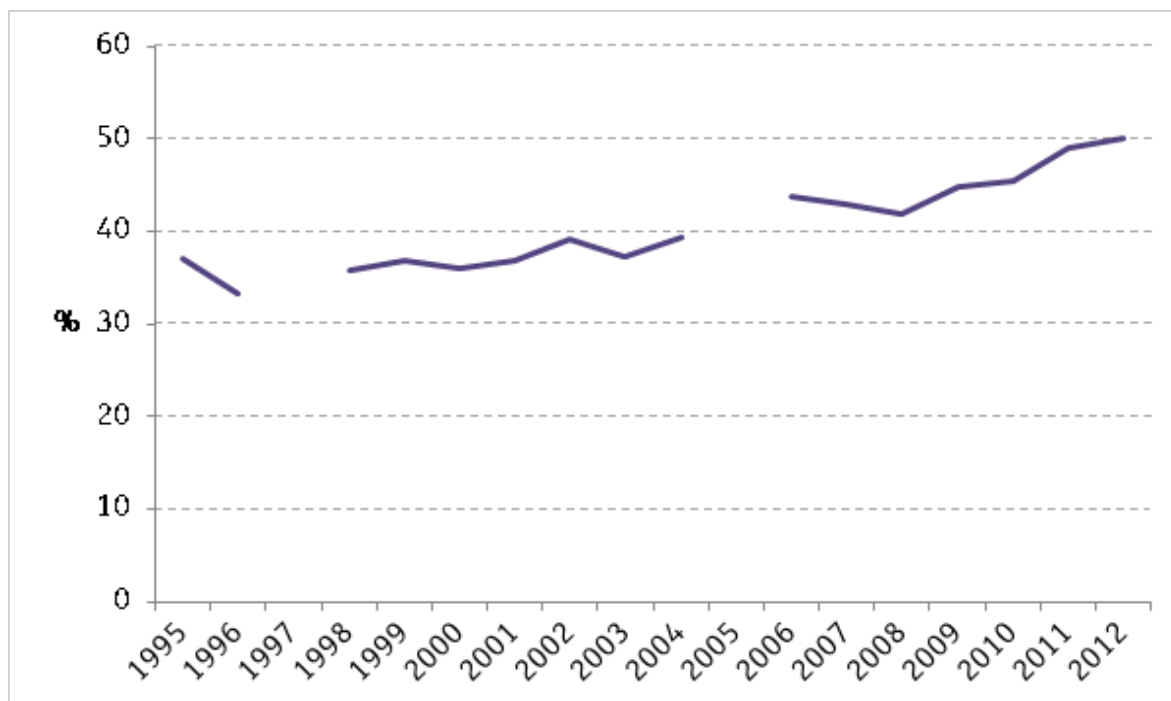


Figure 4: Proportion of training episodes that are less than one week in Scotland, 1995-2012



