Futureskills Scotland

How 'Smart' are Scottish Jobs? Summary Evidence from the Skills Surveys, 1997-2006

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FOREWORD

Between 2002 and 2006, Futureskills Scotland conducted some 25,000 interviews with Scottish employers. The evidence gathered on employers' views on skills, training and recruitment issues has helped inform the skills debate in Scotland. The views of employers are important. But so are the views of workers.

Futureskills Scotland funded a boost to the 2006 Work Skills in Britain Survey, to gather robust evidence on Scottish workers' views about skills and training¹. The survey covered 2,000 Scottish workers. Professor Alan Felstead is one of the respected academics who has led on the development and analysis of this work.

Professor Felstead's paper highlights a number of issues:

- The polarization of jobs in Scotland over a quarter of jobs require higher-level qualifications whilst about 30 per cent of jobs require no qualifications on entry.
- The moderate increase in the skill content of Scottish jobs over time - Scottish jobs are becoming 'smarter'. But not at as fast a pace as jobs in the rest of the UK.
- The low-skilled nature of many part-time jobs held by women.
- The increased proportion of Scottish jobs in which computing skills are essential - although Scotland still lags behind the rest of Britain in this important area.
- Levels of worker autonomy in Scotland are similar to those across the UK. Almost half of Scottish workers claim to have a great deal of influence over their work effort, and a similar proportion claim high influence over the quality standard of their work.
- Most workers considered the qualifications required to get the job were also 'essential' or 'fairly necessary' to do the job.
- When comparing jobs, 'good training provision' is a middle-ranking concern for workers. It falls behind features such as job security, enjoyable work, friendly colleagues and good pay. Having said that, 'good training provision' is considered an essential job feature by a fifth of Scottish workers.

- About two in every three Scottish workers received some form of training in the last year.
- Training for workers is largely instigated by employers. Two-thirds of Scottish workers received training initiated at the request of their employer. For the remaining third, training was initiated at their own request.
- Those workers not receiving training did not regard their lack of training as a barrier to improved work performance. Only a fifth of non-trainees thought it would make it difficult for them to keep pace with changes in the job and even fewer thought it would hinder their career prospects.
- Workers who receive training see its benefits in terms of keeping up-to-date, improving their work practices and improving their skills.

Perhaps the most challenging finding from the analysis is the extent of qualification mismatch in the Scottish labour market, from the workers' perspective. The Scottish education and training system has been successful in developing the skills and qualifications of the workforce. But it appears that the level of skills demanded by employers has not kept pace with this increased supply.

The recent launch of **Skills for Scotland: A Lifelong Skills Strategy** highlighted the importance of **economic pull** stimulating demand for skills from employers and improving the utilisation of skills in the workplace. The results of the 2006 Skills Survey underpin the importance of this issue.

The 2006 Skills Survey is a valuable addition to the evidence base. Professor Felstead's work highlights Scottish workers' views on the qualifications, skills and training associated with their job. It provides a valuable complement to the views of Scottish employers.

Futureskills Scotland November 2007

Note: the views expressed in this briefing paper are those of the author and are not necessarily those of Futureskills Scotland.

INTRODUCTION

There is considerable interest, from both the policy-maker's and the academic researcher's perspectives, in measuring the stock of skills in the economy: its distribution, how it is changing and whether there are differences between the skills across nations. Much of this interest has been prompted by evidence linking skills to economic performance (e.g. Mason and Finegold, 1995; Mason et al., 1992; DfES, 2001; HM Treasury, 2005 and 2006).

An up-to-date understanding of the distribution of skills is, therefore, an important underpinning for the policy agenda of enhancing Scotland's economic performance and promoting greater social inclusion. Similarly, evidence on the changing use of skills is warranted, if we are to understand the direction in which Scottish workplaces are heading. However, these issues pose some basic prior questions, including 'which skills are relevant?', and 'how can they be measured?'. Given answers to these questions, one can then examine how the different skills are distributed across workplaces, which are growing and which are declining. It is also useful to find out what workers, as well as employers, think about the prospects of acquiring skills at work. Answers to these questions are of interest to scholars who wish to test theories of the modern workplace and to policy-makers concerned to use skills, if possible, to improve economic performance.

