ESRC CENTRE ON SKILLS, KNOWLEDGE AND ORGANISATIONAL PERFORMANCE

Scotland's Skills Utilisation Programme:
an Interim Evaluation

Jonathan Payne

SKOPE, Cardiff University

SKOPE

Editor's Foreword

SKOPE Publications

This series publishes the work of the members and associates of SKOPE. A formal editorial process ensures that standards of quality and objectivity are maintained.

Abstract

It is increasingly accepted that improvements in productivity, competitiveness and social well-being depend not only on boosting skills supply but also ensuring that skills are utilised effectively inside the workplace. Skills utilisation is a relatively new policy area, however, and the evidence base upon which to formulate and develop new policy interventions is limited. In the UK, Scotland is leading the way on this agenda. This paper reports on the findings from a mid-term evaluation of the Scottish Funding Council's programme of 'action research' projects, which are aimed at exploring the potential contribution of universities and colleges to improved skills utilisation in the workplace. The evaluation finds some initial empirical evidence for establishing proof of concept, but also identifies challenges in relation to capacity building and sustainability. The potential exists, it is argued, for the programme to contribute to a broader approach to skills and innovation policy in Scotland.

Executive Summary

In July 2009, the Scottish Funding Council (SFC) committed around £2.9 million in funding to 12 'action research' projects aimed at exploring the role that universities and colleges might potentially play in improving skills utilisation in the workplace. The programme is a direct response to the challenges facing Scotland as originally outlined in the 2007 Skills Strategy and by the Skills Utilisation Leadership Group, and is part of a broader range of policy activity currently aimed at supporting more effective use of skills in Scottish workplaces.

This paper is an independent interim evaluation of the SFC programme which has been conducted by the Economic and Social Research Council's (ESRC) centre for Skills, Knowledge and Organisational Performance (SKOPE). Drawing upon interviews with project managers, employers and employees involved with four of the 12 projects as well as discussions with key Scottish policy makers, it finds some evidence that universities and colleges can make a positive contribution to skills utilisation, thereby providing an initial empirical basis for establishing 'proof of concept'. It also highlights a number of issues and challenges which have implications in terms of programme development and next steps.

The main findings and recommendations are summarised below:

- If the intention is to try to move towards a full-cost recovery model, policy makers need to recognise that obtaining up-front employer contributions towards the cost of such initiatives is likely to be challenging. Careful thought will need to be given to how this might be achieved in practice. One model, which may be applicable in some cases, is for the public purse to fund the initial exploratory phase of projects, with employers asked to contribute more as the benefits become clearer. There are, however, serious questions around whether some of these initiatives are sustainable in the absence of public funding.

- Policy makers may wish to consider an expanded publicly-funded programme of skills utilisation/workplace innovation projects which could potentially be positioned as part of a broader approach to business improvement and innovation policy. As a first step, policy makers might consider funding an exploratory second phase of the programme.

- Consideration might be given to whether there is a case for extending funding to existing innovative projects which are still at an early stage of development and have the potential to generate further learning.

- Research suggests that the way in which jobs are designed, both in terms of the complexity of tasks and level of autonomy and discretion afforded

to employees, has a significant bearing upon the scope available to employees to engage in informal learning and the opportunities they have to develop and deploy their skills at work. Although some projects have touched upon issues of task delegation and role design, work organisation would not appear to have figured prominently within the current programme. In thinking about future programme development, policy makers may wish to encourage project proposals which have work re-organisation and job redesign as a central aim or objective.

- Funding criteria should take account of the quality of the intervention and whether projects leave a legacy of development activity within participating organisations by helping them to embed approaches within their everyday practice which can be sustained after project funding ends.

- There are issues around the existing capacity of universities and colleges to engage with this agenda. Some projects are highly dependent upon the knowledge and expertise within the project team, raising questions about the extent to which such approaches could be replicated or scaled up. 'Action research' approaches to workplace development/innovation tend to have a more limited presence in UK universities compared to elsewhere in Europe, particularly in Scandinavia. This may reflect institutional pressures upon UK academics to publish in high ranking international journals as well as the weakness of social partnership in the UK which leaves many critical researchers reluctant to involve themselves in workplace change initiatives, often emanating from management. Scottish business schools do not appear to be engaged with the SFC programme and one challenge would be to try and build their involvement into any subsequent second phase.

- Given existing capacity issues, it makes sense to build the programme slowly and gradually. Providing further opportunities for projects to discuss their different approaches to working within organisations would be useful as part of a continued commitment to cross-project networking. Establishing links with research institutes in other countries, in particular Scandinavia, which have a strong tradition of 'action research' in support of workplace development/innovation could also help to build up 'process knowledge'. Using existing projects to guide, mentor and support new ones will be particularly important in terms of capacity building.

- There is a need to ensure that the programme continues to be rigorously evaluated in terms of impact. Policy makers also need to be aware of the challenges and difficulties involved in undertaking such evaluation. The concept of 'skills utilisation' is relatively new and 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 also be problematic, not least because of the difficulties of

'controlling' for other influences beside the actual project itself. The full impact of projects may not be felt for some time so it is important that both project and programme evaluation adopts an adequate and realistic timeframe.

- In evaluating 'success', consideration should also be given to the potential and quality of the intervention in terms of what it is that policy makers are seeking to achieve. Should, for example, more emphasis be placed upon initiatives which improve operational efficiency, given where firms are currently positioned in the market, or upon those which have the potential to help firms to move up the value chain?

- It is also important to consider the extent to which projects have acted as a catalyst for enabling universities and colleges to rethink their role in economic development/business improvement or how they might deliver training within the workplace and link this to improved skills utilisation. There is evidence that some projects have developed their understanding over time and that this is now beginning to influence discussions within their wider institutions. It is important that evaluation takes account of such 'developmental effects' for the provider.

- Building upon existing relationships, there is scope to explore ways in which the programme can be more fully integrated with the work of other agencies, such as Scottish Enterprise (SE), Highlands and Islands Enterprise (HIE) and Skills Development Scotland (SDS), so that universities and colleges are closer to the point of intervention with regard to business support and can add value to the current offer. Consideration might be given to developing the programme as a joint initiative across a wider range of partners, including SFC, SDS, SE and HIE, with Scotland's economic development agencies afforded representation within the Skills Committee.

- Building upon policy concerns outlined in the refreshed skills strategy and developments within some of the projects, policy makers may wish to consider the role and potential of 'learning networks', which draw together universities/colleges, public agencies and firms/organisations, as a means of helping employers to learn together and share knowledge about workplace development.

- Finally, changing employer behaviour to support more effective utilisation of skills is extremely challenging and needs to be considered as a long-term project. It is important to avoid 'over-selling' what a small programme, on its own, can contribute to Scottish economic performance. More generally, there is a need to build a strong supportive policy consensus across government, employer and employee organisations that can underpin programme development over time. The challenge is to weave the programme into the tartan of Scottish skills and innovation policy.

Contents

1   Introduction

In July 2009, the Scottish Funding Council (SFC)[1] invested around £2.9m over five years in 12 'action research' projects which are aimed at exploring the role that universities and colleges might potentially play in improving skills utilisation in the workplace. The projects are part of a broader stream of policy activity which has sought to take forward a clear commitment to address issues of skills demand and utilisation as outlined in the Scottish Government's 2007 skills strategy, *Skills for Scotland – A Lifelong Skills Strategy* (Scottish Government 2007a), and its wider economic strategy (Scottish Government 2007b). A central aim of the skills utilisation projects is to test whether there is a sufficiently robust evidence base to establish 'proof of concept', and to use the findings from the initial pilots to inform future policy development:

> To be able to demonstrate the value of funded projects and their potential to address the better use of skills in the workplace we need to understand *what does and does not work*. We also need to build enough knowledge and expertise to allow replication (SFC/SDS 2010, August p. 7, *emphasis added*).

This paper is an interim evaluation of the SFC's programme of skills utilisation projects. The research was conducted by the Economic and Social Research Council's (ESRC) centre for Skills, Knowledge and Organisational Performance (SKOPE). It is important to note that the evaluation was not commissioned by the SFC. SKOPE's deputy director, Ewart Keep, is a member of the joint SFC/SDS Skills Committee and, in December 2010, approached the SFC with a view to undertaking an independent study of the skills utilisation projects that could aid future programme development. The research was subsequently undertaken by Jonathan Payne, a senior researcher with SKOPE based at Cardiff University's School of Social Sciences.

The evaluation draws upon interviews with project managers, employers and employees involved with four of the 12 skills utilisation projects as well as discussions with key Scottish policy makers.

---

[1] 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.

2 Background and Context

2.1 The policy 'turn' to skills utilisation

There is currently a growing recognition among policy makers in many countries that if skills are to contribute to economic performance and social well-being then they have to be *used* effectively inside the workplace (see Buchanan *et al* 2010). In the UK, statements to this effect can now be readily observed in the skills strategies of England, Scotland and Wales as well as in a series of high profile publications from the UK Commission for Employment and Skills (for a summary, see UKCES 2009a: 4, also DBIS 2010: 44). The latter for example has argued that 'the skills problem' confronting the UK:

> ... lies largely on the demand side. The relatively low level of skills in the UK; the limited extent of skills shortages; and the potentially relatively low demand for skills relative to their supply taken together, imply a demand side weakness. The UK has too few high performance workplaces, too few employers producing high quality goods and services, too few businesses in high value added sectors. This means that in order to build an internationally competitive economy, 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 2009b: 10)

It goes on to add:

> ... there is little value to an organisation having a skilled workforce if the skills are not used well. (UKCES 2009b: 11)

In broad terms, the concept of skills utilisation points to the need for policies around productivity, innovation, economic development, work organisation, employment relations and skills to pull together as part of a balanced and coherent strategy for sustainable growth. At the level of *policy discourse*, this is a significant development given the emphasis that has been placed on boosting the *supply* of skills and the heavy burden of expectation that has tended to be heaped upon the education and training system as a result (see Keep *et al* 2006, Keep 2009, Keep and Mayhew 2010). The idea that skills are potent *only* when they are used effectively is, however, 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 (for a discussion of recent international initiatives in this field, readers are referred to Appendix 2 of this report).

2.2 Skills utilisation policy in Scotland

In the UK, Scotland is currently at the forefront of this agenda (see Payne 2009, Green 2010, UKCES 2010). Scottish policy makers have been particularly concerned 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. In 2007, the newly elected Scottish National Party administration published *Skills for Scotland - A Lifelong Skills Strategy*, which strongly emphasised the need to address skills demand/utilisation as well as skills supply (Scottish Government 2007a). The commitment of the Scottish Government to address skills utilisation has recently been reiterated in the refreshed skills strategy, which affirms that:

> Making more effective use of skills is of *fundamental importance* in leading Scotland back to a higher level of productivity and sustainable growth. This encompasses many elements including how well learning is transferred to the workplace setting, job design, organisational ambition and workplace organisation (Scottish Government 2010: 42, *emphasis added*).

Following the publication of the initial 2007 skills strategy, policy has progressed in stages. In January 2008, the Scottish Government and the Scottish Trades Union Congress (STUC) signed a joint communiqué stating their commitment to working together in partnership to improve skills utilisation. In the following September, 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)[2], 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 posses 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

---

[2] 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.

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, subsequently set up by SULG, has 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 (see SUAG undated). 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: 41-2, see also MacLeod and Clarke 2009). A range of policy activity is currently underway, with SDS, SE and HIE integrating messages around skills utilisation within their core products and services. SDS, for example, has helped to draft an employer guide to skills utilisation and is currently working with the SCQF in key sectors to ensure that employees' abilities are properly mapped, recognised and understood. SE and HIE, in addition to raising awareness around skills utilisation and helping firms to introduce effective workplace practices, have a key role in helping to support better leadership, management and employee engagement. SULG has also recently produced a 'balanced scorecard' designed to provide a picture of skills utilisation at national level, using a range of measures.[3] The SFC, in collaboration with key partners, has also played an important policy role through its funding of 12 skills utilisation projects.

2.3   The SFC skills utilisation projects

The Scottish Government has stated that it looks to the SFC, through its funding to colleges and universities, to deliver a 'step change' in 'the delivery of learning and teaching to best enable the effective application of skills in the workplace' and in 'knowledge exchange activities to help raise employer demand for skills by encouraging innovation and raising firms' ambitions and competitiveness and by helping firms to introduce workplace practices that enable better skills use' (Scottish Government 2010: 42).