Source: QLFS

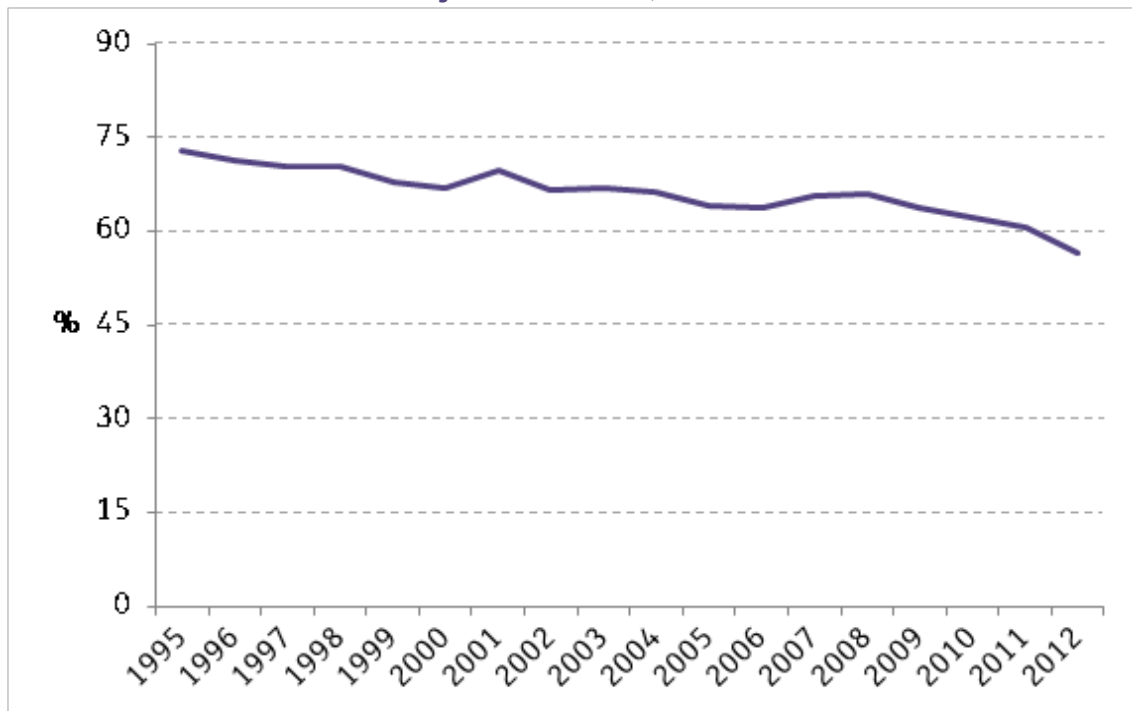
to have been thoroughly allayed.

Training experiences tend to be concentrated among younger workers, and particularly among those who have just entered the workforce. Figure 3, which focuses on training in Scotland, reflects this well-known fact: the participation rate is much greater among 16-24 year-olds than among 25-65 year-olds. Yet, it can be seen that the pattern of a rise and fall in training participation is seen among both age groups, even if for the 16-24 year-olds the pattern is less smooth, and there appear to be two peaks before the fall in training in the late 2000s.

5. Duration

It might seem puzzling that there is a difference between the pattern of no change in the annual participation rate in recent years, as shown in Figure 1, and the pattern of slow decline in the four-week participation rate, as shown in Figures 2 and 3. Figure 4 shows the probable reason for this difference. It shows that there has been a remarkable trend for training episodes to become shorter in length. During the late 1990s around 35% of training episodes in Scotland lasted less than one week; by 2012 this proportion had risen to 50%, with a particularly rapid rise in the last few years.

Figure 5: Proportion of training that is off-the-job in Scotland, 1995-2012



Source: QLFS

Shorter training episodes reduce the likelihood that each one will occur in a four week period. As a result, the four-week participation rate may decline, even though the annual participation rate does not.

A further indication of what has been happening to training duration is shown in Figure 5 which gives the proportion of training in Scotland in the 4-week period that is undertaken either partly or wholly “away from your job”.² Off-the-job training tends to be of longer duration than training on the job, and as a share it has fallen steadily, dropping 16 percentage points from 1995 to 2012 down to 57%. Again, this pattern is not unique to

Scotland, there being similar falls in the share of off-the-job training elsewhere in Britain.

6. Volume

We now consider how these trends in training participation and duration translate into training volumes. Respondents were asked, in selected years and quarters, to state the number of hours they trained for in the previous week. Because training is, to some extent, seasonal, we restrict our timeseries comparison to training during the second quarter. Unfortunately, the variable is not included in the data set for a long time at the start of the 2000s, and the question was changed in 2011

² Off-the-job training means away from the workplace, though it can take place on the employer's premises. In the Quarterly Labour Force Survey the distinction is made by respondents without prompting.

