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RESEARCH ARTICLE

Fronting up to skills utilisation: what can we learn from Scotland's skills utilisation projects?

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Policy makers in many countries have long insisted that skills are critical to economic performance and social cohesion/inclusion. However, it is increasingly recognised that if skills are to fully deliver on this agenda, they have to be *used* effectively inside the workplace. While such statements can now be observed in the skills strategies of England, Scotland and Wales, much less is understood about how to design effective interventions in this new and challenging area of policy. Of particular interest then are the 12 'action research' projects currently being funded by the Scottish Funding Council, which are aimed at testing the role that universities and colleges might potentially play in improving skills utilisation. Drawing upon interviews with project managers, employers and employees involved in three of the projects as well as with key Scottish policy makers, the article examines progress to date. It finds some initial evidence for establishing proof of concept and highlights challenges in terms of capacity building and sustainability. Drawing parallels with Scandinavian workplace development programmes, the article argues that the programme can potentially contribute to a broader approach to business improvement and innovation policy in Scotland, with universities and colleges more closely engaged as a key strategic partner.

Keywords: skills utilisation; Scotland; workplace development; policy

Introduction

Over the past 30 years, governments across the developed world have insisted that education and skills are critical to international competitiveness, productivity growth, improved living standards and social cohesion/inclusion (see Brown *et al.* 2010). However, it is increasingly recognised that if skills are to fully deliver on this agenda, they have to be *used* effectively inside the workplace (see Buchanan *et al.* 2010). In the United Kingdom, the 'skills problem' has, until very recently, been viewed in relatively narrow terms as primarily one of inadequate *skills supply* and weaknesses in the education and training system (see Keep 2009, Payne 2009). Policy attention has focused upon initiatives aimed at increasing the supply of skills and qualifications in a bid to close the 'skills gap' with major competitors, boost productivity and deliver greater social inclusion and mobility.¹ Consequently, education and training, operating within a flexible (deregulated) labour market, have come to shoulder a very heavy burden of policy expectation.

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In recent years, however, the argument that skills policy must do more to address skills *demand* and *usage* has begun to make some serious headway within UK policy circles. This shift began in Scotland, where there are concerns that despite out-performing England when it comes to the supply of higher level skills, productivity continues to trail below that of its southern neighbour (see Keep *et al.* 2006, Payne 2009). In 2007, the newly elected Scottish Nationalist Party (SNP) administration published *Skills for Scotland – A Lifelong Skills Strategy*, which strongly emphasised the need to address issues of skill demand and utilisation as well as supply (Scottish Government 2007). This commitment has been recently reiterated in the refreshed skills strategy which insists that ‘Making more effective use of skills is of fundamental importance in leading Scotland back to a higher level of productivity and sustainable growth’ (Scottish Government 2010, p. 42).

Similarly, the UK Commission for Employment and Skills (UKCES) has argued that ‘the UK has too few high performing workplaces, too few employers producing high quality goods and services, too few businesses in high value added sectors’, and has drawn attention to rising levels of ‘over-qualification’ and problems of skills mismatch among the workforce. Highlighting a significant ‘policy gap’, the Commission notes that ‘the future employment and skills system will need to invest as much effort on raising employer ambition, on stimulating demand, as it does on enhancing skills supply’ (UKCES 2009a, p. 10). It goes on to add that, ‘there is little value to an organisation having a skilled workforce if the skills are not used well’ (UKCES 2009a, p. 11).

The *principle* that skills must be utilised if they are to help power improvements in economic and social well-being is one which now readily appears in the policy statements of nations across the devolved UK (see UKCES 2009a). Although, at one level, this represents a significant shift in terms of policy *discourse*, at another it is perhaps no more than a statement of *truth*. The difficulty resides not so much in establishing its veracity as determining what role policy can, or should, play in respect of such an ambition and designing viable policy interventions which are capable of making a difference.

In general terms, the skills utilisation agenda points to the need for policies around productivity, innovation, economic development, work organisation, employment relations and education and training to be joined together as part of a coherent and consistent strategy (Keep *et al.* 2006). At the same time, it suggests the need for a new approach to skills policy itself through interventions which link skills supply to effective skills utilisation in the workplace. For policy makers whose experience is primarily bound up with ‘traditional’ skills supply measures, designing interventions that are outside their comfort zone and which require a new and fundamentally different approach to tackling ‘the skills problem’ is likely to be very challenging indeed.

In the United Kingdom, it is Scotland that is at the forefront of this agenda, with a range of policy activity currently underway (see Payne 2010). Of particular interest are the 12 skills utilisation projects which are being funded by the Scottish Funding Council (SFC).² These are ‘action research’ pilots designed to explore the role that Scottish universities and colleges might potentially play in improving skills utilisation by testing ‘what does and does not work’ (see SFC/SDS 2009). What progress can they make and what might they have to tell us about how to design effective interventions in this new and difficult area of policy? The article addresses these

questions, drawing upon interviews with project managers, employers and employees involved in three projects as well as with key Scottish policy makers. The opening section, 'Policy interventions to improve skills utilisation', examines the literature on this topic and considers whether there are any key pointers for Scotland. The following section, 'Skills utilisation policy in Scotland', sketches the background to the SFC initiative and outlines the research methodology. The 'Case studies' section then presents the key findings. The final section discusses the implications for future policy development, before offering some conclusions.