---

[3] For details of the above and other current policy activity on skills utilisation in Scotland, see
http://www.scotland.gov.uk/Topics/Education/skills-strategy/making-skills-work/utilisation

The 12 'action research' skills utilisation projects that have been funded by the SFC since 2009 are part of this agenda. SFC Council member and Skills Committee chair, Janet Lowe, is a member of SULG and played a key role in establishing the SFC as the lead on this initiative, the purpose of which is to enable universities and colleges to explore the potential contribution they might make to improving skills utilisation in the workplace (the full suite of projects is listed in Appendix 1, together with their lead institution, funding award, and a brief summary). In 2009, SFC and SDS formed a joint Skills Committee which took up and broadened work previously set in train by the former SFC Skills Committee. The new joint forum functions as a strategy body, whose role is to offer advice on skills development in support of Scotland's Economic Strategy (see Scottish Government 2007b). Although the skills utilisation projects are funded by the SFC, they provided an early opportunity for SDS and SFC to work together on project delivery.

A number of preliminary observations can be made about the programme. First and foremost, these projects are 'action research' pilots designed to aid policy learning by understanding 'what does and does not work'. The SFC was fully prepared from the outset that some projects might not succeed. Indeed, it was assumed that lessons could be learnt as much from failure as from success.

Second, the £2.9 million (over five years) that was allocated to the programme and which funded the 12 pilot projects came from within the SFC's core grant and not from any additional funding made available by the Scottish Government. Inevitably, this meant that the available funding was on a relatively small scale.

Finally, the original 'call for projects' had a fairly open brief (see circular letter SFC/49/2008), reflecting that skills utilisation is a new and largely untested concept which universities and colleges would have the opportunity to explore, and develop their understanding of, *through practical engagement*. It also meant that projects were, from the very outset, heavily dependent upon the visions, expertise and thinking of those within the actual institutions. Given that this was a new area, it was perhaps understandable that some of the projects focused, at least initially, on 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 grapple with aspects of skills utilisation, these projects have come to embody, what the SFC now terms, an 'employability-*plus*' approach. Other projects have focused upon 'business development and knowledge transfer', or

'organisational innovation'. The 12 projects then are highly varied, have different starting points, and cover a wide range of sectors and regions. They also have different timescales, with projects starting and due to finish at different times, and some already having reached completion, all of which adds to the complexity of evaluating the programme.[4]

3   Evaluation Methodology

The evaluation is based upon case studies of four projects that were undertaken as part of a five-day study visit to Scotland in February 2011. The four projects were:

- the *Creating Cultures of Innovation though Creativity and Design* project, run by the Glasgow School of Art (GSA);

- the *South of Scotland Knowledge Transfer Network* project, run by Dumfries and Galloway College (DGC);

- the *Enhancing Skills Utilisation by Private and Public Care Providers* project, run by the Open University (OU) in Scotland; and

- the *Business Improvement Techniques* project, run by West Lothian College (WLC).

The aim was to include projects which had universities and colleges in a lead role and which were located across different points on the 'employability-plus' (OU), 'business development/knowledge transfer' (WLC, DGC) and 'organisational innovation' (GSA) spectrum, identified by the SFC. The research took the form of 'semi-structured' interviews with project managers as well as selected employers, managers and employees involved with the specific projects. The interviews focused upon the origins of the project, its development over time, the impact on skills utilisation, and key lessons that have been learnt in the process. Most interviews were conducted on a face-to-face basis. However, logistical issues necessitated a small number of telephone interviews with employers and employees.

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

---

[4] The programme as a whole is due to complete at the end of the academic year 2011-2012, with one project (*Engineers of the Future – MA2MA: Chemical, Electrical and Mechanical Engineering,* led by Forth Valley College) completing at the end of the academic year 2012-2013. The programme is currently about mid-way through.

colleges and universities in relation to this agenda. The report's author also participated in a Skills Committee workshop in early March which looked at lessons to come out of several skills utilisation projects. These discussions are also used to inform this evaluation.

4 Case Studies of Four Skills Utilisation Projects

This section of the report focuses upon the four case study projects. For each case study, a brief description of the project is provided, together with the reflections of the project manager and other key participants, including selected employers, managers and employees. A brief commentary is provided at the end of each case study. Section 5 provides a broader overarching analysis of the four projects, identifying a number of key challenges as well as offering some reflections on programme development and possible next steps.

4.1 Creating cultures of innovation through creativity and design

4.1.1 Project outline

Led by the Glasgow School of Art (GSA), this project (henceforth referred to as 'the GSA 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 2010a: 19, SFC 2010b: 19-26). The approach is underpinned by a particular philosophy of 'co-design' which assumes that everyone in the organisation is creative and that tapping into and using this creativity can bring benefits both in terms of business performance and the quality of working life. 'Innovation' is understood not as 'generating something new', but as 'a framework to renew thinking and creative processes' that goes beyond 'merely identifying the next product' (project manager). In this approach, innovation is considered to be broader than technological innovation, encompassing social and cultural aspects. Leadership is defined as a 'collective skill across the organisation' (SFC 2010b: 21) and active employee engagement is a *sine qua non* of finding an organisation's creative potential.

Working with the Institute of Directors (IoD), 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 for example include the need for a new market or product. The

organisation is then invited to a 'taster workshop' to first of all ascertain if there is a basis for working together. The aim is to work with organisations that are 'curious' and which are committed to the GSA's mode of working (project manager). 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' and help structure a creative thinking process, where ideas and experiences can be freely shared. The aim is for the group to take ownership of the process, envision solutions and in doing so 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 some of the tools which 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 group must be able to hear all views without pre-judgement. As the project manager explained, 'friction is good. You can feel the tensions between the different functions and hierarchies. Our role is to allow it space to be exposed.' Workshop participants are not expected, however, 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.

The GSA team is currently using this approach with three organisations; a well established manufacturing company (Scott and Fyfe), a service retailer and a ski resort. 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 and that the company needed to find a new direction. A working group was created comprised of 12 persons from the main shareholder to shop-floor operatives and technicians. As the chief executive explained, 'we tried to pick people we thought would have something to say'. The group spends two days a month working with the GSA and a day a week in the organisation on their project work. Two managers in the innovation team explained how the input from the GSA had been 'critical' in helping the organisation

to move from a 'reactive approach' of simply responding to customer inquiries 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. This project allowed us to look for real opportunities based on in-depth market research. (Scott and Fyfe, Innovation team member1)

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. So the very nature of the tasks we give them means they are developing and using more of their latent skills and capabilities.

Both the chief executive and the two managers interviewed felt that the project had improved skills utilisation among the team members.

> ... it's meant that we have been able to identify skills in the organisation and use them better. For example, there was one guy, a machine operator, he contributed a number of ideas around agricultural irrigation, great ideas we've been able to explore as a team. (Scott and Fyfe, innovation team member1)

> 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. The input of some people in terms of the ideas they've contributed has been outstanding. (Scott and Fyfe, innovation team member2)

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'. Although words like 'empowerment' and 'employee engagement' are on the Scott and Fyfe list of banned buzzwords, the chief executive clearly recognised the value of giving people a voice:

> You have got voice in this process. If you have something to say, say it. That works for us as a business. (chief executive, Scott and Fyfe)

Indeed, he was so enthusiastic about *the process* that it did not necessarily matter 'if we don't create any new products from this. The point is that they go back and they

do a better job and that has knock-on effects for the organisation beyond just learning a new creative way of thinking.'

4.1.2   *Commentary*

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 was already established prior to the project and which drew upon the specific skills, knowledge and expertise present within the GSA team. This approach is gradually beginning to filter through and inform practice more widely within the GSA. What is also striking is the depth and quality of the actual intervention with the employer. The GSA worked with Scott and Fyfe over several months in what was an intensive process that was highly valued by the organisation. Significantly, the intervention has left a legacy of ongoing development activity, with the innovation team at Scott and Fyfe becoming permanently embedded within its everyday practice.

A final observation is that while this project was very successful and can be seen to have contributed to improved skills utilisation among the workshop participants, it is much more difficult to say what impact it has had on the employee base of the organisation as a whole. Employees in the working group insisted that there was a 'two-way dialogue' with the shop-floor and that 'feedback had been positive... [because] it was not seen as just another suggestion scheme.' While there may be a 'ripple-effect' of sorts, the question is whether there is scope to involve more employees in the process. For example, it is unclear what impact this project had on the skills used by other members within the organisation. Of course, the long term benefits with regard to skill use may not be seen until the process fully plays out in terms of the possible development of new products and processes. However, if this is the case, it is also likely to require new forms of work organisation. An interesting question is whether participatory projects of this nature might also be applied to changes at the level of work organisation and job design.

4.2   South of Scotland knowledge transfer network

4.2.1   *Project outline*

The project (hereafter referred to as 'the South of Scotland project') is based on a partnership involving three colleges (Dumfries and Galloway College, Barony

College and Borders College) and four universities (Scottish Agricultural College, Heriot-Watt University, University of Glasgow and University of the West of Scotland). Together they form 'the South of Scotland Knowledge Transfer Partnership' (see SFC 2010a: 5-8, SFC 2010b: 6-12). Led by Dumfries and Galloway College, the aim is to enable the 'partners' to provide a simplified and joined-up offer of business support in the South of Scotland, a rural area with a large number of SMEs and micro-businesses that are highly dispersed geographically. This environment is challenging for those seeking to develop business support services, as firms often find it difficult to release staff for training and development, have limited management and leadership capacity, and are less likely to access business improvement services.

The project has established two principal access points, one on the Crichton Campus in Dumfries and the other on the Scottish Borders campus in Galashiels, to act as 'one-stop shops' where firms can access the combined expertise, knowledge, research skills and resources offered across the partnership. Business Liaison Officers engage directly with businesses, building relationships and encouraging firms to look for ways to improve their business performance. These services include support for workforce development, research and development, innovation, and continuing professional development including leadership and management training. As the project manager explained, the project is to some extent quite different to the others in the programme:

> They tend to be more specific geographically or sectorally. This project is broader in terms of what we wanted to do. Skills utilisation is just part of that whole package of putting in an infrastructure, raising awareness... we wanted to understand the issues around knowledge transfer and making best use of skills for SMEs in a rural environment and we wanted to understand the role colleges and universities could play in that and we wanted to know how the issues differ from a ten person business to a one to two person business.

A number of key lessons have begun to emerge. A major challenge has been simply getting small businesses to engage and become aware of what colleges and universities may be able to offer in terms of business development. In part, this reflects the nature of dealing with micro-businesses in the South of Scotland economy, many of which lack the necessary capacity, whether it be in terms of the time or resource they have available. Achieving the kind of information exchange across businesses through word-of-mouth that one might expect in a city context is

also much harder in a rural area where SMEs are highly dispersed geographically. Consequently, the team has sought to make use of existing business networks, for example around food and drink and hospitality and tourism, by 'piggy-backing on events' to raise awareness and identify potential leads. However, even with these kinds of proactive strategies, it is still hard going.

When it comes to working with small businesses, a key message coming through the project is the need for flexibility and the ability to offer a bespoke service that is tailored to a particular need, rather than a purely target-driven, 'one-size-fits-all' approach. As the project manager explained:

> The key thing for me is flexibility and not being constrained by a product so that you can go into a business and listen to their need.

In most cases, training is not the main issue facing the business:

> Often it's not a case of just delivering training or doing a straightforward training needs analysis... I don't think it's as clear cut as the business has got a skills issue. Generally speaking, they are not coming to us and saying we've got a skills shortage, it's much subtler than that... So you don't necessarily go straight in from a skills angle, you start with the needs of the business. (project manager)

The project team has discovered that the issues for a small business can often be relatively routine, such as using technology to develop a new payroll system or setting up an on-line ordering process.

Most businesses in the region do not qualify for one-to-one assistance through Scottish Enterprise, being either too small or lacking the requisite high growth potential. Resource constraints mean that information and advice through services like SE and Business Gateway[5] often require attendance at particular workshops or events. As the project manager explained:

> That [approach] doesn't necessarily fit with an area with a high concentration of small businesses. Contractors are very target-driven, so running a workshop or event in Dumfries and expecting businesses to attend enables one-to-many delivery – but for small rural businesses this is not always practical.