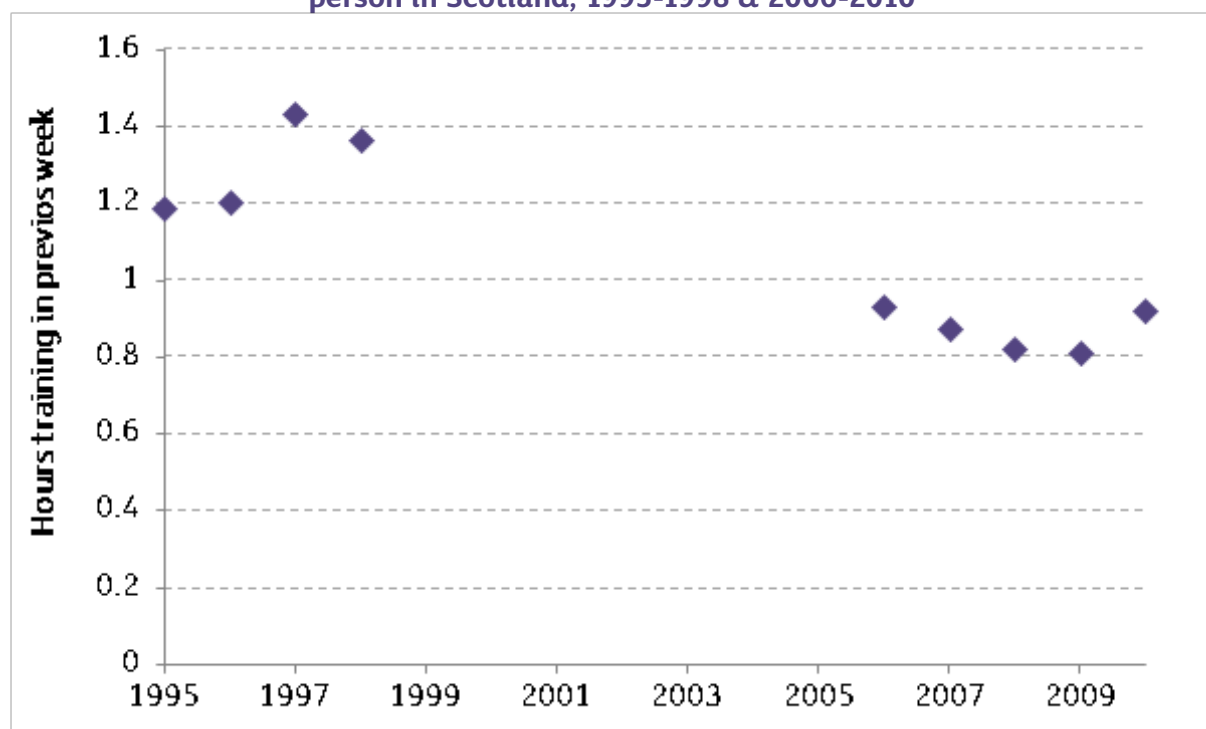
to refer to hours over the 4-week period.

Figure 6 shows that the average training hours per week per employed person in Scotland – the closest indicator of training volume – fell substantially between the mid 1990s and late 2000s. The decline in volume over the 1997-2010 interval is from 1.36 to 0.92 hours per employed person, a startling cut of around one-third. The slight upturn in 2010 rescues this remarkable fall from being even more dramatic, but other evidence for Britain from the Skills and Employment Survey covering 2006 to 2012

and from employer surveys in England and for all of Britain over a nearly similar period point in the same downward direction (Davies et al., 2011; van Wanrooy et al., 2013). Thus, the relatively benign picture one obtains from looking just at the participation rate is transformed into one of radical change when one considers the total volume of training time that people have been receiving.

We do not show this here, but we also examined whether this pattern of change was followed by all groups and regions of the UK economy

Figure 6: Training volume per employed person in Scotland, 1995-1998 & 2006-2010



Source: QLFS, second quarter

or whether it was especially concentrated. We found that relatively larger falls in the volume of job-related training occurred among the young, those in the private sector, those in the lowest education groups, and those living in Northern Ireland. Nevertheless, the same general pattern – a declining participation rate in the 2000s and a long-term substantial decline in training volume – was found in all groups.