This Expert Briefing answers a number of these questions. In particular, we examine a range of skill measures and ask which group of workers deploy which skills, and to what extent, and how much are the skills they use changing. We also examine whether Scotland deploys more or less skills than are used in other parts of the UK. By drawing on data taken from a survey of people actually doing jobs and exercising skills, the evidence presented here is different from reports on skill shortages and other skills-related variables that are based on data collected from employers such as the Scottish Employer Skills Surveys (Futureskills Scotland, 2007). The aim of this Briefing, therefore, is to summarize some of the results emerging from the 2006 Skills Survey in the hope that its readers will wish to scrutinize the results further by consulting the full Report (Felstead and Green, 2007). The Briefing is structured as follows. It begins by outlining, in brief, the data sources from which the evidence presented here is drawn. The Briefing then goes onto outline the distribution and trends in the following:

- broad skill measures including the qualification level required on entry into jobs, the training time for the type of work individuals carry out and the learning time needed to do jobs well, as well as issues such as over-qualification;
- the use of computer skills and their level of sophistication;
- the use of other generic skills, such as problem-solving and communication skills;
- employee task discretion, that is the level of control employees have over the detailed execution of work tasks and hence the extent to which employees' judgement and skill is required;
- **employee attitudes** to work and skill development, the opportunities for training and learning, and the consequences of and reasons for employee development.

Rather than present the data in tabular form, this Expert Briefing uses figures to illustrate particular points of policy interest. Once again, those seeking more detail are urged to consult the full Report (Felstead and Green, 2007). To make cross-referral easier, section headings in this Briefing correspond very closely to the results chapters in the full Report.

DATA SOURCES

The evidence presented here is based on data collected for the 2006 Skills Survey which contained a Scottish boost. The survey generated a high quality, and reasonably large, representative sample of working individuals living in Scotland aged 20-65, consisting of 2,000 respondents. All interviews were conducted in people's homes and lasted for just under one hour. A total of 1,415 of these were based in the area covered by Scottish Enterprise and 585 respondents were located in the Highlands and Islands. The survey's aim was to gather information on the skills used at work via questions directed at workers themselves. By making comparisons across three separate, but comparable, surveys carried out in 1997, 2001 and 2006 we are also able to analyze how skills have changed over the last decade. Furthermore, these data sources also allow us to compare Scottish work skills with those found in other parts of the UK (or for trend analysis, other parts of Britain).

BROAD SKILLS

A common way of measuring skills is to examine the stock of qualifications held by the workforce. Data sets such as the Labour Force Survey and their equivalents in other countries make this type of analysis possible on a regular basis. One aspect of the skills debate, therefore, has been to compare the qualifications of the British workforce with those of competitor nations. While this is a complex and difficult task since adjustments have to be made which take into account different gualification standards, norms and scope between nations, several studies have adopted such an approach (e.g. DfEE and Cabinet Office, 1996; HM Treasury, 2005). This type of research identifies the strengths and weaknesses of the British educational system. Its strength lies in the production of graduates - approaching a guarter of the population now have qualifications above National Vocational Qualification (NVQ) level 3, a proportion which has more than doubled over the last decade. However, the UK has proportionately more people with low qualification levels than many of its major comparators and is ranked 18th across the Organisation for Economic Co-operation and Development (OECD) on this measure. Five million people have no formal qualifications at all (HM Treasury, 2005: 40). It also has a smaller than average proportion of people with intermediate-level qualifications which puts it 20th out of the 30 countries in the OECD (HM Treasury, 2005: 43). However, such an approach is focused exclusively on the supply of skills as proxied by qualifications.

The Skills Survey series, on the other hand, mainly asks respondents about the skills demands of the job (although it also collects data on the qualifications respondents hold). The series collects data on three broad skill dimensions of jobs. These are:

- the qualifications required to get the job;
- the length of training for the type of work undertaken;
- the time taken to learn to do the job well.

The 2006 evidence shows that more than a quarter (27.9%) of Scottish jobs require qualifications at or beyond level 4 (see **Figure 1**). However, over three out of ten jobs (31.3%) require no qualifications on entry. A similar polarization of jobs is reflected in the training times respondents report for their current type of work - over half of Scottish jobs (57.0%) require less than three months training time, while threetenths (30.3%) report training times of over two years. Similarly, some jobs take a long time to do well, while others are picked up relatively quickly - approaching a third of jobs (31.3%) are done well after two years in post, but around a fifth (18.6%) take just a month to learn. The skills of Scottish jobs, therefore, vary widely.