Policy interventions to improve skills utilisation

The first problem confronting policy makers engaging with skills utilisation for the first time, as in Scotland, is that they have only a few examples of practical policy initiatives in this area and a fairly limited evidence base to go on. A recent international study by Buchanan *et al.* (2010, p. 34) for the Organisation for Economic Co-operation and Development (OECD) noted that such initiatives are hard to find. They nevertheless highlighted a number of examples, including attempts to encourage the diffusion of 'high performance working' (HPW), 'skill ecosystem' approaches in Australia and various workplace development programmes, notably in Scandinavia.

High performance working

There is now a significant body of research which suggests that the way in which work is organised and people are managed has a significant bearing on the depth and quality of informal learning that takes place inside the workplace and the opportunities available to employees to develop and utilise their skills at work (see Felstead *et al.* 2009). At the same time, academic and policy discussions of work organisation, particularly within liberal market economies (though not exclusively), have been dominated by the concept of 'HPW' which for some has become a vehicle, or proxy, for achieving improved skills utilisation (see UKCES 2009b).

HPW refers to various combinations of work and managerial practices, which, when joined together in mutually reinforcing 'bundles', are thought to improve organisational performance by providing greater scope, opportunities, incentives and rewards for employees to apply their skills and effort within their jobs (see Hughes 2008). The core idea is of a 'bargain' between management and employees. In theory, workers take on more responsibilities in managing the work process and offer greater commitment and effort in return for investment in training, more autonomy, improved career paths, job stability and higher rewards. Increasingly, the literature suggests that there is no 'single' set of practices, or 'one best way', and that approaches need to be carefully tailored to the particular needs of the organisation in question.

However, the concept is far from unproblematic. There is no universally agreed definition of HPW, while the individual practices themselves can assume many different forms (see Lloyd and Payne 2006). If one takes 'team working', for example, often said to be a core feature of HPW, in some cases these may have extensive autonomy and problem-solving capabilities. But equally, there are examples of many teams, with limited discretion, where tasks are narrowly defined, and whose members are also subject to extensive managerial supervision and control. Perhaps unsurprisingly then the empirical evidence that HPW delivers positive gains for workers and

improves skill levels remains rather mixed (see Lloyd and Payne 2006, Hughes 2008). Even those who stress the model's *potential* to improve skills utilisation and create 'good quality work' acknowledge that 'care needs to be taken that performance gains are not achieved to the detriment of employee well-being through increased workload, limited discretion and enhanced stress at work' (UKCES 2009a, p. 126, also Green 2010). The most nuanced discussions emphasise that the *real* HPW depends upon *implementation*, in particular the need for reciprocity, the delivery of mutual benefits, and trust.

The research evidence indicates that, on most measures, take-up of HPW remains limited to a minority of UK organisations, with very slow and patchy diffusion. Explanations have focused on issues of managerial capability and training, ignorance, inertia, the costs associated with implementing such systems and problems linked to firms' choice of competitive strategy (see UKCES 2009b). Some argue that the consolidation of the HPW model is particularly challenging in liberal market economies. Thompson (2003, p. 364) has argued that pressures to maximise short-term shareholder returns means that firms often resort to down-sizing, such that the mutual gains bargains, required for the stabilisation of the HPW model, are 'bargains that most of the time, most employers cannot keep'. The United Kingdom is said to have too many firms which compete on the basis of low value added, low wage strategies, producing goods and services sold mainly on the basis of price, and adopting forms of work organisation and job design that demand only limited skills from the bulk of their workforce (see Geary 2003, Keep 2009, UKCES 2009a). A lightly regulated labour market and relatively weak trade unions imply relatively few constraints on many firms' ability to compete on the 'low road', while high levels of income inequality structure a marketplace in which many consumers can only afford to 'buy cheap'. If it is the case that 'value added strategies . . . have the best chance of producing outcomes of mutual benefit to firms and their employees' (Locke 1995, p. 23), this too may be a problem.

In the United Kingdom, the main policy approach to improving take-up of HPW has been to try and persuade employers to adopt such approaches through the publication and dissemination of best-practice examples. Leaving aside the aforementioned institutional constraints, a further problem with this approach is that senior managers often remain unconvinced by evidence drawn from other sectors and firms (see Guest *et al.* 2001). Finally, as discussed below, there is the issue of how, *if* HPW is to be part of the solution to skills utilisation, organisations can be guided and helped to implement effective approaches that are carefully tailored to their particular needs and have the active support and involvement of employees.

Skill ecosystems in Australia

Like the United Kingdom, Australia is a liberal market economy which is also grappling with issues of 'over-qualification' and the 'under-utilisation' of skills (see Hall and Lansbury 2006, Payne 2008). The concept of 'skill ecosystems', which has emerged as an innovative policy approach to addressing these challenges, is broader than HPW and draws attention to an interconnected web of factors shaping skill formation, retention and utilisation in a particular sector or region (see Buchanan *et al.* 2001, p. 21). These factors include firms' choice of product market and competitive strategies, the operation of the financial system, institutional and policy

frameworks, work organisation and job design, and the level and type of skill formation. The skill ecosystem *projects* and skill formation *strategies*, which have been funded nationally and at state level in Queensland, have sought then to provide employers and other stakeholders in a particular ‘ecosystem’ with the opportunity to take a more *holistic* view of ‘the skills problem’, assume ownership of the issues and explore *for themselves* new ways of dealing with those challenges.