Finally, given the large decline in training volume shown both in the QLFS and, for the 2006-2012 period in the SES, we checked whether other individuals' survey series could confirm the picture. The most suitable was the British Household Panel Study. This data showed that the volume in 1998/1999 was 0.68 days per month per employee; this fell to 0.50 days per month in 2007/2008, a drop of over a quarter.

7. Training quality

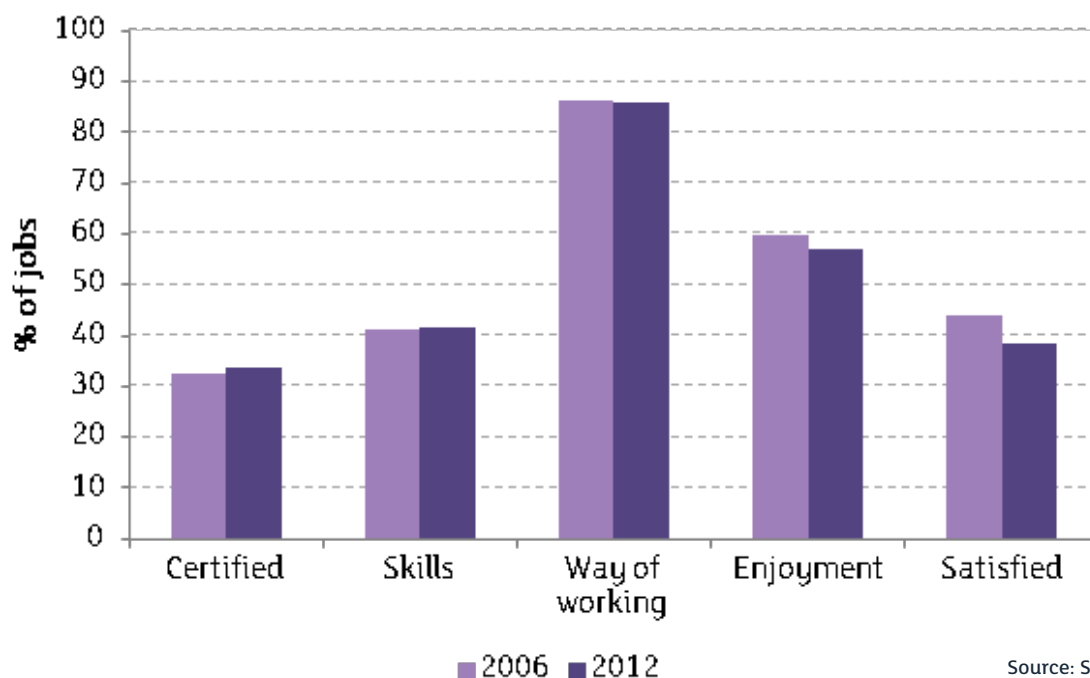
If training duration has been declining, what has been happening to its quality? Could it be that the same amount of skill acquisition is being delivered in much shorter times than during the 1990s, or is the decline in durations a clear indication that there is less learning of new skills taking place?

In a qualitative study looking at the changes enforced during the recent recession, we found that some employers said that they had better focused their training, made use of e-learning and brought it closer to the workplace to meet their needs more closely. They were claiming, in other words, to have maintained training quality – though we had no means of verifying this. Yet it is hard to answer the question with statistics, because relatively few studies have been done to collect data on training quality. We made an attempt, using the SES surveys.

First, we checked whether the training received was being certified. In both 2006 and 2012 the same proportion, just over 30%, of trained workers said that their training led to a qualification of some kind. This picture of stability is backed up by other surveys, both the QLFS and the BHPS. In effect, workers were acquiring qualifications through training just as much as before when the time spent had been much greater.