FIGURE 1

Broad Skills in Scotland, 2006



BROAD SKILLS

One way in which they vary is by sex: men tend to be in more skilled jobs than women. However, this difference is driven in large part by the relatively low skill levels of jobs occupied by women who work part-time. Figure 2 shows the summary measures for the three broad skills outlined above. The higher the 'score' (shown on the y-axes) the higher the level of skill demanded by the job according to these demand measures. For each of the three broad skill measures, the male column is higher than the female column. However, women who work full-time are neck-and-neck with men, while women who work part-time are in lower skilled jobs. What this means in practice is that almost half (47.0%) of female part-timers report that they do not need a qualification for the job they currently occupy compared to around a guarter (27.7%) of women who work full-time. Furthermore, these differences are large enough to be statistically significant. The policy implication of this evidence is that skills inequality, if it exists having controlled for compositional factors such as occupation, industry and so on, is likely to affect women according to the number of hours worked. Women part-timers may therefore be paying a penalty in doing jobs that are lower skilled and hence lower paid.

FIGURE 2

Males

Broad Skills in Scotland by Gender and Working Time, 2006



Note:

The Required Qualifications Index was calculated from the highest level of gualification respondents thought a new recruit to their job would require. The index was calculated as follows: none=0; level 1=1; level 2=2; level 3=3; and level 4 or above=4.

The Training Time Index was calculated from the responses given to a guestion on the length of training needed for the job. The index was calculated as follows: none=0; less than 1 month=1; 1=3 months=2; 3-6 months=3; 6-12 months=4; 1-2 years=5; and over 2 years=6

The Learning Time Index was calculated from the responses given to a question on the length of time taken to do the job well. The index was calculated as follows: less than 1 month=1: less than 3 months=2: 3-6 months=3: 6-12 months=4: 1-2 vears=5: and over 2 vears=6.

Another way the skills of Scottish jobs vary is by occupation with those at the top of the hierarchy requiring more skills than those at the bottom. Skills used at work also vary by industry. Notably, 'Agriculture' is at the bottom of the league in terms of the level of gualifications required on entry into jobs and bottom in terms of the length of training, but it is top in terms of the time needed to learn to do the job well. This suggests that in this sector of the Scottish economy skills are acquired in large part on-the-job.

Evidence from the Skills Surveys can be used to derive a qualification demand and supply balance sheet for Scotland which can then be compared to the UK as a whole. Using evidence drawn from the spring and summer 2006 Labour Force Survey the profile of skills supply among the economically active can be mapped, the Vacancies Survey for the equivalent months can provide data on the level of unmet labour demand (ONS, 2006; Williams, 2004a) and data from the 2006 Skills Survey can be used to estimate the number of jobs requiring a particular level of gualification on entry. On this evidence, there are 240,000 more people with level 4 or above gualifications than there are jobs requiring this level of qualification on entry (see Figure 3). The gualification demand-supply discrepancy is of a similar order for level 3 qualifications (239,000 more people than jobs). On the other hand, the data suggests that there are many more people with gualifications of any level than there are jobs that require qualifications for entry. Estimates from the 2006 Skills Survey show that there are 724,000 jobs in Scotland that do not require qualifications on entry. However, there are only 230,000 people who possess no qualifications to their name. While this suggests that the educational system has been successful in increasing the qualification level of the economically active population, the demands of the economy have not kept pace with this success.

FIGURE 3

Balance of Supply and Demand for Qualifications, Scotland, 2006



Moreover, the Scottish educational system is more successful than the UK in producing people with level 4 or above qualifications - in 2006, 37.3% of those in Scotland possessed these qualifications compared to 32.8% of those in the UK. However, in proportionate terms Scotland has fewer jobs requiring level 4 or above qualifications on entry. So, there is a ten percentage point qualification gap in Scotland compared to a gap of three percentage points in the UK as a whole (see Figure 4). At the other end of the scale, both economies have reduced the numbers of people who have no qualifications to their name - in both cases, this category accounts for about one in ten people (9.8% in Scotland and 9.4% in the UK). However, the Scottish economy has proportionately more jobs that do not require gualifications on entry (31.6% compared to 28.2% in the UK). This means that the Scottish educational system has outpaced the demands of the Scottish economy faster than the UK as a whole - Scotland has a 22 percentage point gap between the demand and supply of jobs/people in the 'no qualifications' category compared to a gap of 19 percentage points for the UK as whole.