The project team has discovered that what many small businesses need is someone with the skills and expertise who can go into their business, discuss the issues that matter for them, and help to identify potential ways forward. This means that there is

---

[5] Business Gateway provides on-line advice and support for start-ups and existing businesses in Scotland.

a 'gap' in the current business support offer that universities and colleges could *potentially* try to fill.

Although the issues facing small businesses are often very different and disparate, the project has sought to implement a number of 'innovative solutions'. The 'Creative Clusters project' has involved College Creative Industries students working with small businesses. Fourth-year mechanical engineering students from Heriot-Watt University have undertaken 12 week real work projects with local companies. There are also examples of successful interventions with particular firms. At Murray Farmcare, a supplier of veterinary medicines, the project helped the company to better understand how the launch of a new e-commerce website would impact upon their stock management and distribution system and to think through the potential implications in terms of staffing, training needs and skills utilisation (see http://www.sosbus.biz/enx/about/Murray_Farmcare.asp).

At the same time, however, those involved with managing the project have raised questions about the *feasibility* of colleges and universities undertaking such a role. According to the project manager, one challenge has been 'getting FE and HE institutions to work together' so that they develop a shared vision and understanding when it comes to working with local businesses. This has certainly not been easy, in part because most of their research staff are located on their main campuses which are at some distance from the point of intervention. Of course, such challenges are to be expected of any new partnership being formed within the space of 15 months and, according to the project manager, 'considerable progress' has been made, with the partners now working well together. The 'one-stop shop' approach is also said to be proving popular with businesses. The project has made referrals to other agencies and referrals have been received from other agencies, an indication that cross-agency referral is also possible.

For colleges, there have been challenges in terms of identifying staff within their institutions who have the requisite skills and expertise and who feel comfortable about working with business, whether they be teaching or administrative/support staff. As a senior manager of one college explained, 'Often when we identify people who might be able to offer assistance to a business they don't want to or don't feel comfortable with that.' However, the main problem is the difficulty of releasing staff from teaching commitments and the 'knock-on' effects that this can have for the

college in terms of providing timetabling and cover arrangements. As one senior college manager explained:

> There are definitely capacity issues. You're talking about releasing staff that are contracted to teach 21-24 hours a week. That can often be disruptive to students in terms of who can back-fill and take over their teaching.

Indeed, the project team has reached the conclusion that the most practical way the partners could provide a business improvement service is by identifying a 'dedicated team' of staff specifically for that purpose:

> One of the key lessons for me is that if as a college you want to work with a business you need to recruit and identify a dedicated team to do that. The project was about utilising the skills and expertise of those within the academic institutions to support SMEs but the practicalities of that – a marketing professor may not know how to engage with a business on a one-to-one basis... So the question for me is does the model of taking a lecturer out of the lecture room and putting them in a business really work. (project manager)

The team has also discovered that engaging with small businesses is 'very labour intensive and costly' (project manager). Having contacted between 90-100 organisations, 24 had agreed to further engagement and more detailed discussions and, of those, only four or five had subsequently gone ahead with an actual business improvement project. In other words, the conversion rate is about 5 per cent of the organisations initially contacted and a fifth of those subsequently visited. As a senior college manager explained:

> You can take three or four days of staff time with a business trying to get at the issues and they can simply turn round and say I am not going to do anything with this now.

4.2.2 Commentary

In many ways, this project is quite different from many others within the skills utilisation programme. Its main focus is bringing universities and colleges together to provide a more accessible offer of business development services and knowledge transfer for small firms and micro-businesses in a predominantly rural local economy. Helping businesses to develop and improve their systems and processes may have potential effects in terms of improved skills utilisation, although this has been only one element of what remains a broader project. This, in turn, raises questions around how a project of this nature can be reasonably evaluated in terms of its impact and over what timescale, a point we return to below. What the project illustrates are some

of the challenges involved in building co-operation across universities and colleges, the need to be extremely flexible in tailoring support to the particular needs of individual businesses, and the capacity issues that colleges and universities often run up against when engaging in this kind of activity, particularly with very small companies.

A further challenge relates to the costs involved in resourcing such activity. The project team has been able to use the £700k from the SFC to lever an additional £480k from the European Regional Development Fund (ERDF) as well as £20k from partner contributions, providing a total project budget of £1.2 million (see SFC 2010b: 6). As discussed in section 5, a key issue is to what extent universities and colleges would be able to sustain this activity on a purely commercial basis when project funding ends, and whether they would have the incentive and capacity to do so.

4.3 Enhancing skills utilisation by private and public social care providers

4.3.1 *Project outline*

Led by the Open University (OU) in Scotland, this project (henceforth referred to as the 'OU social care 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: 9-12, SFC 2010a: 23-24). The starting point for this project has been new regulatory requirements. The Scottish Social Services Council, the regulatory body for the sector, requires that supervisors in public, private and voluntary social care establishments, such as care home services for adults, acquire an appropriate management qualification at higher education (HE) level for statutory registration with the Council.

The students (supervisors in the social care sector) 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. In order to meet their learning needs, the OU has sought to combine the 'traditional OU model of distance learning' with workplace tutorials, online discussions where useful, and workplace peer and mentor support. The course is focused upon 'reflective practice' throughout, with students required to reflect upon what they have learnt in the context of their own work and study.

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:

> When I first looked at the project, it looked to me like a traditional skills project, let's go in and deliver some training. I wouldn't have called it what I call it now, a skills utilisation project. But then I don't think there was the understanding back then of what that really meant.

As the project has progressed, however, 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... We started to realise that there was an opportunity here to look at whether there was a culture change between line managers and individual supervisors and to engage managers in a discussion about how learning is put to use.

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, where the local council has been particularly receptive to this type of approach, 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:

> It's got managers to reframe things. They might delegate more of their role and give some power and authority away and that would never have happened had we not met with line managers... That kind of dialogue wouldn't have taken place before because we wouldn't have tried to put that bridge in so to speak.

Facilitating dialogue with management about how they can change their role and practice to make better use of supervisors' skills and knowledge is an essential part of this process. However, this is not something that 'any course tutor' can do as it requires a particular skill set and professional background. As the same course tutor commented:

> You become the facilitator of a dialogue between manager and student. I don't think any tutor can just walk in though and deliver this; there

are some subtleties to it. You're not going in in a directive sense and telling management what to do. It's really about dialogue.

They also gave an indication of the subtleties involved and the sensitivity with which such discussions have to be handled:

I try to open up a subtle dialogue but in a non-threatening way. It's not a cosy chat, though they (managers) quite enjoy it. 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. Sometimes I will ask them that question with the student present and that can be very empowering for the student.

At the same time, the course tutor emphasised that the process was helped by not being driven by crude assessment criteria.

Not being assessment-driven made all the difference. Not making it a paper-driven, box-ticking exercise. As it was, it felt natural, not driven, and that created a comfortableness. If we had gone in with assessment criteria, that would've been lost.

Project reports suggest that student feedback on the course is very positive, with students stating that they have a better grasp of managing budgets and of how to motivate their teams and deal with conflicts. Many feel that they are better able to reflect on their supervisory role and experience increased confidence in their abilities and learning potential. For some, the course has stimulated their desire to engage in future career development (see SFC/ SDS 2010: 8-11). These findings were echoed by two students interviewed as part of the interim evaluation:

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. (student1)

It makes you more aware of budgetary constraints, that there's not just this open purse you can dip into. It's given me confidence, made me look at what I am doing, am I doing it right, are there other ways I could be motivating my team. I think I've got more autonomy, with X [line manager] devolving tasks to me. (student2)

This was also confirmed during an interview with their line manager:

It gives them an insight into what managers do and why and it helps them to manage their teams better. I can really see a difference; they've stepped up a gear. They are more self-assured, more confident, and they are carrying out their roles in a more reflective way.

The manager explained that the managers' meetings were particularly valuable:

17

> They brought us into the process. It gave me an insight into what they were learning... There's no point someone doing a course and then sitting back and saying I've done it. It's about saying OK now would you like to do this.

One outcome was the ability to delegate part of this line manager's role to the supervisor who was now 'more like a deputy'. This had freed up the manager's time to concentrate on higher level strategic work, while also contributing to a better 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.

The same interviewee cited the case of one manager who had:

> ... previously used two days to work out respite and holiday rotas for service users and carers. She has now delegated that to students and they have been able to do it in less time and in a more collaborative way by working with other staff members and asking for their input and advice.

It might be argued that many of the attributes that students acquired, such as increased confidence and better awareness of the management role, were outcomes of the learning itself and would have resulted even had the course been delivered without the discussions with line managers. What these discussions did do, however, was open up an opportunity to talk about the possibilities of task delegation and, in a limited sense, role redesign. It may also be the case that those line managers who did grasp such opportunities were perhaps already open to delegating aspects of their role. Indeed, this was partly acknowledged by both the students and the line manager:

> Some managers don't like giving away part of their power I suppose. And I know from other students on the course, they had a different experience because the backing of managers wasn't there and they were less proactive. (student2)

> I think some managers are quite precious, you know that's my bit. There's a fear factor of relinquishing their role. Some students came to me and said it's amazing the amount of managers that aren't supporting their staff. (line manager)

These perspectives were echoed by a senior course organiser in the OU:

> You hear stories from students. No you can't come into the office... you can't use the only PC, you're not at that grade.

18

In addition:

> 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.

4.3.2 *Commentary*

The strength of this project has been in the way it has sought to engage line managers in discussions around how students' leaning on the B121 can be put to effective use within their everyday working life. The project started with a quite traditional focus on course delivery, but has developed over time and has influenced thinking within parts of the OU about how courses targeted at the workplace can be best delivered. From an evaluation perspective, it is difficult to ascertain from the above data whether or to what extent the process of engagement with line managers changed the thinking and approaches of those who were perhaps less open to trusting more responsibility to their supervisors. Whether this type of intervention can transform or nudge these types of managers is an interesting question but this would require further research with a broader sample of managers. It is possible, however, that bringing managers together in meetings to discuss how they have responded to the course can create a space whereby some managers might begin to question their current approaches as they hear from others about the benefits of alternative ways of working. As discussed below, the challenge for the OU is whether this kind of delivery model, which has many benefits but also additional costs attached to it, can be marketed to employers on a fully commercial basis when project funding ends.

4.4 Business improvement techniques

4.4.1 *Project outline*

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: 22-24). The project stemmed from discussions between WLC and the Sector Skills Council for Science, Engineering and Manufacturing Technologies (SEMTA), and was delivered in partnership with Anniesland College, Adam Smith College and the University of

Strathclyde. The Scottish Manufacturing Advisory Service (SMAS)[6] was later identified as a key partner.

The project has been built mainly around the delivery of business improvement techniques vocational qualifications (BIT VQs). Designed by the manufacturing industry and SEMTA, these are aimed at supervisors, team leaders and operators in companies that have introduced 'lean manufacturing' and are focused upon accrediting 'lean skills' acquired through these processes.[7] In contrast to England, where 'Train to Gain' funding had been used to leverage employer buy-in, these qualifications had not been taken up in Scotland. The project has provided opportunities for shop floor operators and supervisors in participating companies to obtain a Scottish Vocational Qualification (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 was completed in August 2010.

Project reports (see SFC/SDS 2010: 23-24) 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.' There have also been positive unintended outcomes as companies have been able to identify potential within their workforce, with some individuals obtaining promotions to 'five Ss champions, organisational team leaders, continuous improvement implementers and one person being put on their company management development programme.' Feedback has been positive, 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 number of lessons have also been learnt during the course of the project. Embedding lean processes often takes time (sometimes several years) and is said to require 'a change in leadership style to support and allocate individuals and groups at operative levels time to better self manage their workplaces' (SFC/SDS 2010: 24). Another key message in terms of delivery is that the project tends to work best as a partnership between SMAS and a college, with the former providing advice and mentoring to the company on lean processes and the latter supporting this with

---

[6] Part of Scottish Enterprise, SMAS provides advice, one-to-one support, training and events for manufacturing companies in Scotland.

[7] The concept of 'lean production' has its origins in the 'Toyota production system' and concentrates on the elimination of waste and increased efficiency in delivering products and services of value to the customer/user.

accreditation. The project manager sought to differentiate this approach from that which had taken place in England through Train to Gain:

> We didn't want to do what they did in England. We wanted to join up our work with what SMAS was doing so we weren't just going into a company offering a qualification and then walking away. It doesn't work. You have to embed this in a process of business improvement, that's what works, joining it up. Otherwise you devalue the whole thing.