Yet certification – its import being for transferability and progression – is at best a partial indicator of quality (how far skills are raised). Most though not all research studies show no association between adults' qualification gains and subsequent pay rises, even though substantial gains from work-

Figure 7: Training quality in Britain, 2006 and 2012



Source: SES

based training in general are found in most studies (e.g. Wolf et al., 2006). One interpretation is that certification of training is a poor badge of quality; the persistence of certification may be due to the preoccupation of government policies with accountable targets and consequent effects on funding streams.

So we also asked respondents directly about their experiences of training. As Figure 7 shows, across Britain between 2006 and 2012 there was little change in the proportions reporting that the training improved skills a lot, or in the proportions that reported that the training improved their way of working.

However, there was a small but statistically significant fall from 59.6% to 57.0% in the proportion reporting that the training “has made me enjoy my job more”; and the proportion who were very or completely satisfied with their training fell from 43.8% to 38.6% between 2006 and 2012.

Figure 8 examines whether Scotland’s training quality experience differed from the rest of the UK, something that is feasible to check using the 2006 data. As can be seen, there are only small differences, with workers in Scotland marginally more likely to say that the training helped them to enjoy their job more, but

Figure 8: Training quality in Scotland and the Rest of the UK, 2006

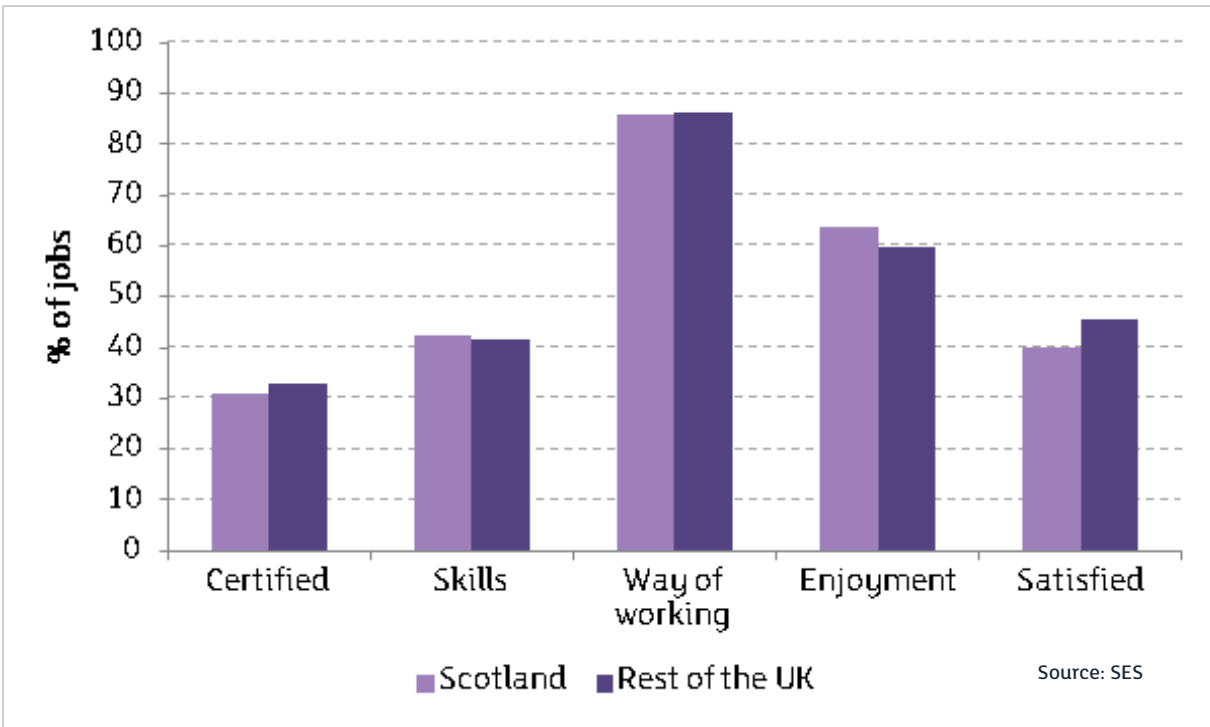


Figure 9: Demand for future training in Britain, 2006 and 2012

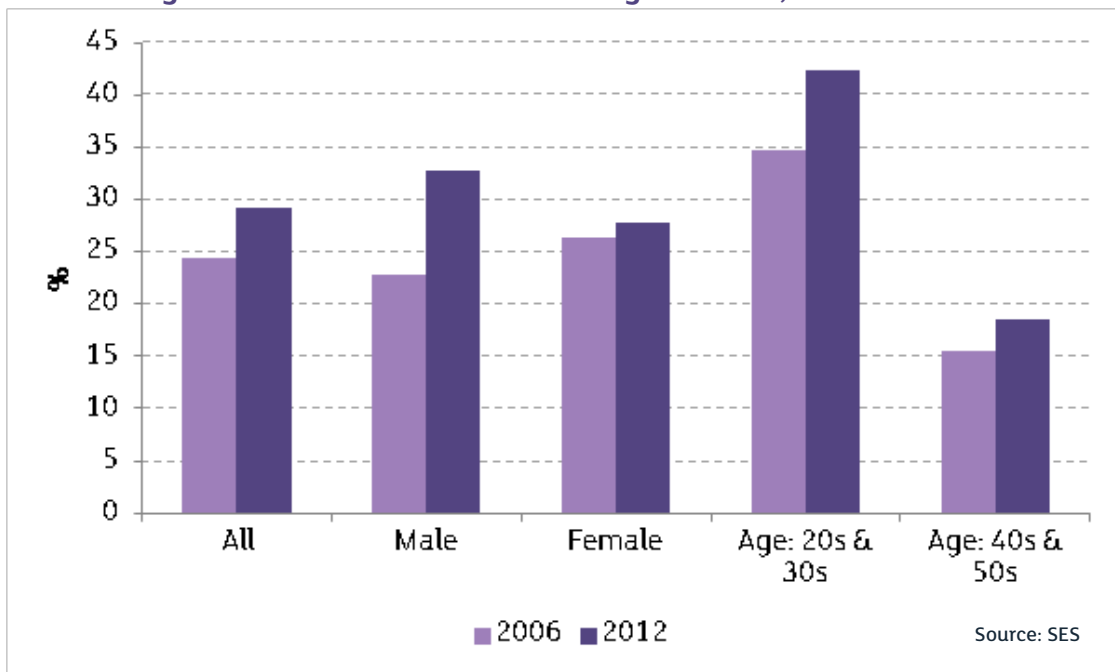
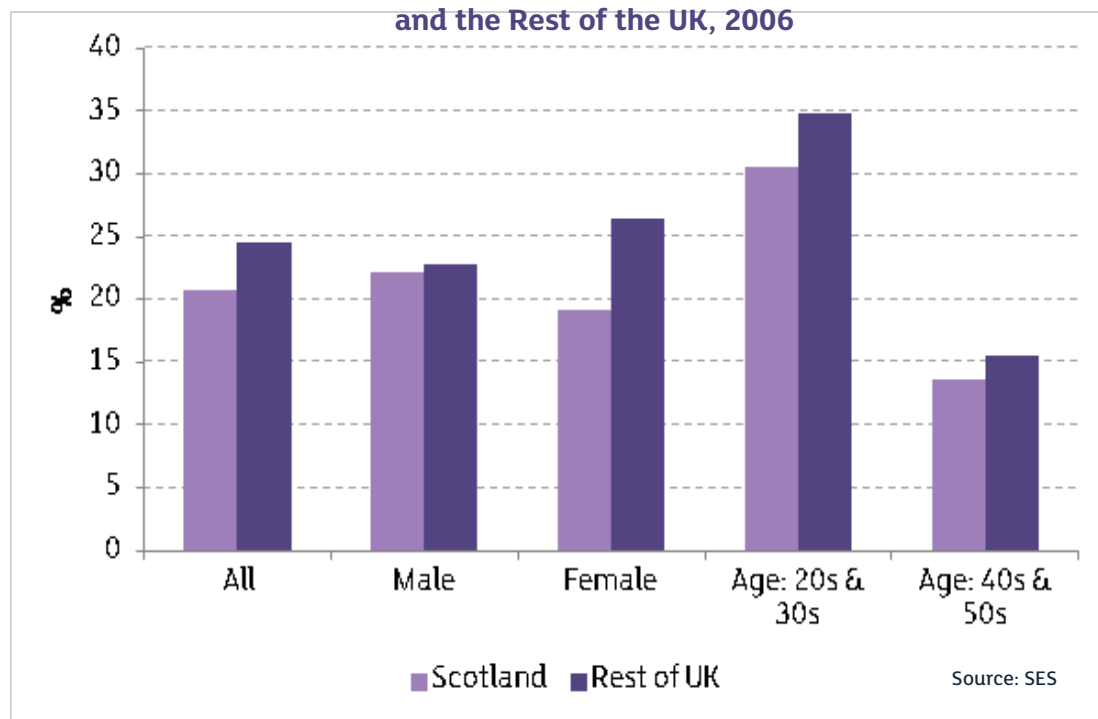