As a result, in 2006, almost two-fifths (39.7%) of Scottish respondents reported that their highest qualification was above that required for entry (defined here as 'over-qualification'). This represents a rise from the figure reported in 1997 when around a third of respondents (36.2%) reported being 'overqualified'. However, almost three-quarters of Scottish respondents still said that the qualifications required to get their jobs were 'essential' or 'fairly necessary' to carry them out and relatively few said that they were 'totally unnecessary'.





The policy implication is that while the education system has successfully equipped the Scottish workforce with higher qualifications, the Scottish economy has not upskilled sufficiently to keep pace with a rising supply of qualified labour. This provides underpinning evidence for the Scottish government's aim of providing 'both a skilled population and an economy and society that makes full and productive use of these skills' (Fiona Hyslop, Secretary for Education and Lifelong Learning, Scottish Government, 2007: 4; my emphasis). The evidence from the 2006 Skills Survey suggests that while there are more qualified workers in Scotland, they are not being as productively used as they might, hence the importance of the 'economic pull' dimension of the Skills Strategy for Scotland. Moreover, while a similar pattern is evident in the UK as a whole, it is more pronounced in Scotland.

BROAD SKILLS

Another key issue is how broad skills have changed over time and whether Scotland's skills trajectory is any different from the rest of Britain. **Figure 5** addresses this issue. It shows that jobs in Scotland have seen a **moderate** increase in their skill content over time. For example, jobs requiring degrees for entry have risen from one in seven (14.5%) in 1997 to around one in six (17.8%) in 2006. Similarly, the proportion of jobs requiring more than two years learning time to do well has risen a couple of percentage points from 29.1% in 1997 to 30.5% in 2006. Skill change in the rest of Britain over the last decade has been similarly modest. The conclusion is that the level of skill exercised in Scottish jobs - according to our broad skills measures - is similar to skill levels exercised elsewhere in Britain (with the 2006 columns in Figure 5 of similar height).

Despite a decade of modest change in the skills content of jobs, women living outside of Scotland have seen their skills rise significantly. These women have experienced significant increases over the 1997-2006 period in the skills they use at work. Moreover, the skills used by part-time women workers have risen most. However, this pattern of change does not extend to women working in Scotland. Their skills have also risen but mostly at a slower rate and at rates falling short of statistical significance.

FIGURE 5

Trends in Broad Skills, Scotland and the Rest of Britain, 1997-2006



COMPUTER SKILLS

It is widely held that the introduction of computer-based technologies has transformed the nature of employment in the modern era. Correspondingly, computing skills are considered to be the most far-reaching 'generic skill'; that is, a skill that is used in various ways and levels in many different occupations. Yet there is a scarcity of information about just how widespread computer usage is in Scotland, how fast it is changing, how workers are coping with the changes, whether they are doing so adequately and how the uptake in Scotland compares with other parts of the UK.

The 2006 Skills Survey collects data on the use of computing skills in four ways. It asks respondents whether computerized or automated equipment is used at work (participation), whether the use of a PC or other computerised equipment is 'essential' or 'very important' to their jobs (centrality), whether the use of this equipment is 'complex' or 'advanced' (complexity) and whether they regard the use of the internet as 'essential' to their job (internet usage).

The results are that: computers are used in over two-thirds (69.4%) of jobs in Scotland; in two-fifths (40.9%) of cases computer usage is 'essential' or 'very important' for the job; in one-fifth (18.0%) of jobs this involves using 'complex'

(e.g. use of spreadsheets) or 'advanced' (e.g. programming) techniques; and in a third of (35.2%) of jobs the use of the internet is 'essential'. According to all of these measures, computer skills are used significantly less in Scottish jobs than in jobs elsewhere in the UK as shown in **Figure 6** (on all four measures, the rest of the UK column is taller than the Scottish column).

FIGURE 6

Computing Skills in Scotland and the Rest of the UK, 2006



COMPUTER SKILLS

There has been a remarkable growth over the last decade in the use of computers in Scottish workplaces. For example, the proportion of workplaces in which computers were 'central' rose from 24.9% in 1997 to 41.6% in 2006 and the importance of the internet in people's jobs has risen from 20.8% to 36.0% over the same period (see **Figure 7**: note that the data here excludes the Highlands & Islands for consistent trend comparisons to be drawn).