A college assessor involved in the delivery of the SVQ also stated:

> The thing that has come out for me is the model where we are working with SMAS. That was new and it has worked particularly well.

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. The company had contacted Scottish Enterprise, with SMAS subsequently brought in to help embed lean methodologies and a continuous improvement structure within the company. At the time SMAS suggested linking up with the West Lothian project. As the project manager put it, 'Lots of things just sort of came together – there was SMAS offering mentor support and advice and the college saying we'll help you tie this process to a qualification and put it in at the bottom level.'

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.' As the process improvement manager explained:

> We use the '5Ss' – sort, set in order, standardise, shine and sustain. We first of all de-clutter everything before we paint. What we've also done is set things, tools, in place, so whenever they need something like a tool or information it is right there to hand exactly where they need it.

The aim has been to work systematically, taking one machine run at a time, on a crew by crew basis. 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 using 'lean

tools' such as brainstorming, spaghetti diagrams, and flow process. However, gaining employee 'buy in' has been challenging. Over the last five years, around one fifth of the plant's workforce has been lost as a result of automation. Previous change initiatives introduced by management are said to have 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 six 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. There had been a measurable improvement in productivity per run of 41 per cent, with waste reduced by 2 per cent and overtime for re-working faulty product down to zero. Set time had decreased by 50 per cent and the run speed of the machine was up 33 per cent and rising. Based on this initial information and average runs, the company had projected a cost saving of around £1k per run and over £22k per annum. Employees were also said to have benefitted, with a working environment that was now 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 acquired an SVQ at level 3 and was now looking to take a degree or HND in management. At the same time, however, 15 fork lift truck drivers had recently been informed that they were going to be made redundant as a result of process automation.

What was the impact of this intervention on skills and 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... it helped identify those on the shop-floor with leadership potential... 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.

One of the college's SVQ assessors stated that:

> The skills that people learn are about being more motivated... they've got a voice, a feeling that they can contribute to improving their working area and the efficiency of the process... They are [using more skills]... You have to learn the lean tools and take part in kaizen events like process mapping, problem solving, communication...

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

> Before, everything was just lying about. There was no organisation. Nobody took any responsibility or pride... it makes everybody more aware of what everybody should be doing and it's made us more efficient... So you're not walking all over the workplace trying to find a spanner.

> 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... You're always thinking now of how you can improve the process and make it even better.

The operator also felt more satisfied with the work because 'what we've done is recognised at a very high level in the company... People from other plants come to look at us as an example of how to do it.'

4.4.2   Commentary

A number of observations can be made about the project as a whole. The first is that, on one level, it appears perhaps less innovative than some of the other projects. Essentially, the project was quite traditional 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. Perhaps the most innovative element was the triple partnership model of working involving company, college and SMAS. In the case of the packaging company cited above, this came about almost by accident and it is unclear to what extent this kind of joined-up approach was applied in other participating companies that had already introduced lean systems. Overall then, it is difficult to say how far this project differed from the delivery of BIT VQs in England.

It is interesting to reflect upon the extent to which this project can be considered to have impacted on skills and skills utilisation. 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

23

literature which suggests that 'lean production' varieties of 'high performance working' can be associated with work intensification, downsizing and de-skilling (see Godard 2004, Lloyd and Payne 2006, appendix two).

It is noteworthy that business improvement approaches in UK manufacturing tend to be dominated by concepts of 'lean'. As the process improvement manager in the company stated, 'Lean is the only way I know and have heard of.' Certainly, this approach permeates the work of SMAS and appears to be a dominant strand within its portfolio.[8] This is also consistent with European survey evidence which suggests that the UK has a relatively high proportion of 'lean production' forms of work organisation compared to many other European countries and a lower proportion of more advanced forms of 'discretionary learning', involving more complex tasks and greater autonomy, which are found to be most widely diffused in the Netherlands and Scandinavia (see Lorenz and Valeyre 2005, OECD 2010, Appendix two).

Given where some firms are positioned in the market, there may be little alternative than to adopt lean approaches if the organisation is to remain competitive. The challenge for companies is around how to obtain employee engagement and commitment to processes which are central to market survival, but which may also generate job losses. As the project manager noted, 'the first problem in a company where there's been no lean process is "well you want to get rid of me, don't you?"' For policy makers, there are questions too around what kind of jobs will be available to those displaced through such processes and what is an appropriate balance between forms of business support which are geared to helping firms to improve efficiency given their existing position in the market, and helping organisations to envision and take advantage of new market opportunities and growth potential.

5   Programme Evaluation and Possible Next Steps

5.1   Proof of concept

The above case studies represent a third of the 12 projects that have been funded through the skills utilisation programme. Nevertheless, they offer an illustration of the diversity of projects that have been supported through an initiative which has allowed considerable experimentation from a variety of starting points and approaches. As the case studies illustrate, there is evidence that the projects have met with some success

---

[8] See http://www.scottish-enterprise.com/your-sector/manufacturing/smas-team.aspx

and that universities and colleges can contribute to improved skills utilisation within workplaces.

At the same time, the projects have generated a great deal of learning. The findings from the case studies echo many of the themes that have been flagged in previous progress reports to the Skills Committee (see SFC/SDS 2010). It is clear, for example, 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. Changing organisational culture and management and work practices, however, is clearly very challenging as well as time consuming. There are questions around the ability of universities and colleges to sustain approaches given the costs involved, and how the programme might be developed and evaluated in the future. These issues are discussed in more detail below.

5.2   Sustainability

A key question that needs to be addressed is whether such approaches are sustainable when project funding ceases. Can these interventions be marketed to employers so that they are commercially viable for the institutions concerned? It is clear that a number of projects have already begun to give some thought to this issue.

The GSA project, which involves working in-depth with a company over a relatively lengthy period of time, estimates that the cost is somewhere in the region of £30,000 per organisation. The project manager was sceptical about whether organisations might be prepared to pay for this service on the open market. The CEO of Scott and Fyfe, when asked this question directly, conceded that the company would not have done so when first approached but having seen the benefits they would now be willing to contribute towards any subsequent work. The project manager felt then, that without continued public funding at least for *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.'

It was a similar story with the South of Scotland project, where the approach of offering business support to SMEs and micro-businesses was found to be both labour intensive and relatively expensive. An indication of the difficulties of getting employers to contribute up front can be found in the testimony of one company that

had received support through the project. The managing director was impressed by the 'excellent' package of advice and support which they had received to help them introduce a barcode system for stock control, audit and on-line ordering: 'It's wonderful that the service is free. This project has had value for the business, but if I had to pay for it I would not have embarked upon it so readily, certainly not without knowing the cost/benefit up front.' Having gone through the process and seen the results, however, the director stated that they would be 'happy to contribute' towards any subsequent work and development. The catch is that some employers might be prepared to pay something but perhaps not initially and not until the full costs and benefits have been proven.

To what extent might some universities or colleges choose to fund this kind of engagement? Some colleges may see a *potential* commercial opportunity in the hope that a participating company may in the future look to purchase some bespoke training from the college or take on a student. In the view of one senior college manager, however, it was unrealistic to expect colleges to do so given the costs involved, and there was an obvious danger that without additional funding such activity, if it did not disappear completely, could contract:

> If colleges and universities are to have a role in economic development then it is my view that there will either have to be additional funding to the traditional students on seats role – there's not the scope to have it all with the resource that's there. You either want to have less students in full-time placements and redirect resources to work with business, or you want to sustain student numbers and this is additional.

In the case of the OU social care project, the project team was in no doubt that they had identified a more joined-up and better way of delivering training in the workplace; the question was would employers pay for the additional costs involved on a sufficient scale to make this new delivery model a viable commercial proposition for the OU. As a senior course organiser commented:

> There's a lot of costs to this. First, it's labour intensive. You can't just breeze into a council and say you're going to deliver this; you have to build a strong and trusting relationship first. Then there are the workplace visits and managers' meetings... the course already delivers more than the regulator requires, it's already more expensive than what a college or training provider might offer.

The B121 course currently costs around £600 per student, compared to other professional awards on the market offered by colleges which can be as low as £200. The additional costs of workplace visits and managers' meetings have yet to be fully

assessed, but the project manager estimates that this may raise the cost of delivering the course by at least 10 per cent. The manager felt that there was perhaps scope to reduce these costs by limiting the time spent in the workplace and making more effective use of virtual communication: 'we need to work a bit harder on that'. However, given the critical importance of the dialogue with line managers, there is the danger that attempting to shave off costs in this way might affect the quality of the intervention.

Although these extra costs are currently funded through the project, the approach is also more demanding on 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? Some employers are saying that they already want fewer requirements for individuals to be taken out of the workplace and are asking for tutorials not to be run in work time as they can't afford to release staff.

An interview with a senior officer with one local authority, which had engaged fully with the project, noted that while this had been 'time consuming for line managers', the course still represented 'value for money because it has directly benefited managers and teams as well as students'.

> The way we've worked on this course is the way we want to work in the future. If there was an excessive cost, then given the budget we would need to look at that. But if it's an extra 10 per cent we would pay that.

Clearly there are some councils who value this model of training delivery and are prepared to pay for the enhanced service they receive. How representative they are of employers in the care sector as a whole is another question. As one course organiser put it, with this particular council 'we were pushing on an open door; other councils have been less receptive'. The OU has yet to fully test whether such a course can be marketed to private sector care establishments who have been slower to engage with the regulator's requirements but who will have to do so as the deadline looms. Gaining access was felt to be particularly problematic in the private sector. As one senior course organiser put it, '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.' The pressures on cost and bottom-line profitability, which are

particularly acute in the private sector, also raise questions about the extent to which employers will be prepared to pay more for a qualification which, as noted above, is already more expensive than other alternative awards. The fear then is that the OU could simply end up pricing itself out of the market.

The above factors relating to sustainability have a number of policy implications. If the ultimate aim is to move towards a *full cost recovery* model, where universities and colleges market these initiatives on a commercial basis to employers, very careful thought will need to be given as to how this might be achieved in practice. One model perhaps, which may be applicable in some cases, is for the public purse to fund the initial exploratory phase of projects, with employers asked to contribute more as the intervention develops and the benefits to the business or organisation become clearer. There is no denying, however, that establishing such a model will be extremely challenging, especially in the current economic and financial climate.

5.3   Programme development

Consideration may also be given to whether these initial projects might establish the basis for a *publicly-funded programme* as a form of policy intervention in its own right aimed at supporting workplace development and better skills utilisation. There is scope to think about how such a programme 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 in this process. The first question is what might universities and colleges potentially bring to this agenda?

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. The GSA project, for instance, only works with organisations that are prepared to accept its particular approach which includes having a cross-section of the whole organisation represented within the innovation group. The OU social care project seeks to bring line managers into a sensitive discussion around how their mode of management may need to change if it is to accommodate and make use of students' learning. What both of these projects have in common is that they seek to *facilitate a dialogue* involving both management and the workforce around issues which need to be handled quite carefully and

sensitively. The focus upon skills utilisation and the particular methods and approaches to working within organisations that are being developed through these projects can bring new dimensions to the current business support offer.

In the UK context, where 'innovation' tends to be defined in 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 (see Appendix 2). In Finland, for example, research institutes, based in colleges and universities, have played an important role in publicly-funded workplace development programmes, and have developed different theoretical approaches to underpin their practical engagement through 'action research' (see Alasoini 2006).

Clearly, much depends upon the requisite political commitment and sufficient resource being made available in a tough public sector financial climate. At the same time, the programme is at a very early stage and 12 pilot projects is a relatively limited evidence base upon which to guide future policy decisions. Policy makers therefore may wish to consider funding *a second exploratory phase of the programme*. What might this look like and what factors might be taken into consideration in terms of its future development?

5.4   Extending funding to existing projects on a case-by-case basis

As a first step, policy makers may wish to consider whether there is a case for extending funding to innovative projects which may have further potential to aid policy learning. Extending the funding to some projects, particularly where they are at a relatively early stage of development, such as the GSA project, would give them more time to develop and test whether they have wider applicability. It might be interesting to explore the impact upon a particular sector, such as food and drink or tourism, which figure prominently as part of the Government's economic strategy.