Notwithstanding some successes (see Windsor 2006, Payne 2008), it would seem however that ‘examples of deep-seated, ongoing change are difficult to find’ (see Buchanan *et al.* 2010, p. 36). This new approach to skills policy was borne out of the problems presented for skill formation and usage by Australia’s experiment with a broadly neo-liberal growth model in the 1980s and 1990s. Research indicated that many employers, faced with intensifying competition, short-term shareholder pressures and fiscal austerity measures in the public sector, were resorting to downsizing, outsourcing, labour intensification and the use of non-standard employment, including casuals, contractors and labour hire workers (see Buchanan *et al.* 2001). These issues have not gone away. There are signs, however, that policy makers’ interest in skill ecosystems may be waning. The national skill ecosystem programme, which was led by the New South Wales Department of Education and Training with funding from the Australian Government (see NSW DET 2008), has been wound up, and there are no indications that there will be any follow-up activity, although work with ‘skill formation strategies’ remains on-going in Queensland.

Lessons from Scandinavia

Another way of approaching the question of how to address skills utilisation is to turn to the experience of the Nordic countries. According to the European Working Conditions Surveys (EWCS), the Nordic countries have gone further than most in developing forms of work organisation that combine high levels of discretion and learning within the job (see Arundel *et al.* 2007), and which are likely therefore to be most conducive to effective skills utilisation (see Payne 2010). Part of the explanation may lie with the institutional environment (see Gallie 2007). Strong trade unions, multi-level collective bargaining, high levels of employment protection and a relatively generous welfare state help to ‘block off’ strategies based on low wages and cost-cutting. Well-developed vocational training systems, underpinned by social partnership, provide those entering the workforce with a high level of technical expertise, as well as a core of general education. Employers and unions therefore have a strong incentive to pursue a ‘high-road’ approach and to work together in partnership to develop forms of work organisation that make effective use of skills. There will, of course, be variations across different sectors, but for many employers the institutional framework, together with embedded social and cultural norms, will point the way.

As Gustavsen (2007, p. 667) reminds us, however, the ‘macro-political and macro-economic order is not in itself sufficient to generate new forms of work organisation’; they are ‘conditioning factors, not an ordering principle’. He stresses the role played by workplace development programmes aimed at improving productivity and the quality of working life, which began in Norway and Sweden in the 1970s and 1980s (see Payne and Keep 2003). In recent years, Denmark and Finland have tended to lead the way, the latter having supported a National Workplace Development Programme since 1996 (see Alasoini 2006, Ramstad 2009a, 2009b). A central feature

of these initiatives is the use of expert researchers and consultants who can support and help organisations to implement ‘social innovations’ and ‘smarter’ ways of working.

Projects are said to be most effective when they begin with the challenges that the organisation is confronted with, are ‘bottom-up’ rather than ‘top down’ and have the active support of management and the ‘broad participation’ of the workforce. While there are examples of successful projects, the evidence suggests that generating change on a broader front is not easy. Solutions arrived at in one workplace are not readily transferable to others. Again, as with much of the discussion around HPW, relying upon the ‘enlightenment potential of exemplary cases’, ‘one-time visits’ and ‘presentations in key texts’ is not enough (see Gustavsen 2007, pp. 664–665); something more is required to facilitate a process of learning and adaptation (see Alasoini 2006, Ramstad 2009a, 2009b). Attention has increasingly turned to building ‘networks’ of firms (in a particular sector, region or supply chain) and other actors (research institutions, regional development agencies) that can help support a process of knowledge generation. The aim is not to try and diffuse ‘best-practice’ examples after the event but to create a learning space in which members can explore and adapt new knowledge to their own unique circumstances so that ‘change and diffusion merge into one process’ (Gustavsen 2007, p. 664).

The United Kingdom comes at this from a very different starting place. In contrast with Scandinavia, policy makers have tended to view ‘innovation’ fairly narrowly in terms of publicly funded R&D and new scientific and technical knowledge which can then be transferred to industry. Relatively little policy attention has been paid to supporting ‘social innovations’ inside firms and organisations which allow new technologies to be successfully adopted and embedded in high-discretionary, learning-rich forms of work organisation and job design. The kind of workplace innovation programmes, funded by the state or social partners, that one finds in Scandinavia and other European countries, like Germany, have no real equivalent here (see Payne and Keep 2003). Instead, business support functions have focused mainly upon entrepreneurialism, start-ups and business growth. Where support has been offered *within* businesses, ‘the overall emphasis tends to be on providing information and guidance, rather than direct intervention into how businesses are managed’ (UKCES 2010, p. 77). The institutional environment of liberal market economies, such as the United Kingdom, would also appear to pose particular challenges which would seem to make progress on skills utilisation at least more difficult. In Scotland, where the statutory aspects of employment relations policy and labour market regulation are ‘reserved’ matters under the control of the UK government, the immediate challenge for policy makers then, in fronting up to skills utilisation, is to try and fashion interventions that can make a difference, build policy momentum and take this agenda forward.

Scottish skills utilisation policy

Following the 2007 skills strategy, Scottish policy on skills utilisation has progressed in stages. In September 2008, a Skills Utilisation Leadership Group (SULG) was established to oversee policy development. This group includes ministers, business and trade unions leaders, Scotland’s two economic development agencies – Scottish Enterprise (SE) and Highlands and Islands Enterprise (HIE) – the Scottish Funding

Council (SFC), Skills Development Scotland (SDS),³ the Scottish Council for Voluntary Organisations, as well as leading academic experts. Drawing upon the findings of an extensive literature review (Scottish Government 2008), skills utilisation has been defined as:

- confident, motivated and relevantly skilled individuals who are aware of the skills they possess and know how best to use them in the workplace

working in:

- workplaces that provide meaningful and appropriate encouragement, opportunity and support for employees to use their skills effectively

in order to:

- increase performance and productivity, improve job satisfaction and employee well-being and stimulate investment, enterprise and innovation.