FIGURE 7





However, the computer skills gap with the rest of Britain has persisted over time and shows no sign of narrowing. For all our four computing skill measures, the gap between Scotland and the rest of Britain has remained at around five percentage points over the last decade and has, if anything, widened rather than narrowed (see **Figure 8**).

FIGURE 8





These results show that computing skills are an important feature in a growing number of jobs. Their centrality has increased and the sophistication of computing skill use has also risen. This applies both north and south of the border. However, jobs in Scotland still lag behind those in the rest of the UK in the use of computing skills. This suggests that jobs in Scotland are being less infused with advanced technology and the quality of Scottish jobs - on this measure at least - is failing to keep pace with the quality of jobs in the rest of the UK. Given the strong association computing skills have with pay, this pattern is a worrying since it may account - at least in part - for the relatively low pay of Scottish workers compared to those working elsewhere (Green et al., 2007; Swadkin and Hastings, 2007).

OTHER GENERIC SKILLS

Supplementing the importance commonly attached to the use of computing skills, many commentators, including employers' representatives, also refer to the requirement for other 'generic skills' in modern workplaces. Previous surveys in the series have pioneered the development of measures of the use of generic skills. The idea of a generic skill refers to a skill which is used across a wide range of occupations and industrial situations, in contrast to occupation-specific or firm-specific skills that are needed in particular jobs. The surveys asked respondents about how important a range of almost 50 activities were to their jobs. These are summarized into groups of similar activities and scores according to the importance-rating respondents attached to each set of activities.

The results show that there are differences between the generic skills utilized by men and women, with women typically found in jobs requiring more communication skills, and more emotional and aesthetic skills. Among women, those in full-time jobs exercise considerably greater levels of generic skills in most domains than those in part-time jobs. As with broad skills, generic skills also vary by industry and occupation. For example, aesthetic skills are highest in 'Sales' occupations, while literacy skills are highest for 'Professional' occupations. Emotional and aesthetic skills are deployed far more in service industries. Influence skills are highest in 'Managerial', 'Professional' and 'Associate Professional' occupations, and are on average considered less than 'fairly important' in other occupations. There are modest, but statistically significant, differences between the generic skills deployed in Scottish jobs compared with jobs elsewhere in the UK. In contrast to our broad skill measures, this suggests that the skills content of jobs in Scotland is lower than elsewhere. In Figure 9 the Scottish bars are shorter than the bars for the rest of the UK in ten out of thirteen cases.

Furthermore, while in the rest of the UK there has been a notable and significant increase in the deployment of most generic skills (the one exception being physical skills), in Scotland the deployment of generic skills has risen but not as fast as elsewhere. This suggests that the generic skills content of Scottish jobs is marginally lower than elsewhere in the UK and that the skills lag has worsened over the last decade. For policy makers, this suggests that while jobs in Scotland are becoming 'smarter', jobs are becoming even 'smarter' south of the border and that the gap is therefore widening.

FIGURE 9

Generic Skills in Scotland and the Rest of the UK, 2006



For each group of generic skills an additive important rating index was calculated. The index was calculated according to the importance attached to each skill by respondents. The index was calculated as follows: 0=not at all important/does not apply; 1=not very important; 2=fairly important; 3=very important; 4=essential.

EMPLOYEE TASK DISCRETION

Skills - as measured by what is required to get and do jobs have risen very modestly in Scotland over the last decade, although computing skill requirements have grown rapidly. In this section, we examine whether there has been correspondingly little change in the autonomy workers are allowed to do the job. It is often argued that skills are closely linked to levels of task discretion for employees - that is to say greater control over the detailed execution of the job. This is thought to reflect the need to motivate employees who are carrying out more complex work and greater difficulties in externally monitoring more skilled work. Discretion offers the potential productive advantages of flexibility, together with better use of employees' judgement and skill.