5.5   Deepening engagement with work organisation and job design issues

Research suggests that the way in which jobs are designed, both in terms of the complexity of tasks and level of autonomy and discretion afforded to employees, has a significant bearing on the scope available to employees to engage in informal

learning and the opportunities they have to develop and utilise their skills at work (see Felstead *et al* 2009, Appendix 2). Although some projects, such as the OU social care project, have touched upon aspects of role design and task delegation, work organisation and job design would not appear to have figured prominently within the current programme. In thinking about future programme development, policy makers *may wish to encourage project proposals which have work re-organisation and job redesign as an explicit aim or objective*. It would be interesting to see what kind of response emerged from the sector, given existing capacity constraints (see below) and the recognition that bids will reflect the skills, expertise and interests of universities and colleges as well as those of their staff who are willing to engage with this agenda.

5.6 Legacy of development for companies

Consideration might also be given to whether the intervention itself leaves a legacy of development activity inside the participating firm or organisation. There is evidence from some of the projects that they can help to embed a particular way of working within an organisation which continues after the project completes. Thus, at Scott and Fyfe, the GSA project has helped to put in place an innovation team that will continue to take this work forward. As one manager noted:

> ...the whole process gave us a way of *finding answers for ourselves*... The cross-functional team will remain in place for good because it works. There will be no going back to the old ways.

Leaving behind a legacy of ongoing development work in an organisation is important in terms of obtaining the maximum return from any investment of public money. It might be useful therefore to consider whether this could be included within the key criteria for any future project funding.

5.7 Capacity building for colleges and universities

As the case studies illustrate, there are issues around the capacity of universities and colleges to engage with this agenda. For example, the GSA project is highly dependent upon the knowledge and expertise within the project team, raising questions about to what extent 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.' The South of Scotland project required time to build up partnership working across colleges and universities, and found that not all college staff felt

comfortable working with small businesses, even where they possessed the necessary theoretical knowledge and expertise.

If Scottish colleges and universities are to become more fully engaged in knowledge transfer/action research around organisational development and innovation, they will need to develop the appropriate capacity, skills and expertise to do so. SFC/SDS have already emphasised the importance of cross-project networking to share learning and insights from across the different projects (see SFC/SDS 2010: 7). As part of this, it would be useful for projects to consider what they have learnt in terms of their particular modes of working within organisations to see if there are any common themes or principles which can be pulled out.

There is no doubt, however, that capacity building represents a major challenge, given the direction that research around issues such as organisational development and employee participation has tended to take in the UK over recent decades. As Beirne (2008) has argued, there did exist in Britain from the 1950s to the 1970s a tradition of action research, associated with the work of scholars such as Kurt Lewin and others within the Tavistock Institute, which sought to support local projects aimed at improving employees' direct task participation and autonomy over their work as part of a broader commitment to improving the quality of working life (see Trist and Bamforth 1951; Trist 1963). This research tradition has been on the retreat in recent decades. Some of the reasons for this reside in institutional pressures, in particular the role played by the Research Assessment Exercise in linking university ratings criteria and funding to published outputs in high ranking international journals. The weakness of social partnership in the UK and the power imbalances within the workplace between management and employees means that the terrain for academic/researcher engagement is very different from that which exists in Scandinavia for example, where action research approaches to organisational development have retained a much stronger presence. Many critical researchers in the UK are said to have retreated into an 'abstentionist position', preferring to research management-initiated participation schemes with a detached (and often healthy) scepticism, rather than engage 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).

It is noteworthy that the Skills Committee was quite disappointed with the overall response of universities to the original call for skills utilisation projects

(SFC/SDS 2009: 5-6). It is particularly noticeable that Scottish business schools do not appear to be engaged with the SFC programme, perhaps for the reasons outlined above. One challenge would be to develop that engagement so that those who currently research issues of organisational change and development apply their knowledge and expertise to the practical agenda of changing workplace contexts. It is interesting to note that some projects are already beginning to think about this. The GSA project, for example, is looking at how to link up what they do around product innovation with the expertise that business schools can bring in terms of organisational development and change management. As the project manager noted, 'We are looking to collaborate with Glasgow University Business School. I think it works best as a collaborative project between a design school and a business school, between design thinkers and business thinkers.' These 'future directions' are worth exploring. However, policy makers need to be aware that there is a long road ahead in terms of developing the willingness and capacity of universities to engage in action research of this kind.

All of this has policy implications for the pace at which the programme might be developed. Given the kind of capacity constraints outlined above, a sensible approach would be to build up slowly and gradually. Of particular importance will be the ability to use existing projects to guide, support and mentor new ones in any subsequent second phase. Forging international links with research institutes in Europe and in particular Scandinavia would also be useful as a way of building up 'process knowledge' around *how* to facilitate organisational change based upon principles such as 'democratic dialogue' and the 'broad participation' of employees.[9]

5.8 Evaluation of impact

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. Notwithstanding the very useful efforts made by policy makers in Scotland to develop a working definition of skills utilisation, the concept is still relatively new and is not always well understood by employers and employees, for whom it may mean quite different things. Assessing the impact of

---

[9] Whether the 'broad participation' of the workforce should be included as a key criteria for future project funding, as was the case with the Finnish Workplace Development Programme, is a moot point but clearly it is something which projects should be encouraged to achieve.

projects on skills utilisation is 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 also be problematic, given the difficulties of 'controlling' for other factors and influences beside the actual project itself.

Some of these challenges are reflected in the four case studies. The GSA project with Scott and Fyfe, for example, while highly valued by the organisation, has not yet reached the stage of generating any new products. For the CEO, this was not a matter of concern because of the wider organisational benefits from engaging employees in the process. 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 Business Improvement Techniques 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.

Demonstrating impact can be particularly challenging in service contexts. In the case of the OU social care project, for example, 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'. Yet, as outlined above, this is clearly an important consideration if the provider is to attempt to market such an approach to employers. The assumption here would be that if supervisors learn to manage their teams better, this is likely to feed through to improvements in service quality. However, obtaining the data to prove such a link can be difficult. To begin with, eliciting the views of users, who include elderly residents in care homes and adults with learning difficulties, is clearly problematic. Then one has to be able to disentangle the impact of the project from many other factors that may be affecting service quality at a particular point in time.

As the project manager noted, 'We need to talk to service users to see if they are benefitting. That's where it gets really hard.'

In the case of the South of Scotland project, which is about universities and colleges coming together to develop an infrastructure for business support in a challenging rural environment, the difficulties are around demonstrating tangible benefits with regard to skills utilisation within a timeframe which policy makers may expect. While helping SMEs and micro-businesses to improve their business processes may have potential benefits in terms of skills utilisation, this is only one element within a broader project. As the project manager noted, 'We started from such a low base that to see the impact of this type of project you're looking not at year three but years seven, eight, nine and ten even. For me, this is a long term game.'

What the above illustrates are just some of the challenges involved in evaluating projects of this nature. Policy makers need to be aware of these differences in approach and emphasis when designing evaluation tools and methodologies. A further challenge for any future development of the programme will be to try to weigh the *potential* and *quality* of the different interventions in terms of what it is that policy makers really want to achieve. Should, for example, more emphasis be placed upon initiatives which improve operational efficiency, given where firms are currently positioned in the market, or upon those which have the potential to help firms move up the value chain?

Finally, it is also important to consider the impact of projects upon universities and colleges themselves and the extent to which they have acted as a catalyst for re-thinking their own role in economic development/business improvement or how they can best deliver training within the workplace by opening up opportunities for improved skills utilisation. There is evidence that some project teams, such as the OU social care project, have developed their understanding over time, and that this has now begun to stimulate discussions within the OU in terms of how it might deliver work-based learning programmes in the future. This was of course a central aim of the SFC programme and it is important, therefore, that evaluation takes such 'developmental effects' into account.

5.9   Joined-up policy around business support

This programme has provided a valuable opportunity for SFC and SDS to work together, for the first time, on what is a significant programme of work. SDS seconded

a member of staff to work with the SFC at an early stage, for a fixed period, to help develop the call for projects and to assess the proposals. SDS strategic managers have also worked with the SFC on project delivery (e.g. *Maximising the Impact of Skills in the Oil and Gas Industry* project, led by Robert Gordon University, and *Skills for the Life Science Industry project,* led by Dundee College). However, the programme came quite early on in the evolving relationship between SFC and SDS, and it is clear that the lead role, both in terms of funding and programme management, has so far resided with the SFC. The programme has also provided a mechanism for the SFC to engage quite differently with the university and college sector. Given that SDS has particular expertise in working with industry, consideration might now be given to how this partnership may be further developed.

If the programme is to become part of a wider offer around business support, it is also important to consider how this initiative can be better joined up with the work of other agencies in the field, notably SE and HIE. Tightening public sector budgets mean that all agencies are under increasing pressure to generate cost savings and are concentrating resource on the delivery of their core products and services. Given such constraints, the challenge is to explore ways in which these various agencies can work effectively together to improve the delivery of current business support so that universities and colleges are both closer to the point of intervention and are able to contribute to the quality of the service available to businesses.

There are already some interesting examples of joint working within the individual projects. The Business Improvement Techniques project suggests that the delivery of BIT VQs is greatly enhanced when combined with the mentoring support offered by SMAS. The project manager of the South of Scotland project regularly meets with SE on a monthly basis and is also seeking to build up links with local authorities' economic development departments. The GSA project is working with the IoD and HIE to engage networks of SMEs in the Scottish Highlands and Islands. There is a particular opportunity for Scotland's economic development agencies to help identify instances where a project may be appropriate for a particular business.

This is not to suggest that developing joined-up policy around business support is easy. An indication of some of the challenges is provided by the South of Scotland project. As noted above, one of the main issues here is the finite capacity within colleges and universities to service the needs of small businesses in the region. The project team has identified the potential of an alternative 'broker-type' model, where

colleges and universities working in partnership undertake the original analysis of business need but then signpost the organisation in question to the appropriate support that might be available in other agencies, such as Scottish Enterprise. Cross-agency referral has the advantage of involving the colleges in the initial business engagement, whilst at the same time drawing upon the skills and expertise that lie across the different agencies. However, it also assumes that these agencies have sufficient capacity themselves to deliver additional support beyond their existing commitments and strategic priorities at a time when budgets are under increasing pressure.

The misalignment of targets and funding across the different actors and agencies can also impede collaboration at a local level. As the manager of the South of Scotland project observed:

> There's often a desire, a will to join things up. But there's also sensitivity around each partner's particular strategic direction and funding criteria... often it's a case of 'yes we would like to do that but actually our target is slightly different to yours...' The terminology of the targets can be different, the way targets are measured, and you are almost trying to work together despite all the constraints rather than with a model that could encourage and enhance collaborative working.

One challenge will be to try and design funding and performance management arrangements which facilitate joint working at a local level and in a funding context where resources are severely constrained.

Finally, there is an opportunity to consider developing the programme as a joint initiative across a wider range of partners. This is important given that the SFC's main focus continues to be on skills supply and the programme occupies a relatively marginal (and therefore potentially fragile) position within its overall portfolio of work. A broader workplace development/innovation programme would include a role for universities and colleges working in partnership with SE and HIE. This could help to deliver a better more joined-up approach to business improvement, while also helping to embed the programme. Consideration therefore should be given to including SE and HIE representation within the Skills Committee.

5.10 Diffusing lessons: the potential for 'learning networks'

Any programme comprised of a series of projects can only hope to reach and impact upon a relatively small proportion of firms and organisations within a national economy. A key question is how to ensure that lessons generated through the individual projects are diffused across a wider number of organisations. One approach

is to gather examples of best-practice that can then be used to try and stimulate other organisations to adopt similar approaches through a process of emulation. While this approach has its place, its impact may be limited as there are indications to suggest that organisations are often not persuaded by 'exemplary cases' which are drawn from other sectors and firms (see Guest *et al* 2001, Appendix two).

Evidence from 40 years of workplace innovation/development programmes in Scandinavia also suggest that 'social innovations' around work and management practice cannot simply be transplanted from one organisation to another and require a process of modification, adaptation and learning (see Alasoini 2006, Gustavsen 2007). Those closely involved with such programmes have increasingly emphasised the role of 'learning networks' in bringing together firms (in a particular sector, region or supply chain) with research institutes (see Appendix two). The aim is to support a process of adaptive learning which allows individual organisations to engage in development work that is tailored to their particular needs, whilst at the same time helping them to learn from each other, so that 'change and diffusion merge into one process' (Gustavsen 2007: 664). It has to be said that much of the discussion operates on a conceptual level, however, and it is difficult to tell what success 'learning networks' have had in these countries.