The Skills Utilisation Action Group (2009), subsequently set up by SULG, adopted three key policy objectives: to increase awareness of the benefits of skills utilisation; to help organisations implement workplace change; and to support key delivery agencies and stakeholders to deliver these objectives. Particular emphasis is being placed upon the need for ‘ambitious, progressive and innovative leadership and management’ and ‘effective employee engagement’ that can build ‘trust and motivation’ and encourage ‘workplace cultures that enable people to perform at their best’ (Scottish Government 2010, pp. 41–42). A range of policy activity is currently underway, with SDS, SE and HIE integrating messages around skills utilisation within their core products and services.⁴

The SFC skills utilisation projects

In addition to the above, the SFC has, since July 2009, provided around £2.9 million in funding over 5 years to 12 ‘action research’ projects aimed at exploring the role that universities and colleges might potentially play in improving skills utilisation in the workplace (see SFC/SDS 2009). The programme is a joint venture in partnership with SDS through the joint SFC/SDS Skills Committee. The projects are highly varied, have different starting points and cover a wide range of sectors and regions (see Table 1). Some begin with more traditional skills supply issues, such as training delivery, the need to improve individuals’ employability and/or (re)designing qualifications to better reflect employers’ needs. Insofar as they have gone on to address aspects of skills utilisation, these projects have come to embody, what the SFC terms, an ‘employability-*plus*’ approach. Other projects, however, have focused upon ‘business development and knowledge transfer’, or ‘organisational innovation’. What can this programme tell us then about the challenges involved in designing viable policy interventions to address skills utilisation and, in particular, the role that universities and colleges might play in relation to this agenda?

This article reports on case studies of three projects that were undertaken as part of a formal evaluation of the programme, conducted in February 2011. For each

Table 1. Scottish skills utilisation projects.

Lead Institution	Project title	Funding
Barony College	<i>Aquaculture Work-based Learning Development</i> This project seeks to develop a blended learning package for the aquaculture workforce, such as fish farm workers, divers and boat operators, hatchery employees, fish feed producers, transportation and processing plant workers.	£150,000
Barony College	<i>Scottish Dairy Skills Initiative</i> This project to address recruitment and retention issues in the Scottish Dairy Industry through workforce development and skills utilisation.	£307,000
Dumfries and Galloway College	<i>South of Scotland Knowledge Transfer Network</i> This project involves colleges and universities working together to link their services and knowledge to business' skills development in a challenging rural environment.	£700,000
Dundee College	<i>Skills for the Life Science Industry</i> This project seeks to create a strategy for sustainability by establishing a skills ecosystem for the Scottish Life Sciences industry.	£226,076
Edinburgh's Telford College	<i>Skills Utilisation and College Graduates</i> This research-based project aims to find out why college graduates can struggle to obtain progression in their careers so as to help colleges modify what and how they teach and work more closely with employers on progression.	£159,850
Forth Valley College	<i>Engineers of the Future – MA2MA: Chemical, Electrical and Mechanical Engineering</i> This project seeks to develop a vocational degree route from modern apprenticeship to Masters' level based on collaboration between college, university and employers.	£500,000
Glasgow School of Art	<i>Creating Cultures of Innovation through Creativity and Design</i> This project seeks to develop a learning tool that can enable business leaders to make better use of their employees' skills in creative thinking and design processes in on order to drive sustainable innovation.	£200,000
Open University in Scotland	<i>Recognising and Enhancing Skills Acquired in the Engineering Workplace: From Modern Apprenticeship to BEng</i> This project seeks to establish a work-based model of study to enable employees with a MA or HN award to acquire BEng and potentially Chartered Engineer Status.	£78,836

Table 1 (Continued)

Lead Institution	Project title	Funding
Open University in Scotland	<i>Enhancing Skills Utilisation by Private and Public Social Care Providers</i> This project seeks to develop the skills of supervisors in the public, voluntary and private social care sector and improve their utilisation through engagement with employers.	£57,508
Robert Gordon University	<i>Maximising the Impact of Skills in the Oil and Gas Industry</i> This project seeks to improve leadership and management training in the oil and gas industry with a view to encouraging workplace innovation, more ambitious market strategies and improved opportunities for individuals to better use the skills they have acquired at college and university.	£225,000
Stevenson College	<i>Working With Attitude</i> This project seeks to assist employers in the creative media and tourism sector to assess employees' skills and 'Mental Toughness' and to explore links with performance in the workplace.	£114,450
West Lothian College	<i>Business Improvement Techniques Project</i> This project seeks to embed a culture of business improvement in selected companies that can lead to higher levels of productivity and performance through courses aimed at employees, supervisors, college lecturers and industry managers.	£186,130
Total		£2,931,850

Source: Adapted from SFC/ SDS 2009 Annex A.

case, semi-structured interviews were undertaken with project managers as well as selected employers, managers and employees involved with the specific projects. A policy forum was also held with key policy makers, including representatives of the Scottish government, SFC, SDS and SE, which explored the core assumptions underpinning skills utilisation policy in Scotland and the role of colleges and universities in relation to this agenda.