In Scotland, almost half (48.7%) of respondents claimed to have 'a great deal' of influence over their work effort and a similar proportion (49.7%) claimed high influence levels over the quality standards of their work. Smaller but sizeable proportions claimed to exercise 'a great deal' of influence over what tasks are to be done and how (28.4% and 40.9%). Notably, comparisons with the rest of the UK suggest little difference in patterns of task discretion. However, the

FIGURE 10





Respondents were asked: How much influence do you **personally** have on how hard you work?' The options were: 'a great deal'; 'a fair amount'; 'not much'; and 'none at all'. The same question format was used to determine employee influence on: 'deciding what tasks you are to do'; 'deciding on how you are to do the task'; and 'deciding the quality standards to which you work'. A Task Discretion Index was constructed by giving a score ranging from 0 [no influence at all] to 3 [a great deal of influence] and then taking the average of the summed scores. gendering of task discretion is much stronger in Scotland than in the rest of the UK. According to this evidence, men enjoy much greater levels of autonomy at work than women (with a task discretion score of 2.21 compared to 2.13) compared to equality in the rest of the UK (see **Figure 10**). Matters are worse for women part-timers in Scotland who have, on average, even less room for manoeuvre than their colleagues south of the border.

However, over the last decade the gender gap has narrowed. For example, our summary of task discretion index was 2.22 for men and 2.06 for women in 1997 compared to 2.21 for men and 2.13 for women in 2006 (see **Figure 11**). Other discretion inequalities in Scotland have also narrowed over the decade. Women part-timers, for example, have seen their levels of task discretion rise at a time when their full-time counterparts have seen their task discretion levels fall, hence the gap between the two groups has narrowed.

FIGURE 11

Employee Task Discretion by Sex, Scotland, 1997-2006



Since this aspect of gender differentiation is improving, it may be tempting to allow further improvement to take place rather than attempt to intervene, which is hard to achieve when autonomy is associated with management cultures that are beyond the reach of government policies. Nevertheless, given a greater level of autonomy 'makes better use of employees and stimulates enterprise and innovation' (Scottish Government, 2007: 44), a continuous watching brief on the levels of autonomy of Scottish jobs is warranted.

EXPERIENCES OF AND ATTITUDES TOWARDS SKILL ACQUISITION

An important aspect of the 2006 Skills Survey was the addition of a set of questions designed to uncover more about the routes through which employees acquire the skills they use at work. While we have a lot of data on the incidence and intensity of training activities through surveys such as the Labour Force Survey, we know comparatively little about the reasons for training take-up by employees, its consequences for their performance at work and their future training prospects. We know even less about those who do not receive training and the consequences this has for their skill development and work performance. The 2006 Skills Survey was also designed to shed light on other sources of skill development such as learning from others while at work, learning opportunities embedded in the job and teaching others how to do the job more effectively (cf. Felstead et al., 2005 and 2007). This section considers the results produced by these new questions. Throughout the Scottish results are compared to the results for the rest of the UK and, in the absence of comparable questions carried in earlier surveys, the results are restricted to 2006.

Many job features are important to people's work orientations, but 'good training provision' does not appear one of them. It is ranked ninth out of fifteen job features in both Scotland and the rest of the UK. Nevertheless, it is rated as 'essential' by a fifth (21.1%) of job-holders in Scotland: about the same proportion as employees who work elsewhere in the UK. In general, employee motivations to train are therefore weak. It is particularly weak among those who report not receiving training in the year prior to being interviewed. Around half (49.7%) of them said that they 'did not want any training' compared to around a sixth (16.2%) who said that 'my employer was not willing to provide additional training, even though I wanted it'. Seven out of ten (71.6%) Scottish respondents who did not undertake training in the past twelve months regarded such activity as irrelevant to the job and well over half (59.1%) said that training had little pay-off in terms of promotion. Furthermore, only around a fifth (19.8%) of Scottish non-trainees thought that it would make it difficult for them to keep pace with changes in the job and even less (8.3%) thought that it would hinder their career opportunities. From this, we can conclude that the perceived benefits of training among those who do not receive it are quite low (see **Figure 12**).

FIGURE 12

Attitudes to, and Consequences of, Not Receiving Training, Scotland, 2006



On the other hand, when training is undertaken it is often at the behest of the employer: whereas only a third (35.3%) of Scottish trainee respondents claimed personal responsibility, around two-thirds (68.3%) mentioned that training had been initiated on the suggestion of their employer. The pattern is very similar among men and women, although only a quarter (27.5%) of female part-time employees receive training as a result of their own initiative.