The idea of developing 'learning networks' which allow organisations to exchange knowledge, share ideas and support each other in experimenting with change is strongly signalled in the Scottish Government's recently refreshed skills strategy, which states:

> One of the ways to achieve this [i.e. more effective use of skills] is to help employers with common interests to come together to learn and support each other. We look to Scottish Enterprise, Highlands and Islands Enterprise, SDS and SFC to pilot, in partnership with Business Gateway and other relevant organisations where appropriate, new innovative approaches to help facilitate organisations (particularly SMEs) to come together in a variety of contexts, such as cross-sectoral groups, sectoral or geographical networks, to address workplace-related issues. (Scottish Government 2010: 41)

It is interesting that some of the Scottish skills utilisation projects are already beginning to recognise the need to make effective use of networks. The GSA project, as noted above, is looking to use its links with IoD and HIE to engage SMEs in the Scottish Highlands and Islands. As the project manager remarked, 'I think what is particularly interesting is the idea of clusters, hubs and networks. It is particularly

interesting for SMEs because they learn inside their peer groups. The work we've done with the IoD could be a way into that.' The project manager with the OU social care project also felt that there was scope to explore the potential of networks in the local authority care sector: 'If we could work with a council like X and then begin to pull in some other councils around that, we might be able to develop a network that could be self-sustaining.'

The South of Scotland project has sought to make use of existing business networks, for example around food and drink and hospitality and tourism, by 'piggy-backing on events' to advertise its service in a context where local businesses are highly dispersed geographically. But even with these kinds of proactive strategies it is still hard work. The team was sceptical, however, of the extent to which the idea of 'learning networks' would work in a context where small businesses are under pressure simply to survive, have little spare time and there is often a fine line between seeing other businesses as a learning partner and a competitor.

Clearly, the construction of learning networks will be more difficult in some circumstances than others and therefore requires careful thought and consideration. However, the idea of bringing together a group of organisations and research experts in a network, hub or module to experiment with workplace innovation and share their experience is one which is potentially worth exploring in any subsequent second phase of the programme. It is difficult to be prescriptive at this stage about the precise form such networks might take in the Scottish context, for example their size and scope, or whether they might operate at a regional or sectoral level. In some cases, they might usefully build upon already existing forms of inter-organisational collaboration. Consideration might be given to funding 'network projects' that have the development of 'dissemination knowledge' as one of their central aims, as was the case with the Finnish Workplace Development Programme for example. As a first step, policy makers are encouraged to forge links with other European and Scandinavian programmes to see what lessons have emerged from these kinds of initiatives.

5.11 Scale and consensus building

While there is a need to build up capacity gradually and to ensure that projects are properly evaluated, it is also important to be realistic about what a programme of this kind can be expected to deliver in and of itself. Any programme comprised of 12, 20

or even 50 projects cannot be expected to transform the performance of the Scottish economy. It is important to avoid over-selling what a small programme can achieve on its own. 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: 143). From 2004 to 2010, a third programme invested 75 million euros in 1,164 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 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.

Moreover, changing employer behaviour and workplace practice to make better use of skills is extremely challenging and, as Buchanan *et al* (2010: 34-5) note, can be a bit like 'grinding through granite'. There are no quick fixes here; rather this is a long-term project. The Finnish programmes enjoyed the active support of policy makers and the labour market parties for well over a decade. 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 too will need to be embedded within a supportive policy consensus. This will require ensuring that the programme is honestly evaluated (accepting some of the difficulties outlined above), particularly in terms of its impact on skills utilisation, but without overstating what it can achieve in terms of Scottish economic performance, thereby avoiding unrealistic expectations.

Winning the support of groups, such as Institute of Directors in Scotland, who have given their backing to the GSA project, is a significant development. At national level, the programme also enjoys the support of the STUC. However, the involvement of trade unions in the actual projects is limited, with the exception that is of the OU's other project, *Recognising and Enhancing Skills Acquired in the Engineering Workplace: from MA to BEng*, where, according to the project manager, the union

Unite has been instrumental in both its initiation and design (for a description of the project, see SFC 2010b: 34-39). There is, however, the scope for unions to engage further with these initiatives. Indeed, the projects could provide a real opportunity for unions to build upon and broaden their current activity around workplace learning so that they become more centrally involved in discussions around skills utilisation (see Lloyd and Payne 2007, Green 2010). As noted earlier, the skills utilisation agenda in Scotland began with, and is in part motivated by, a commitment to social partnership between the STUC and the Scottish Government. Building upon that initial commitment, and demonstrating the active support of both employers' and employees' organisations, will be important going forwards.

6   Conclusions and Main Policy Recommendations

Designing new forms of policy intervention which are capable of impacting upon skills utilisation in the workplace is challenging, particularly for those whose prior experience relates primarily to delivering skills supply initiatives. 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. There are some early indications that their experiment with skills utilisation projects is beginning to pay off. An open call for proposals with a relatively 'loose' interpretation of what a skills utilisation project might consist of has given rise to considerable experimentation from a variety of different starting points, the flipside of which is, inevitably, some variation in terms of the quality of the different interventions and their innovativeness. There is some evidence from the above case studies, however, to suggest that universities and colleges *can* make a positive contribution to skills utilisation. While these are still early days and the programme as a whole will need to be fully evaluated, these studies provide an initial empirical basis for establishing *proof of concept*.

A great deal of learning has also been generated in the course of this initiative. Significantly, some projects have started out with a traditional focus on training delivery but have gradually begun to engage 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. In some cases, then, it is the *distance travelled* and the learning that this has generated *for the provider* which is particularly striking. In a sense, however, all of the projects have gone on a journey of discovery.

The findings from the case studies echo many of the themes that have been highlighted in previous progress reports to the Skills Committee (see SFC/SDS 2010). Building strong relationships between project staff, employers and other partners, communicating with employers in a language they can understand and relate to, and being able to demonstrate up-front benefits for the organisation, are clearly all very important. Working inside organisations to help change organisational cultures and ingrained practice is challenging and calls for particular skills and expertise on the part of those delivering this activity. There are, however, questions around the ability of universities and colleges to sustain approaches given the costs involved – questions that institutions are now beginning to ask for themselves – and how the programme might be developed and evaluated in the future.

The key findings and recommendations of the interim evaluation are summarised below:

- If the intention is to try to move towards a *full cost recovery model*, policy makers need to recognise that obtaining up-front employer contributions towards the cost of such initiatives is likely to be challenging. Careful thought will need to be given therefore to how this might be achieved in practice. One model, which may be applicable in some cases, is for the public purse to fund the *initial exploratory phase* of projects, with employers asked to contribute more as the benefits become clearer. There are, however, serious questions around whether some of these initiatives are sustainable in the absence of public funding.

- Policy makers may wish to consider an *expanded publicly-funded programme* of skills utilisation/workplace innovation projects which could potentially be positioned as part of a *broader approach to business improvement and innovation policy* in Scotland. As a first step, policy makers might consider funding an exploratory *second phase* of the programme.

- Consideration might be given to whether there is *a case for extending funding to existing innovative projects* which are still at an early stage of development and have the potential to generate further learning.

- Research suggests that the way in which jobs are designed, both in terms of the complexity of tasks and level of autonomy and discretion afforded to employees, has a significant bearing upon the scope available to employees to engage in informal learning and the opportunities they have to develop and deploy their skills at work. Although some projects have touched upon issues of task delegation and role design, work organisation would not appear to have figured prominently within the current programme. In thinking about future programme development, policy makers may wish to encourage project proposals which have work re-organisation and job redesign as a central aim or objective.

- Funding criteria should take account of the *quality of the intervention* and whether projects leave a *legacy of development activity* within participating organisations by helping them to embed approaches within their everyday practice which can be sustained after project funding ends.

- There are issues around the existing capacity of universities and colleges in general to engage with this agenda. Some projects are highly dependent upon the knowledge and expertise within the project team, raising questions about the extent to which such approaches could be replicated or scaled up. 'Action research' approaches to workplace development/ innovation tend to have a more limited presence in UK universities compared to elsewhere in Europe, particularly Scandinavia. This may reflect institutional pressures upon UK academics to publish in high ranking international journals as well as the weakness of social partnership in the UK which leaves many *critical* researchers reluctant to involve themselves in workplace change initiatives, often emanating from management. Scottish business schools do not appear to be engaged with the SFC programme and one challenge would be to try and build their involvement into any subsequent second phase.

- Given existing capacity issues, it makes sense to build the programme slowly and gradually. Providing further opportunities for projects to discuss their different approaches to working within organisations would be useful as part of a continued commitment to cross-project networking. Establishing links with research institutes in other countries, in particular Scandinavia, which have a strong tradition of 'action research' in support of workplace development/innovation could also help to build up 'process knowledge'. Using existing projects to guide, mentor and support new ones will be particularly important in terms of capacity building.

- There is a need to ensure that the programme continues to be rigorously evaluated in terms of *impact*. Policy makers also need to be aware of the challenges and difficulties involved in undertaking such evaluation. The concept of 'skills utilisation' is relatively new and 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 also be problematic, not least because of the difficulties of 'controlling' for other influences beside the actual project itself. The full impact of projects may not be felt for some time so it is important that both project and programme evaluation adopts an adequate and realistic timeframe.

- In evaluating 'success', consideration should also be given to the potential and quality of the intervention in terms of what it is that policy makers are seeking to achieve. Should, for example, more emphasis be placed upon initiatives which improve operational efficiency, given where firms are currently positioned in the market, or upon those which have the potential to help firms to move up the value chain?

- It is also important to consider the extent to which projects have acted as a catalyst for enabling universities and colleges to rethink their role in economic development/business improvement or how they might deliver training within the workplace and link this to improved skills utilisation. There is evidence that some projects have developed their understanding over time and that this is now beginning to influence discussions within their wider institutions. It is important that evaluation takes account of such 'developmental effects' for the provider.

- Building upon existing relationships, there is scope to explore ways in which the programme can be more fully integrated with the work of other agencies, such as SE, HIE and SDS, so that universities and colleges are closer to the point of intervention with regard to business support and can add value to the current offer. Consideration might be given to developing the programme as a joint initiative across a wider range of partners, including SFC, SDS, SE and HIE, with Scotland's economic development agencies afforded representation within the Skills Committee.

- Building upon policy concerns outlined in the refreshed skills strategy and developments within some of the projects, policy makers may wish to consider the role and potential of 'learning networks', which draw together universities/colleges, public agencies and firms/organisations, as a means of helping employers to learn together and share knowledge about workplace development.

- Finally, changing employer behaviour to support more effective utilisation of skills is extremely challenging and constitutes a long-term project. It is important to avoid 'over-selling' what a *small* programme, on its own, can contribute to Scottish economic performance. More generally, there is a need to build a strong supportive policy consensus across government, employer and employee organisations that can underpin programme development over time. The challenge is to weave the programme into the tartan of Scottish skills and innovation policy.

Appendix 1: Scottish Skills Utilisation Projects

Lead Institution	Project title	Funding
Barony College	*Aquaculture Work-based Learning Development* 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	*Scottish Dairy Skills Initiative* This project aims to address recruitment and retention issues in the Scottish Dairy Industry through workforce development and skills utilisation.	£307,000
Dumfries and Galloway College	*South of Scotland Knowledge Transfer Network* This project involves colleges and universities working together to link their services and knowledge to business development in a challenging rural environment.	£700,000
Dundee College	*Skills for the Life Science Industry* 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	*Skills Utilisation and College Graduates* 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	*Engineers of the Future – MA2MA: Chemical, Electrical and Mechanical Engineering* 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	*Creating Cultures of Innovation through Creativity and Design* 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 order to drive sustainable innovation.	£200,000

Open University in Scotland	*Recognising and Enhancing Skills Acquired in the Engineering Workplace: From Modern Apprenticeship to BEng* 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
Open University in Scotland	*Enhancing Skills Utilisation by Private and Public Social Care Providers* 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	*Maximising the Impact of Skills in the Oil and Gas Industry* 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.	£255,000
Stevenson College	*Working With Attitude* 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.	£111,450
West Lothian College	*Business Improvement Techniques Project* 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

Appendix 2: 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 specific policy initiatives in this area and a fairly limited evidence base to go on. A recent study by Buchanan *et al* (2010: 34) for the OECD noted that such initiatives are hard to find. They highlighted a number of examples, in particular attempts to encourage the diffusion of 'high performance workplaces', various national workplace development programmes in Europe, and 'skills ecosystem' approaches in Australia. A skills utilisation literature review conducted on behalf of the Scottish Government highlighted similar initiatives (Scottish Government 2008). It concluded that 'evidence on the impact of specific interventions, market or state instigated, is relatively limited', and stressed the need to gain a 'fuller understanding of what works... in specific sectors and business types' (Scottish Government 2008: 83). While it is not the intention to review these initiatives again in detail here, it may be useful to try and pull out some key issues.