Case studies

Creating Cultures and Innovation through Creativity and Design

Led by the Glasgow School of Art (GSA), this project seeks to help business leaders learn 'how to use the knowledge and expertise of their workforce in applied creative projects which have the benefit of generating innovations for the business or service' (SFC 2010, pp. 19–26). Working with the Institute of Directors, key business leaders are identified which form the potential basis for a series of pilot projects with

individual organisations. The process begins by listening to the ‘real issues’ confronting the business, which may include the need for a new market or product. The organisation is then invited to a ‘taster workshop’ to ascertain if there is a basis for working together. Once this has been agreed, a group is selected to participate in a series of workshops based upon ‘a diagonal slice of the organisation’, with members broadly representative in terms of their position within the firm, gender, function, age and length of service.

The GSA acts in a *facilitating* role, using ‘design tools’ to open up ‘a learning space’. The aim is for the group to take ownership of the process, envision solutions and create the capacity for sustainable innovation. The metaphor that the GSA uses is that the organisation needs ‘a rod, not fish’ so that it can learn to think creatively for itself. Brainstorming, visuals and storyboarding are used to help the team to ‘view from the perspective of the user’ (i.e. the customer or client) and to ‘spot’ new opportunities in the market with regard to potential product development. In this process, tension and argument are considered to be a positive spur to creativity. As the project manager explained, ‘friction is good Our role is to allow it space to be exposed’. Workshop participants are not expected to work in isolation from the rest of the organisation. Rather the aim is to create a ‘ripple effect’, with members expected to take their ideas back to their work colleagues and engage them in the process.

At Scott and Fyfe, a manufacturing company whose products include backing for carpet underlay, the decision to participate in the project was motivated by the recognition that the market for this product was declining. A working group was created comprised of 12 persons from the main shareholder to shop-floor technicians. The group spends 2 days a month working with the GSA and a day a week in the organisation on their project work. A senior manager in the innovation team explained how the input from the GSA had been ‘critical’ in helping the organisation to move from a ‘reactive approach’ to a proactive one based on ‘opportunity spotting’:

The GSA took us through a design process to help us identify new products and market areas. Before that we were simply reacting. The phone would ring and we would react by going straight from customer inquiry into product development, with long drawn out projects that wasted a lot of money. (Scott and Fyfe, innovation team member 1)

Although the process itself has not yet reached the stage of creating any new products, the group was exploring diversification into areas such as water irrigation and filtration, drainage infrastructure and sewer repair. The project manager explained how the process had brought tangible benefits in terms of skills utilisation:

We had people who had never done IT before, never done a presentation, never stood up and communicated to a group.

A manager in the innovation team agreed:

I would say it’s definitely used people’s skills. We’ve had the contribution of people from the shop floor and that’s been crucial. Normally, they wouldn’t have been part

of the process and that's made us more aware of their strengths and capabilities.
(Scott and Fyfe, innovation team member 2)

The chief executive cited the example of one team member whose job was to 'feed glass into a machine'. Through this project, it became apparent that he could speak German. He was now involved in the development of a distribution plan 'using skills we didn't know he had'.

Several observations can be made about this project. The first is that it happened in a company which was looking to develop new products and where senior management was strongly committed to the project. The second is that it was underpinned by a clear philosophy of design and innovation, and a particular way of working, which drew upon the specific skills, knowledge and expertise present within the GSA. What is also striking is the depth and quality of the intervention. The GSA worked with Scott and Fyfe over several months in what was an intensive process that was highly valued by the organisation.

The costs involved are significant, however, with the project manager estimating this to be in the region of £30,000 per organisation. These costs are currently met through the project funding. The CEO of Scott and Fyfe conceded that the company would not have been prepared to pay for such a service when first approached, but having seen the benefits stated they would be willing to contribute towards any subsequent work. The project manager felt, however, that without continued public funding at least for the *initial exploratory phase of projects*, there was a real danger that 'it could just fall flat It needs public funding to gain continued momentum because businesses are not just going to stump up the cash'.

Enhancing Skills Utilisation by Private and Public Social Care Providers

Led by the Open University (OU) in Scotland, this project has sought to deliver a management qualification (the B121) for supervisors in the social care sector and to link this to improved skills utilisation in the workplace (see SFC/SDS 2010, pp. 9–12). The starting point for this project has been new regulatory requirements. The Scottish Social Services Council requires that supervisors in public, private and voluntary social care establishments acquire an appropriate management qualification at higher education (HE) level for statutory registration. The students are mature and typically have little formal post-school education, although many have obtained a Scottish Vocational Qualification (SVQ) at level 3 through their work.

As the project manager noted, the team began with 'a fairly hazy idea of what skills utilisation was about', with the initial phases of the project concentrating on course delivery through workplace tuition and support for the transition from SVQ to HE learning. As the project has progressed, the team has sought to involve individual students' line managers in the process by informing them of what the course involves and engaging them in discussions about how they can support students in making more effective use of their skills. As the project manager stated, 'That was the innovation for me. We'd never tied that part of the thing up before'.

The project team has now moved to a model where students and line managers are briefed together at the start of the course, reflecting feedback that this was

happening too late. Students and their line managers are visited by course tutors in the workplace to discuss student progress and how to make better use of their skills and knowledge. Post-course evaluations and ‘celebration events’ have also provided an opportunity to open up discussions, both with line managers and students. In one local authority area, line managers have been encouraged to think about how they might give students increased responsibilities by delegating to them parts of their own role. As one course tutor explained:

I try to open up a subtle dialogue but in a non-threatening way . . . I will say to them do you want to manage this organisation where you are holding the reins all the time. That opens up all sorts of stuff around power, responsibility, delegation.