Figure 10: Demand for future training in Scotland and the Rest of the UK, 2006



marginally less likely to be very or completely satisfied with their training.³

In short, it remains possible, even likely, that unit training quality has improved, but given the decline in training volume it is impossible to judge from the limited data available whether the total training quality has been maintained as a result.

8. Future training demand and training adequacy

Whether because of training barriers or for more general reasons, it is possible that some workers are failing to find opportunities they would like to have. How much training do workers say they want? If training volumes are falling, is there any evidence that more workers

are finding the training they receive to be inadequate, or becoming more inadequate?

Figure 9 shows, using the SES data, that the proportion of workers across Britain saying that they wanted training in the future has risen from 24% in 2006 to 29% in 2012. The rise was somewhat greater among men. Figure 10 looks at the position in Scotland compared with the rest of the UK in 2006. Among women and among the younger age group, the demand for future training was somewhat lower in Scotland than in the rest of the UK.

It is possible that the increasing desire for future training is being stoked by the falling volumes of training. We cannot establish this link confidently, but we found that the wish for future training is linked with having faced a

³ Unfortunately, no comparison is possible for the 2012 data, since without a 2012 boost sample for Scotland the number of observations was insufficiently large to present reliable representative findings.

training barrier in the past. For those who did not receive any training in 2012, the proportion wanting future training is much greater among those whose employer would not provide them with desired training than among those not facing such a barrier (37% compared with 16%).

Nevertheless, wanting training for personal development is one thing, while perceiving that training is needed to keep up with the changing skills of one's current job is another. This distinction led us to look at whether people perceived their training to be inadequate. Again using the SES data we found that, among those not receiving training, only about 1 in 5 felt that they should have had some in order to keep up with required skills; this proportion remained stable. Second, respondents who had received training were asked whether it had been enough to keep up to date. The proportion agreeing was high and increased somewhat further, from 88.7% in 2006 to 92.4% in 2012. On the whole, therefore, although training mismatches exist, these subjective responses do not uncover a widespread perception across Britain by workers that the volume of training they receive is vastly different from what their jobs require; nor is there any evidence that the degree of training mismatch is deteriorating.

9. Conclusion

The radical decline in training volumes over 15 years is a puzzle which may be impossible to fully unravel in retrospect, given the piecemeal nature of our information sources. It could also seem quite surprising in the context of the characterisation of Britain as a “knowledge economy”. As we report elsewhere (Felstead and Green, 2013), there is an increasing demand for qualified workers in Britain, alongside rising educational attainment. It is employers who determine the need for training at each workplace, and who play an indispensable role in the provision of training and learning opportunities. Their decisions are partly driven by new technologies and forms of work organisation. Also greatly relevant is employers' orientation—whether more towards the long term, and whether more towards a high value-added approach with complex and dynamic product specifications. Training's variation among employers reflects their business strategies. Because training matters for the whole of society, not just for those in receipt of training, there is a continuing case for social engagement with employers over both the volume and quality of training. But we need also to understand the possible reasons for the decline in training volumes.