The diffusion of high performance workplaces

There is now a significant body of research which suggests that the way in which work is organised, in terms of both task complexity and the degree of autonomy and discretion afforded to employees, 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). Since the 1980s, academic and policy discussions of work organisation, particularly within liberal market economies (though not exclusively), have been dominated by the concept of 'high performance working' (HPW) which for many has become a vehicle, or proxy, for achieving improved skills utilisation (see UKCES 2009a, UKCES 2010). HPW refers to various combinations of work and HR/managerial practices, which when joined together in mutually-reinforcing 'bundles', are thought to improve organisational performance by provided greater scope, opportunities, incentives and rewards for employees to apply their skills and effort within their jobs (see Appelbaum 2002). The core idea is of a 'bargain' between management and employees, with the promise of 'mutual gains'. 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 not unproblematic. There is no universally agreed definition of what constitutes a high performance workplace, while the individual practices that are often said to make up the model are subject to widely different interpretation (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 (see Barker 1993, Procter and Mueller 2000, Godard 2004). It is possible then to have multiple definitions of HPW, which on the surface may share similar practices, but which nevertheless result in very different forms of work organisation and widely divergent outcomes for employees.

Perhaps unsurprisingly, the empirical evidence that such approaches deliver positive gains for workers and improve skill levels remains rather mixed (see Appelbaum 2002, Godard 2004, Lloyd and Payne 2006, Hughes 2008, Wood and Bryson 2009). Even those who stress its *potential* to improve skills utilisation and create 'good quality work' acknowledge that 'care needs to be taken to ensure 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: 126, also Green 2010). The more nuanced discussions stress that the *real* high performance workplace 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 (see Kersley *et al* 2006, UKCES 2009a, Wood and Bryson 2009, Edwards and Sengupta 2010). The 1990s witnessed a 'marked decline' in task discretion available to employees from which the UK shows few signs of recovering (see Felstead *et al* 2007). Team working has spread fairly widely, but autonomous teams are extremely rare (Edwards and Sengupta 2010). Most teams are 'taking orders from above, rather than being afforded the scope to use their own initiative in the

workplace' (Green 2010: 9, also Gallie *et al* forthcoming). Given the purported benefits of HPW in terms of organisational performance, many have questioned why this might be the case. 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 2009a).

Some argue that the consolidation of the HPW model may be particularly challenging in liberal market economies where the institutional framework does not require employers to provide training, social partnership is weak, and the financial system privileges shareholders interests above those of other stakeholders in the firm (see Belanger *et al* 2002: 177). Thompson (2003: 364) has argued that pressures to maximise short-term shareholder returns means that firms often resort to downsizing; the mutual gains bargains, required for the stabilisation of the HPW model, are therefore 'bargains that most of the time, most employers cannot keep'. Relatively weak trade unions, the absence of sectoral collective bargaining and a lightly regulated labour market in the UK, coupled with relatively high levels of income inequality and a group of domestic consumers who can only afford to buy 'cheap', also means that many firms continue to compete on the basis of low value added strategies, with a predominantly low skilled, low waged workforce (see Geary 2003). If it is the case, however, that 'value-added-based strategies... have the best chance of producing outcomes of mutual benefit to firms and their employees' (Locke 1995: 23), this too may be a problem.

UK policy makers have been extremely reluctant to countenance policy approaches that constitute a challenge to the prevailing neo-liberal orthodoxy (see Keep 2009). Instead the focus has been on exhortation, persuading employers of the 'business case' for HPW through the publication of 'best-practice' examples, and the provision of information, advice and guidance (UKCES 2010). However, it has been questioned whether senior managers are really persuaded by examples drawn from other firms and sectors (see Guest *et al* 2001). Furthermore, given the definitional ambiguity surrounding HPW, leaving employers to decide which version of HPW best meets their needs (if at all) is not unproblematic, and does not guarantee that any particular version adopted will be of benefit to employees or result in better jobs and improved skills utilisation (see Lloyd and Payne 2006). There is also the issue of how, if HPW is to be the answer, government can support its adoption, given that in England business support, through Business Links, is being reduced to a call centre

and website (DBIS 2010: 43). How are SMEs to have their hands held through the quite complex process of designing and implementing a system of HPW that would fit their particular needs? Insofar as Scotland retains business support functions within its main economic development agencies, namely Scottish Enterprise and Highlands and Islands Enterprise, it would seem to be in a stronger position to help organisations introduce 'new working practices', although there are issues about the extent of the support available and what form this takes.

Skill ecosystems in Australia

In recent years, Australia's experiments with 'skill ecosystems' and 'skills formation strategies' have attracted attention as an example of a policy initiative that is aimed explicitly at addressing skills utilisation (see NSW DET 2008, Payne 2008). Like the UK, Australia is a liberal market economy, which is also grappling with issues of 'over-qualification' and the 'under-utilisation' of skills (see Considine 2000, Hall and Lansbury 2006, Watson 2010). The concept of 'skills ecosystems', as developed by Buchanan *et al* (2001: 21)[10], 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, including:

- business setting (e.g. the type of product market, competitive strategies, business organisation/networks, financial system);

- institutional and policy frameworks

- modes of engaging labour (e.g. labour hire)

- work organisation and job design

- 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 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.

---

[10] Buchanan *et al* (2001) draws upon and extends Finegold's (1999) original concept of 'high skills ecosystems' found in places such as California's Silicon Valley.

Official evaluations note that 'some projects have found it difficult to move beyond supply-side or more traditional VET design and delivery strategies,' while others quickly became 'captive to industry development agendas and failed to actively consider how workforce capacity could facilitate achievement of these agendas' (see Windsor 2006: 15). Others, however, have 'achieved some remarkable outcomes'. At the same time, many lessons have been generated in the process (Windsor 2008: 8). The concept of 'skill ecosystems' met with much confusion among stakeholders. Projects worked best where industry stakeholders were confronting a pressing challenge, had strong employer 'buy-in' and could count on committed 'project managers' who could balance conflicts and hold the network together (see Eddington 2005, Windsor 2006, Payne 2008).

Yet, despite some success, it would seem that 'examples of deep-seated, ongoing change are difficult to find' (Buchanan *et al* 2010: 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 (see Buchanan *et al* 2001, Buchanan 2006). 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. These issues have not gone away and a key question remains how much progress can be made in terms of skills utilisation, given that these opposing forces and pressures remain. There are also signs that policy makers' interest in skill ecosystems may be waning. The national skill ecosystem programme, 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. There are indications that policy debates have returned to an obsession with marketisation, contestability and how Technical and Further Education (TAFE) institutions work with higher education to deliver a skills supply employers want (see Beddie and Curtin 2010).

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 which, according to the European Working Conditions Surveys (EWCS), have gone further than most in developing forms of work organisation that combine high levels of discretion and learning within the job (Lorenz and Valeyre 2005, OECD 2010: 38), and which are likely to be most conducive to effective skills utilisation (see Payne 2010). The EWCS distinguishes between four types of work organisation, which are termed 'simple/traditional', Taylorist', 'lean production' and 'discretionary learning'. 'Discretionary learning', the most advanced form, is most widely diffused in the Netherlands (64 per cent of employees surveyed), Denmark (60 per cent) and Sweden (52.6 per cent), which compares to 35 per cent in the UK. The most widely diffused form of work organisation in the UK, interestingly, is 'lean production' (40.6 per cent) - which requires some learning and problem solving on the part of employees but affords much lower levels of employee autonomy. This compares with equivalent figures of 17 per cent in the Netherlands, 22 per cent in Denmark, 18.5 per cent in Sweden and 19.6 per cent in Germany.

The reason as to why the Scandinavian countries in particular tend to have more 'discretionary learning' forms of work organisation may have something to do with the macro-social 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. Strong 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 (see Grimshaw and Lehndorff 2010), but for many employers the national institutional framework, together with embedded social and cultural norms, will point the way.

As Gustavsen (2007: 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.' Organisations can benefit from external advice and support. He stresses the role played by national

workplace development/innovation programmes aimed at improving productivity and the quality of working life, which began in Norway and Sweden in the 1970s and 1980s (see also Gustavsen *et al* 2001, Payne and Keep 2003). In recent years, Denmark and Finland have tended to lead the way, the latter having supported a series of publicly-funded workplace development programmes between 1996 and 2010 (see Payne 2004, Alasoini 2006, Ramstad 2009a&b). 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.

Again, these programmes offer some useful pointers. 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. Theory can help to inform the search for local innovations, along with the process through which projects are pursued, dialogue constructed and participation achieved. What it cannot do is provide pre-specified solutions in terms of job design challenges, which must start with the needs of the organisation.

While there are examples of successful projects, all 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. Relying upon the 'enlightenment potential of exemplary cases', 'one-time visits' and 'presentations in key texts' is not enough (see Gustavsen 2007: 664-5); something more is required to facilitate a process of learning and adaptation (see Alasoini 2006). 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: 664). This approach raises big challenges for policy makers who are used to devising simple, standardised one-size-fits-all interventions or supply schemes.

Summary

What conclusions can be drawn from the above? The first, and perhaps most obvious one, is that changing employer behaviour in a bid to improve skills utilisation is

extremely challenging. Buchanan *et al* (2010: 34-35) conclude their recent overview with the observation that this is not just 'very difficult' but is 'akin to grinding through granite'. Change is likely to be slow and incremental, raising questions around sustainability, whether policy makers can commit to the long-term, and whether such initiatives can survive political shifts.

In terms of the design of specific programmes or interventions, it would seem that there are limits to how far employers can be persuaded simply by being shown some glossy evidence that a particular approach works well in another organisation (see Guest *et al* 2001). More direct forms of external support which go *inside* the organisation may be required. Such support needs to be carefully targeted and reasonably well-resourced, while those delivering this need to have the knowledge, skills and expertise to help organisations try out new approaches. Management*, workers and their representatives must not only be fully committed but also actively involved in shaping local innovations. Trust, cooperation and open dialogue are an essential prerequisite for progress in any organisation. The Nordic societies, which are generally seen as having relatively high levels of trust and a supportive institutional framework, may have certain advantages in this respect, but even here programmes have found it difficult to enlighten others simply by presenting some 'star cases' (Alasoini 2006, Gustavsen 2007).

The UK, including Scotland, comes at this from a very different starting place. In recent years, there has been little in the way of direct intervention aimed at helping organisations to re-think their work organisation and management approaches. As a recent report by UKCES (2010: 77) makes clear, business development functions have focused mainly on supporting entrepreneurship, business start-ups, and business growth. It goes on to add:

> Although there are some national and regional variations, overall, the focus of delivery is on tailored one to one advice to individual employers, covering a wide range of issues (especially financial support), through a network of advisors and brokers. *The overall emphasis tends to be on providing information and guidance, rather than direct intervention into how businesses are managed.* (UKCES 2010: 77, *emphasis added*)

The kind of workplace development 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, Keep *et al* 2010). At the same time, the institutional environment of liberal market economies, such as the UK,

would seem to pose particular challenges which may make progress at least more difficult.

This is *not* to say that carefully targeted and well designed initiatives in support of workplace development and improved skills utilisation cannot make an important difference in the UK context. Changing institutional structures and incentives is a long-term project, which depends upon the requisite political will and societal pressure (see Lloyd and Payne 2002a&b, Godard 2002). In Scotland, where the statutory aspects of employment relations policy and labour regulation are reserved matters under the control of the UK government in Westminster, the immediate challenge is to fashion interventions that can make a difference, build policy momentum and take this agenda forward.

Acknowledgements

References

Alasoini, T. (2006) 'In search of generative results: a new generation of programmes to develop work organisation', *Economic and Industrial Democracy*, 27(1): 9-37.