Project reports suggest that student feedback on the course is very positive, with students stating that they have a better grasp of managing budgets, feel more able to motivate their teams and deal with conflicts, and experience increased confidence in their abilities and learning potential (see SFC/SDS 2010, pp. 9–12). These findings were echoed by two students interviewed as part of the evaluation, one of whom commented:

It has given me more of an insight into the managers’ and supervisors’ role . . . It has given me more confidence and opened doors for me to do more and different things. X [line manager] sees what I can do and I have been given more responsibility as a result. I’m also more reflective. I take a step back now with my team whereas before I would have maybe jumped in more. (Student 1)

A line manager explained how they had been able to delegate parts of their role to their supervisor who was now ‘more like a deputy’. This had freed up their own time to concentrate on higher level strategic work, while also contributing to their own quality of life. The benefit of engaging line managers was recognised by a senior officer with the local council:

It’s been time consuming . . . [but] very helpful in making students’ learning applicable in the workplace. If we can get line managers involved in the process, they have realised that there are benefits in terms of delegating tasks, projects, pieces of work . . . that can be shared with supervisors.

It might be argued that those line managers who did grasp such opportunities were perhaps already open to delegating aspects of their role. A unit manager commented, ‘Some students came to me and said it’s amazing the amount of managers that aren’t supporting their staff’. These perspectives were echoed by a senior course organiser:

The managers who came to the meetings were already half way there. There are plenty of others who are not even on the starting blocks and how you work with them is something we are only just now coming to grips with.

The project team was in no doubt, however, that they had identified a more joined-up and better way of delivering training in the workplace; the question was whether such an approach could be marketed to employers on a scale sufficient to make it a viable commercial proposition for the OU. The B121 course is already more

expensive than many other professional awards that satisfy the regulator's requirements. The additional costs of workplace visits and managers' meetings, which are currently funded through the project, have yet to be fully assessed. The project manager estimates that they may raise the cost of the qualification by around 10%, with some scope to possibly reduce this by making more effective use of 'virtual' communication.

Even before these additional costs are factored into the price of the qualification, however, this approach is *already* more demanding of employers who have to accommodate workplace visits and provide time for managers to attend meetings. As a corporate development manager responsible for marketing courses to employers noted, 'The question for me is: is it a sustainable model? . . . Can we find examples of employers who would be prepared to pay for this?'. A local authority HR officer praised the benefits of the course, commenting: 'if it's an extra 10% [i.e. added to the normal cost of the course] we would pay that'. As one course organiser noted, however, with this particular council 'we were pushing on an open door; other councils have been less receptive'. Furthermore, the OU has yet to fully test whether such a course can be marketed to private sector care establishments who have generally been slower to engage with the regulator's requirements. Gaining access was, however, felt to be particularly problematic in the private sector. As a senior course organiser noted, 'there's often a sense of industrial espionage if people go into care homes. What are they doing here? And yes we are happy for you to deliver a qualification but don't tell us how to manage. We can't take people off the floor and double shift'.

Business Improvement Techniques Project

Led by West Lothian College (WLC), this project sought to deliver a business improvement skills development programme into 15 commercial companies and three colleges and to embed a culture of business improvement that would lead to improved productivity and performance (see SFC/SDS 2010, pp. 22–24). The project has been built around the delivery of business improvement techniques vocational qualifications (BIT VQs). Designed by the manufacturing industry and the UK Sector Skills Council for Science, Engineering and Manufacturing Technologies (SEMTE), these are aimed at supervisors, team leaders and operators in companies that have introduced 'lean manufacturing' and are focused upon accrediting the 'lean skills' acquired through these processes. The project has provided opportunities for shop floor operators and supervisors in participating companies to obtain an SVQ at level 2 or 3 and for college lecturers and industry managers to work towards the '6 Sigma Green Belt', awarded by the University of Strathclyde. The project completed in August 2010.

Project reports (see SFC/SDS 2010, pp. 22–24) suggest that BIT VQ programmes have been 'successful in achieving both the primary and long term goals of financial improvement and change in organisational culture', with 'nine groups wanting to produce case studies demonstrating the impact the utilisation of the skills learnt has had on individuals, groups of workers, managers and organisations'. A key message in terms of delivery is that the project tends to work best as a partnership between the Scottish Manufacturing Advisory Service (SMAS)⁵ and a college, with the former

providing advice and mentoring to the company on the introduction of lean processes and the latter supporting this with accreditation.

A visit to a participating company, which supplies corrugated packaging products and related services, provides an illustration of how this has worked in practice. A new managing director, with previous experience of lean production, had decided that the company needed to implement lean processes and had appointed a shift supervisor as a 'process improvement manager' to take this work forward. With guidance from SMAS, the process improvement manager began an implementation process focused upon the use of '5S' and 'lean tools'. The company's own 'Guide to 5S' describes this as 'a method of creating a self-sustaining culture which perpetuates a neat, clean, efficient workplace; a method for removing all excess materials and tools from the workplace and organising the required items such that they are easy to find, use and maintain'. The implementation process focused upon the use of 'kaizen events'. A group is selected made up of shop-floor representatives from different shifts which then examines the production run on a particular machine.

Gaining employee 'buy in' has been challenging. Over the last 5 years, around one-fifth of the plant's workforce had been lost as a result of automation. Previous change initiatives introduced by management have also contributed to a feeling of 'project fatigue'. As the process improvement manager explained, 'we've had numerous ops managers who have all said I've got a new project which is the next best thing and then it has disappeared after 6 months. Fad and project fatigue is something we hear a lot. I had to break a lot of those doors down'.