Those who have undertaken training rate its impact on their performance as high. For example, nine out of ten Scottish respondents said that: it was important for keeping up-to-date with developments in the job (91.8%); it had helped them to improve their work practices (85.7%); and it had improved their skills (92.5%) (see **Figure 13**). Despite remaining high these benefits decline as the spotlight moves down the occupational hierarchy suggesting that the greatest payoff for training is among groups that have traditionally received most. Calls for greater training equality may, therefore, be counterproductive from an economic point of view since resources may be more effectively deployed among groups where it has greatest impact.

Attitudes to training, therefore, divide in two. On the one hand, the receivers of training (around two-thirds of Scottish respondents) are almost unanimous in seeing its benefits and are keen to receive more. In addition, the training payoff is greatest among the top occupational groups, where

FIGURE 13

Attitudes to, and Consequences of, Receiving Training, Scotland, 2006



traditionally the incidence of training has been highest. However, those not receiving training (the remaining one third of respondents) consider themselves, in the main, to be in jobs where training is of little use. This is not because their employers refuse to provide training but because the jobs do not require it - this applies particularly to jobs in the lower reaches of the occupational hierarchy. The policy implication of this finding is that the delivery of training needs to be understood in the wider context of production and that for some jobs training may be inappropriate and even counterproductive (cf. Felstead et al., 2007). On-the-job learning through experience and experimentation as well as learning from others is buoyant. In 2006, around a third (35.1%) of Scottish respondents strongly agreed that the job itself requires learning and just over a quarter (26.6%) strongly agreed that they were able to learn from work colleagues. There was also strong agreement that job-holders have a teaching role in helping others learn - nearly a third (31.3%) of Scottish respondents took such a position. The Scottish results are mirrored by those in the rest of the UK with all three columns neck-and-neck (see **Figure 14**).

FIGURE 14

Sources of On-the-Job Learning, Scotland and the Rest of the UK, 2006



The survey also asked respondents about their future training intentions. A fifth (20.9%) of Scottish respondents reported that they have a strong desire to get training. This proportion drops among women in general (18.5%), but falls even more dramatically among female part-timers (13.1%) (see **Figure 15**). However, the equivalent figures for the rest of the UK are somewhat higher suggesting that the motivations to get training in the future are lower in Scotland than in the rest of the UK, especially among women.

FIGURE 15

Future Training Desires by Sex and Working Time, Scotland and the Rest of the UK, 2006



CONCLUSION

From this analysis, a number of policy challenges emerge that need to be overcome if Scotland is to achieve its aim of having 'a skilled population and an economy and society that makes full and productive use of these skills' (Scottish Government, 2007: 4).

- The skills content of Scottish jobs as measured by the importance of activities carried out at work - is marginally lower than jobs elsewhere in the UK and the situation has worsened over the last decade.
- However, the picture is not clear-cut. Broad skill measures suggest that there is little difference between Scotland and the rest of the UK in terms of the qualifications required to get jobs, training time and the learning time needed to do jobs well. There is also no noticeable change in the difference between Scotland and the rest of Britain on these measures over time.
- Women and those who work part-time in particular are still losing out. They are in relatively lowly skilled jobs and have less task discretion than men. Nevertheless, their position has improved, but significant inequalities still remain with attendant consequences for pay inequality.
- Scotland still lags behind the rest of the UK in terms of the use of computers at work. This, too, is likely to feed into explanations of geographical pay inequality. It may also put in jeopardy the goal of 'improving links between skills and the other drivers of productivity, such as investment in technology' (Scottish Government, 2007: 44) since, on average, Scottish workers are less exposed to new technologies at work than their counterparts elsewhere in the UK.

- Scotland has succeeded in raising the proportion of its population who are highly-qualified. But demand from employers for highly-skilled workers has not increased at a similar pace. This has resulted in high levels of qualification mismatch and large proportions of individuals who report having qualifications above those required to get the jobs they currently occupy. This suggests that more needs to be done to raise the expectations of employers, so that workers' skills are used more effectively.
- Despite the interest in the so-called 'knowledge economy', it is apparent that many low skilled jobs that require little training still exist in the Scottish economy. Without direct intervention to stimulate employer demand this is unlikely to change.
- The survey evidence suggests that training has greatest impact among groups of workers who traditionally have the highest incidence of training. By the same token, lack of training hinders these groups of workers most. The policy implication of this finding is that employers' training practices might be economically rational whilst also being socially inequitable.

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