Alasoini, T. (2009) *Skill and Competence through a Workplace Development Programme – Finnish Experience*, Centre for Research on Lifelong Learning: Skills Utilisation and a Successful Skills strategy, Forum Report Number 21, http://crll.gcal.ac.uk/docs%5CFora%5C21stForum-Report.pdf

Appelbaum, E. (2002) 'The impact of new forms of work organisation on workers', in G. Murray, J. Bélanger, A. Giles and P.-A. Lapointe (eds) *Work and Employment Relations in the High-Performance Workplace*, pp.120-149. London: Continuum.

Arnkil, R. (2004) 'The Finnish Workplace Development Programme: a small giant?', *Concepts and Transformation* 9(3): 249-278.

Barker, J.R. (1993) 'Tightening the iron cage: concertive control in self-managing teams', *Administrative Science Quarterly* 38: 408-437.

Beddie, F. and P. Curtin (eds) (2010) *The Future of VET: A Medley of Views*. Adelaide: National Centre for Vocational Education Research

Beirne, M. (2008) 'Idealism and the applied relevance of research on employee participation', *Work, Employment and Society* 22(4): 675-693.

Bélanger, P.R., P.-A. Lapointe and B. Levasque (2002) 'Workplace innovation and the role of institutions', in G. Murray, J. Bélanger, A. Giles and P.-A. Lapointe (eds) *Work and Employment Relations in the High-Performance Workplace*, pp.150-180. London: Continuum.

Buchanan, J. (2006) *From 'Skill Shortages' to Decent Work: The Role of Better Skill Ecosystems*. Sydney: NSW BVET.

Buchanan, J., K. Schofield, C. Briggs, G. Considine, P. Hager, G. Hawke, J. Kitay, J. Meagher, A. Mournier and S. Ryan (2001) *Beyond Flexibility: Skills and Work in the Future*. Sydney: NSW BVET.

Buchanan, J., L. Scott, S. Yu, H. Schutz and J. Jakubauskas (2010) *Skills Demand and Utilisation: An International Review of Approaches to Measurement and Policy Development*. OECD Local Economic and Employment Development (LEED) Working Papers, 2010/4, OECD Publishing.

Considine, G. (2000) *Vocational Education and Training and the Labour Market: A Statistical Profile*, BVET Future of Work Project Paper. Sydney: NSW BVET.

DBIS (Department for Business, Innovation and Skills) (2010) *Skills for Sustainable Growth*: *Strategy Document*. London: DBIS.

Eddington, N. (2005) 'Skills shortages: an alternative approach to this persistent phenomenon', paper presented to the *2nd International Conference on Training, Employability and Employment*, Monash University centre, Prato, Italy, 22-23 September.

Edwards, P. and S. Sengupta (2010) 'Industrial relations and economic performance', in T. Colling and M. Terry (eds) *Industrial Relations: Theory and Practice* (third edition), pp. 378-397. Chichester: John Wiley and Sons Ltd.

Felstead, A., D. Gallie, F. Green and Y. Zhou (2007*) Skills at Work 1986-2006*. Oxford: SKOPE.

Felstead, A., A. Fuller, N. Jewson and L. Unwin (2009) *Improving Working as Learning*. London: Routledge.

Finegold, D. (1999) 'Creating self-sustaining high-skill ecosystems', *Oxford Review of Economic Policy*, 15(1): 60-81.

Gallie, D. (2007) 'Production regimes and the quality of employment in Europe', *Annual Review of Sociology*, 33, 85-104.

Gallie. D., Y. Zhou, A. Felstead and F. Green (forthcoming) 'Teamwork, skill development and employee welfare', *British Journal of Industrial Relations*.

Godard, J. (2002) 'Institutional environments, employer practices, and states in liberal market economies', *Industrial Relations* 41: 249-286.

Godard, J. (2004) 'A critical assessment of the high performance paradigm', *British Journal of Industrial Relations* 42(2): 249-378.

Geary, J. (2003) 'New forms of work organisation: still limited, still controlled, but still welcome?' In: P. Edwards (ed.) *Industrial Relations: Theory and Practice* (second edition), pp.338-367. Oxford: Blackwell.

Green. F. (2010) *Unions and Skills Utilisation*, www.unionlearn.org

Grimshaw, D. and S. Lehndorff (2010) 'Anchors of job quality: sectoral systems of employment in the European context', *Work Organisation, Labour and Globalisation* 4(1): 24-40.

Guest, D., Z. King, N. Conway, J. Michie and M. Sheehan-Quinn (2001) *Voices from the Boardroom*. London: Chartered Institute of Personnel and Development.

Gustavsen, B., H. Finne and B. Oscarrson (2001) *Creating Connectedness: The Role of Social Research in Innovation Policy*. Amsterdam: John Benjamins.

Gustavsen, B. (2007) 'Work organisation and "the Scandinavian model"', *Economic and Industrial Democracy* 28(4): 650-671.

Hall, R. and R.D. Lansbury (2006) 'Skills in Australia: towards workforce development and sustainable skill ecosystems', *Journal of Industrial Relations* 48(5): 575-92.

Hughes, J. (2008) 'The high performance paradigm: a review and evaluation', Learning as Work Research Paper No. 16. Cardiff: Cardiff University

Keep, E., K. Mayhew and J. Payne (2006), 'From skills revolution to productivity miracle – not as easy as it sounds?', *Oxford Review of Economic Policy* 22(4): 539–559.

Keep, E. (2009) 'The limits of the possible: shaping the learning and skills landscape through a shared policy narrative', SKOPE Research Paper No. 86. Cardiff: Cardiff University.

Keep, E., C. Lloyd and J. Payne (2010) 'Skills policy and the displacement of industrial relations: the elephant in the corner?', in T. Colling and M. Terry (eds) *Industrial Relations: Theory and Practice* (third edition), pp. 398-421 Chichester: John Wiley and Sons Ltd.

Keep, E, and K. Mayhew (2010) 'Moving beyond skills as a social and economic panacea', *Work, Employment and Society* 24(3): 565-577.

Kersley, B., C. Alpin, J. Forth, A. Bryson, H. Bewley, G. Dix and S. Oxenbridge (2006) *Inside the Workplace: Findings from the 2004 Workplace Employment Relations Survey*. London: DTI.

Lloyd, C. and J. Payne (2002a) 'Developing a political economy of skill', *Journal of Education and Work* 15(4): 365-390.

Lloyd, C. and J. Payne (2002b) 'On "the political economy of skill": assessing the possibilities for a viable high skills project in the UK', *New Political Economy* 7(3): 367-395.

Lloyd, C. and J. Payne (2006) 'Goodbye to all that? A critical re-evaluation of the role of the high performance work organisation within the UK skills debate', *Work, Employment and Society* 20(1): 151-165.

Lloyd, C. and J. Payne (2007) 'Tackling the UK skills problem: can unions make a difference?; in S. Shelley and M. Calveley (eds) *Learning with Trade Unions: A Contemporary Agenda in Employment Relations*, pp. 57-77. Aldershot: Ashgate Publishing Ltd.

Locke. R. (1995) 'The transformation of industrial relations? A cross-national review', in K.S. Wever and L. Turner (eds) *The Comparative Political Economy of Industrial Relations*, pp.9-31. Madison: Industrial Relations Research Association.

Lorenz, E. and A. Valeyre (2005) 'Organisational innovation, human resource management and labour market structure: a comparison of the EU-15', *Journal of Industrial Relations* 47(4): 424-442.

MacLeod, D. and N. Clarke (2009) *Engaging for Success: Enhancing Performance through Employee Engagement*. London: BIS. http://www.bis.gov.uk/files/file52215.pdf

NSW DET (New South Wales Department of Education and Training) (2008) *Skills in Context: A Guide to the Skill Ecosystem Approach to Workforce Development*. Sydney: NSW DET.

OECD (2010) Innovative Workplaces: Making Better Use of Skills within Organisations, OECD Publishing, available at http://dx.doi.org/9789264095687-en

Payne, J. and E. Keep (2003) 'Re-visiting the Nordic approaches to work re-organisation and job redesign: lessons for UK skills policy', *Policy Studies* 24(4): 205-225.

Payne, J. (2004) 'Re-evaluating the Finnish workplace development programme: evidence from two projects in the municipal sector, *Economic and Industrial Democracy* 25(4): 485-524.

Payne, J. (2008) 'Skills in context: what can the UK learn from Australia's skill ecosystem projects?', *Policy and Politics* 36(3): 307-323.

Payne, J. (2009) 'Divergent skills policy trajectories in England and Scotland after Leitch', *Policy Studies* 30(5): 473-494.

Payne, J. (2010) 'Skills utilisation: towards a measurement and evaluation framework', SKOPE Research Paper No. 93. Cardiff: Cardiff University.

Procter, S. and F. Mueller (2000) *Teamworking*. London: MacMillan

Ramstad, E. (2009a) 'Promoting performance and the quality of working life simultaneously', *International Journal of Productivity and Performance Management* 58(5): 423-436.

Ramstad, E. (2009b) 'Expanding innovation system and policy – an organisational perspective', *Policy Studies* 30(5): 533-553.

Scottish Funding Council (2010a) *Evaluating the SFC Funded Skills Utilisation Projects: Responses to the First Set of Evaluation Questions*. Edinburgh: SFC

Scottish Funding Council (2010b) *Skills Utilisation Interim Reporting November 2010*. Edinburgh: SFC.

Scottish Funding Council/Skills Development Scotland (2009) *Skills Utilisation Projects: Progress Report*, November, www.scotland.gov.uk/Topics/Education/skills-strategy/making-skills-work/utilisation

Scottish Funding Council/Skills Development Scotland (2010) *Skills Utilisation Projects: Progress Report*, August, www.scotland.gov.uk/Topics/Education/ skills-strategy/making-skills-work/utilisation

Scottish Government (2007a) *Skills for Scotland: A Lifelong Skills Strategy*. Edinburgh: The Scottish Government.

Scottish Government (2007b) *The Government Economic Strategy*. Edinburgh: the Scottish Government.

Scottish Government (2008) *Skills Utilisation Literature Review*. Edinburgh: Scottish Government.

Scottish Government (2010) *Skills for Scotland: Accelerating the Recovery and Increasing Sustainable Economic Growth*. Edinburgh: Scottish Government.

Skills Utilisation Action Group (SUAG) (undated) *Reaping the Benefits: Encouraging Employer Engagement in Skills Utilisation*, http://www.scotland.gov.uk/ Resource/Doc/276460/0082992.pdf

TEKES (2010) TEKES Programme Report 5/2010, English Summary, available at http://www.tekes.fi/en/community/News/482/News/1344?name=Making+empl oyee+voices+heard+in+workplace+development

Thompson, P. (2003) 'Disconnected capitalism: or why employers can't keep their side of the bargain', *Work, Employment and Society* 17(2): 359-378.

Trist, E. and W. Bamforth (1951) 'Some social and psychological consequences of the long-wall method of coal getting', *Human Relations* 4, 3-38.

Trist, E. (1963) *Organisational Choice*. London: Tavistock Institute.

UKCES (UK Commission for Employment and Skills) (2009a) *High Performance Working: A Synthesis of the Key Literature*, Evidence Report 4. Wath-upon-Dearne: UKCES.

UKCES (2009b) *Ambition 2020: World Class Skills and Jobs for the UK*. Wath-upon-Dearne: UKCES.

UKCES (2010) *High Performance Working: A Policy Review*, Evidence Report 18. Wath-upon-Dearne: UKCES, http://wales.gov.uk/docs/dcells/publications/ 01217stwfwstrategyandactionen.pdf

Warhurst, C. (2005) 'The knowledge economy: an opportunity for radical workplace intervention', *Budapest Management Review* 30(7/8): 78-83.

Watson, I. (2008) *Skills in Use: Labour Market and Workplace Trends in Skill Use in Australia*. Report of NSW Department of Education and Training (skill ecosystem project), http://www.skill ecosystem.net

Windsor, K. (2006) *Skill Ecosystem National Project: Mid-Term Evaluation Report*. Sydney: NSW DET.

Wood, S.J. and A. Bryson (2009) 'High involvement management', in W. Brown, A. Bryson, J. Forth and K. Whitfield (eds) *The Evolution of the Modern Workplace,* Cambridge: Cambridge University Press.