The process improvement manager identified a number of benefits that had resulted from this particular initiative. There had been a measurable improvement in productivity per run of 41%, with waste reduced by 2% and overtime for re-working faulty product down to zero. Set time had decreased by 50%, and the run speed of the machine was up 33% and rising. Employees were also said to have benefitted, with a working environment that was cleaner, more organised and safer to work in and move around. Those involved with the project had also achieved recognition of their input and learning by achieving an SVQ at level 2. The process improvement manager had themselves acquired an SVQ at level 3 and was now looking to take a degree or higher national diploma in management. At the same time, however, 15 forklift truck drivers had recently been informed that they were going to be made redundant as a result of process automation.

What was the impact on skills utilisation? The process improvement manager commented:

I wouldn't say it's more skilled. It's more efficient. The process identified skills that we weren't using before... But it wasn't about improving technical skills. It was more process improvement skills... the lean skills... so constantly thinking is this in the right place, should that be in a better place, is everyone doing their job properly... so it depends on what you mean by skills utilisation.

A machine operator who had worked on the 5S project also remarked on the benefits:

The big difference we notice between shifts is that before you were coming into a mess, clutter, people just left it. That caused grievances – why have you left that for

me? But now you're coming into a standard everyone's committed to...you're not climbing over things all the time so it is definitely a safer environment.

They also felt more satisfied in their work because 'what we've done is recognised at a very high level in the company'.

A number of observations can be made about the project. To begin with, it is perhaps less innovative than the other two projects, in that it focused upon the delivery of *existing* vocational qualifications. With the cost of accreditation estimated to be around £2000 per student and currently paid for through the project funding, the project clearly represented a commercial opportunity for the colleges involved. There is little evidence that it improved technical skills in the company visited or that it changed work organisation in a fundamental sense; and insofar as it addressed skills utilisation it did so mainly by influencing employees' *behaviours*. The interviewees in the case study company suggest that the process had brought benefits for both the company and workforce, although the interview sample – one manager and one shop floor worker – is too limited to draw definitive conclusions, still less generalise across other participating firms. These findings also have to be weighed against an extensive literature which suggests that 'lean production' varieties of 'HPW' can be associated with work intensification, downsizing and de-skilling (see Lloyd and Payne 2006, Hughes 2008).

Discussion and conclusions

The above case studies represent only 3 of the 12 projects within the SFC programme. Nevertheless, they provide a flavour of the diversity of projects that have been supported through an initiative which has allowed considerable experimentation from a variety of different starting points. There is some evidence to suggest that universities and colleges *can* make a positive contribution to skills utilisation, thereby providing an initial empirical grounding for establishing *proof of concept*. Changing organisational culture and work practices, however, is clearly very challenging as well as time consuming and comes at a cost, raising questions around the ability of projects to sustain approaches when public funding ends and, more generally, about the capacity of universities and colleges to engage with this agenda.

A great deal of learning has been generated in the course of this initiative. It is clear that improving skills utilisation is not simply about 'fixing the individual' and requires a more holistic approach which addresses issues of management and leadership, organisational culture and HR practice (see SFC/SDS 2010). Some projects have started out with a traditional focus on training delivery but have gradually begun to grapple with issues of skills utilisation. This has challenged the way some colleges and universities think about how they deliver training in the workplace and engage with employers. The model of simply delivering a short course or off-the-shelf training package, without simultaneously addressing the wider organisational context in which learning is put to use, has been fractured to some extent.

Of particular interest are the specific methods and ways of working that some of the projects are developing to generate discussion within organisations about how employees can be engaged and skills put to better use. In many cases, it is the process of employee involvement itself that serves to highlight skills and capabilities which

have hitherto been neglected. In the UK context, where ‘innovation’ tends to be defined in relatively narrow technological terms, as the commercialisation of new scientific research, these approaches have elements in common with the way innovation is defined more broadly in Northern Europe and in particular Scandinavia, where the concept of ‘social innovations’ is also applied to changes in managerial and work practices and emphasis is placed upon achieving the ‘broad participation’ of the workforce. In Finland, for example, research institutes, based in colleges and universities, have played an important role in the publicly funded Workplace Development Programme and have developed different theoretical approaches to underpin their practical engagement through ‘action research’.

Potentially, then, there is scope to think about how Scotland’s skills utilisation projects might be re-positioned as part of a *broader approach to business improvement and innovation policy* in Scotland, which allows universities and colleges to be more closely involved as a key strategic partner working alongside SDS, SE and HIE. Consideration might be given to whether these initial projects could establish the basis for a *publicly funded workplace innovation programme* which draws upon the expertise of all the relevant partners. Clearly, much depends upon the requisite political commitment and sufficient resource being made available in what is presently a very tough public sector financial climate in the United Kingdom. Assuming that there is the necessary backing, what factors might be taken into consideration in terms of future programme development?

As the case studies illustrate, there are issues around the capacity of universities and colleges to engage with this agenda. The GSA project is clearly very dependent upon the knowledge and expertise within the project team, raising questions about the extent to which such an approach could be replicated or scaled up. The course tutor for the OU social care project noted that engaging with line managers requires a particular skill set; they did not believe that ‘any tutor can just walk in and deliver this’. Furthermore, while this particular project touched upon issues such as task delegation, it would seem that work organisation and job design, which remain central to effective skills utilisation, have not figured prominently within the programme as a whole.