We offer four possible explanations. First, it could be attributed to managers becoming

less optimistic about the value of skill formation for their businesses. Such a change could be privately rational if it reflects an unbiased estimate that the expected private returns from training have fallen in an increasingly flexible economy. Alternatively lower optimism might be simply a consequence of evolving business strategies in the context of deep uncertainty (Green, 2013). In this perspective, a falling demand for skill formation is inherent in a “low-skills” trajectory for large swathes of the British economy; it would represent a trend away from the knowledge-economy (Finegold and Soskice, 1988; Keep and James, 2012).

Second, it could be because the workforce has increasingly been composed of more-educated workers. At the low end of the skill

spectrum, an increasingly educated workforce should require less remedial training ; while at all skill levels one can expect more educated workers to learn more quickly, hence to require less training time, than less educated workers. This would be a less alarming interpretation than the first, but it would reinforce the increasing concern with the internationally-slow pace of educational expansion in Britain (UKCES, 2009a).

A third explanation for falling training demand is that there could have been a radical transformation of the training function in Britain, greatly improving the private efficiency of training. This gain will have derived in part from new online training technologies, but also from better targeting of training at employers’ needs in relation to their business strategies (Felstead et al., 2012). In this explanation, this is the age of “lean training”. Indeed there seems to be no reason why the spread of ‘lean production’ methods should not reach HR departments. Nevertheless, it could be questioned whether efficiency gains on their own would be enough to account for such a large reduction in training volume.

Finally, it could be that formal training is being gradually displaced by learning through participation in workplace activities, through working in teams, and through involvement in

...there is a continuing case for social engagement with employers over both the volume and quantity of training.

‘communities of practice’ (Guile, 2001; Felslthead et al., 2009). As learning and development practices evolve, and as the innovation imperatives of the knowledge economy expand, it is possible that workplace learning could become less associated with the concept of training, despite the traditional association of formal training and education with the acquisition of scientific knowledge. Thus, learning may have become better embedded in more organisations, at least in those that have adopted high-involvement working practices (UKCES, 2009b). Regular appraisals and mentoring, a careful design of work organisation and incentives to facilitate employee involvement may be enabling new forms of skill formation that substitute for the typical forms of training reported in surveys.

Either the third or the fourth explanations, if correct, could save policy-makers from being concerned, but in the absence of strong evidence to decide between the possible explanations there is a strong case for closely monitoring the volume and quality of training. A number of challenges are therefore posed for policy-makers, analysts and statisticians:

1. There should be an investment of effort to devise improved, regular training volume indicators for the British labour market, in support of public discourse and as an aid for training stakeholders across the UK. We think that the Office for National Statistics could be more proactive in this respect by publishing the data on training hours on its statistical pages. It should not confine itself to the

QLFS data: it should make some use of existing high-quality survey series. We recommend that a collective effort to improve training statistics should be undertaken drawing on a range of expertise

2. In parallel it should be considered how to generate suitable regular indicators of the quality of training. There may be a need to devise multiple indicators in order to build the fullest possible picture. It would also be valuable to monitor trends in aspects of work organisation that are conducive to learning in workplaces.
3. When considering how to intervene or engage with employers and workers regarding the training function, policy-makers should devote attention both to the volume of training and to its quality.
4. Data on training participation should continue to be collected, if only because it is a constituent part of collecting data on training volumes. Yet researchers and policy-makers should no longer be content to present their analyses solely in terms of training participation, because it can generate misleading results.
5. Finally, we need to have available more regular indicators of training mismatch, not least because training barriers are a prime potential focus for beneficial social interventions.

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