In part, this may reflect the skills, expertise and interests of universities and colleges and those staff within them that are willing and able to engage with this agenda. ‘Action research’ approaches to work reorganisation, which can be traced back to the work of Trist and Bamforth (1951) in the British coal mines in the 1950s and the subsequent work of the Tavistock Institute, have waned in recent decades. In part, this reflects the role of the Research Assessment Exercise and its successor, the Research Excellence Framework, in linking university ratings criteria and funding to published outputs in high-ranking international journals. At the same time, many *critical* researchers of work are said to have retreated into an ‘abstentionist position’, preferring to treat management-initiated participation schemes with a detached (and often healthy) scepticism, rather than engaging practically with ‘the gritty matters of local advancement’ on the ground by stretching the sense of ‘what is possible’ (Beirne 2008, see also Warhurst 2005). Building international links with research institutes in Europe, and in particular Scandinavia, where action-research approaches to workplace development have a more established presence, may be helpful then as a way of building up ‘process knowledge’ around *how to* facilitate organisational change based upon the ‘broad participation’ of employees.

Policy makers will also need to consider how such a programme can be evaluated and ‘success’ measured (see Buchanan *et al.* 2010, Payne 2010). This is likely to be challenging for a number of reasons. The concept of skills utilisation is still relatively new and is not always well understood by employers and employees. Assessing the impact of projects on skills utilisation is nevertheless likely to rely heavily upon the *subjective* feedback of project managers, together with the testimonies of participating employers and employees. Demonstrating impact in terms of ‘hard measures’ of performance, such as productivity, efficiency or service quality, may be even more problematic, given the difficulties of ‘controlling’ for other factors and influences besides the actual project itself.

Some of these challenges are reflected in the case studies. The GSA project with Scott and Fyfe, while highly valued by the organisation, has not yet reached the stage of generating any new products. What we have here is an exciting example of an innovative and high-quality intervention to help organisations develop new products and move ‘up market’ which has clearly made use of some employees’ skills and knowledge but which has *yet* to generate hard benefits in terms of organisational performance. In the case of the BIT project, the actual intervention was perhaps less innovative, being focused mainly upon the delivery of existing SVQs linked to lean manufacturing. In the case study company, the implementation of a *lean process* had however generated benefits in terms of employee engagement, a safer working environment and organisational performance but in a context of downsizing and what remained a relatively low-skill, low-value-added production process. How one might compare these two interventions and evaluate them in terms of their ‘success’ is plainly quite difficult. A key challenge with regard to the future development of the programme therefore will be try to weigh the *potential* and *quality* of different interventions in terms of what it is that policy makers want to achieve.

Demonstrating impact can be particularly challenging in service contexts. In case of the OU social care project, while it is possible to obtain the views of supervisors and managers in terms of how this project has impacted upon skills utilisation, it is a much bigger challenge to establish the direct impact upon service ‘users’, who include elderly residents in care homes and adults with learning difficulties.

Finally, it is also important to be realistic about what a small programme can deliver on its own. Clearly, any programme comprised of 12, 20 or even 50 projects cannot be expected to transform the performance of the Scottish economy. It may be useful to put this in a wider context. Finland launched its first national Workplace Development Programme in the mid-1990s to assist organisations in implementing innovative modes of operation aimed at improving both productivity and the quality of working life. Run by the Ministry of Labour, some 670 projects, involving approximately 1600 workplaces, were funded during two successive phases of the programme between 1996–1999 and 2000–2003 (OECD 2010, p. 143). From 2004 to 2010, a third programme invested 75 million euros in 1164 projects, involving 207,000 persons in around 4000 workplaces (see TEKES 2010). This programme was transferred to the Finnish Funding Agency for Technology and Innovation (TEKES) in 2008. Following the programme’s completion in 2010, TEKES has continued to set aside an annual budget of 12 million euros for working life research and development projects. Scotland’s nascent skills utilisation projects are still at an early stage but clearly there is some way to go before they reach the scale of experimentation that has been tried in Finland.

Changing employer behaviour and workplace practice to make better use of skills is, as Buchanan *et al.* (2010, pp. 34–35) note, a bit like ‘grinding through granite’. There are no quick fixes here. The Finnish programme has enjoyed the active support of policy makers and the labour market parties for over a decade. By the same token, Australia’s experience with skill ecosystems reminds us that policy commitment can sometimes be difficult to sustain. If the long-term aim is for the Scottish skills utilisation projects to form the basis for an expanded publicly funded programme as part of a broader approach to workplace development/innovation policy, then it will need to be embedded within a supportive policy consensus that can withstand political shifts. To their credit, Scottish policy makers, and in particular the SFC, have grasped that they are only likely to find out about the challenges involved in addressing skills utilisation and designing appropriate interventions by engaging *practically* with this agenda. This is, and remains, in many ways, an *iterative* process. The challenge going forwards will be to learn the lessons from these early forays into the field and to weave the programme into the tartan of Scottish skills and innovation policy.

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Notes

1. In the United Kingdom, education and training policy is devolved to the respective parliaments/assemblies of Scotland, Wales and Northern Ireland, with policy in England residing with the UK government in Westminster.
2. The SFC is a national body responsible for funding universities and colleges in Scotland. Formed in 2005, it replaced the former Scottish Further Education Funding Council and Scottish Higher Education Funding Council.
3. Formed in 2008, SDS brought together the careers, skills and training functions of Careers Scotland, learndirect Scotland and the skills intervention arms of SE and HIE.
4. For details of the above and other current policy activity on skills utilisation in Scotland, see www.scotland.gov.uk/Topics/Education/skills-strategy/making-skills-work/utilisation
5. Part of Scottish Enterprise, SMAS provides advice, one-to-one support, training and events for manufacturing companies in Scotland.

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