SKILLS UPGRADING NEEDS: THE CHALLENGE FOR EMPLOYERS AND TRAINING PROVIDERS IN SCOTLAND AND NORTHERN IRELAND

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skills FOR BUSINESS

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THE CHALLENGE FOR EMPLOYERS
AND TRAINING PROVIDERS
IN SCOTLAND AND NORTHERN IRELAND

Report to the Sector Skills Development Agency

Final Report, August 2007

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Sector Skills Development Agency: Research Series
Foreword

In October 2002 the Department for Education and Skills formally launched Skills for Business (SfB), a new UK-wide network of employer-led Sector Skills Councils (SSCs), supported and directed by the Sector Skills Development Agency (SSDA). The purpose of SfB is to bring employers more centre stage in articulating their skill needs and delivering skills-based productivity improvements that can enhance UK competitiveness and the effectiveness of public services. The remit of the SSDA includes establishing and progressing the network of SSCs, supporting the SSCs in the development of their own capacity and providing a range of core services. Additionally the SSDA has responsibility for representing sectors not covered by an SSC and co-ordinating action on generic issues.

Research, and developing a sound evidence base, is central to the SSDA and to Skills for Business as a whole. It is crucial in: analysing productivity and skill needs; identifying priorities for action; and improving the evolving policy and skills agenda. It is vital that the SSDA research team works closely with partners already involved in skills and related research to generally drive up the quality of sectoral labour market analysis in the UK and to develop a more shared understanding of UK-wide sector priorities.

The SSDA is undertaking a variety of activities to develop the analytical capacity of the Network and enhance its evidence base. This involves: developing a substantial programme of new research and evaluation, including international research; synthesizing existing research; developing a common skills and labour market intelligence framework; taking part in partnership research projects across the UK; and setting up an expert panel drawing on the knowledge of leading academics, consultants and researchers in the field of labour market studies. Members of this panel will feed into specific research projects and peer review the outputs; be invited to participate in seminars and consultation events on specific research and policy issues; and will be asked to contribute to an annual research conference.

The SSDA takes the dissemination of research findings seriously. As such it has developed this dedicated research series to publish all research sponsored by the SSDA.

Lesley Giles
Director of Strategy and Research at the SSDA

CONTENTS

EXECUTIVE SUMMARY

BACKGROUND AND METHODOLOGY

This report presents the findings of research on meeting employers' skills upgrading needs through engagement with Further Education (FE) and commercial vocational education and training (VET) providers in Scotland and Northern Ireland. The research was conducted by members of the Employment Research Institute, Napier University, Edinburgh; the Policy Research Institute, Leeds Metropolitan University; and the Business and Management Research Institute, University of Ulster. The research was commissioned by the Sector Skills Development Agency (SSDA) in line with the themes outlined by the SSDA's Research Prospectus 2005-2007 (and with particular relevance to its priorities on 'understanding the demand for skills' and 'identifying and meeting skill needs') – this report builds on and complements research already completed in England and Wales.[1]

The recent Leitch Review has called for a "demand-led skills system" for the UK, in order to deliver a "radical step change" in participation in skills upgrading and "embed a culture of learning" within the UK workforce.[2] It is a challenge that is reflected in the existing strategies and policies of the devolved governments of Scotland and Northern Ireland. Policy makers – and as our research demonstrates many UK employers – are aware of the need for urgent, on-going action to improve the skills of people already in work, in response to the intensification of competition in a global economy, rapidly changing and more demanding markets, technology change and increasingly complex products and services. Skills are crucial to the resulting drive for efficiency and productivity – but the ability to plan, capacity to deliver and resources to support necessary skills upgrading are limited and varied.

Our research sought to identify: skill gaps and future skills upgrading needs; employers' responses to these; and the current and potential role of FE and VET providers. A range of sectors were selected to reflect diverse employment and skills profiles, namely: the textiles sector in Scotland; the financial services sector in Scotland, specifically focusing on insurance, investments and fund management, and other services auxiliary to financial intermediation; the metal and machinery manufacturing sectors in Northern Ireland; architectural and engineering activities in Northern Ireland; and the printing and publishing sectors in Northern Ireland. The methodology involved: an extensive series of telephone interviews with a sample of employers in each sector; follow up in-depth interviews with a selection of employers; case studies of FE, commercial VET and other providers' attempts to engage with employers and respond to skills upgrading needs; and discussions with government representatives, Sector Skills Councils and other key stakeholders.

[1] NIESR, 2005: Raising Sector Skills Levels – How Responsive is Local Training Supply?; York Consulting, 2005: ELWa Creative Industries Sector Skills Study; Cardiff Business School, 2005: Review of the Learning Network and Audit of Post-16 Learning Provision for the AV Industries in Wales; Futureskills Wales, 2007: Report from the Care Council for Wales and ELWa.
[2] HM Treasury, 2006: Prosperity for all in the global economy – world class skills, Final Report.

KEY ISSUES IN SKILLS UPGRADING AND ENGAGEMENT WITH FE/VET

In the **textiles** sector in Scotland, employers described a complex range of skill sets among staff, but also low levels of qualification (less than one-fifth of all employers participating in telephone interviews described of core/main employee groups qualified above S/NVQ3 equivalent). More than three-quarters of employers predicted skills upgrading needs over the next year. For those identifying technical skill needs the effective use of machinery and CAD/CAM technologies were prioritised. In-depth interviews also highlighted the need for sector-specific commercial and communication skills for higher-skilled technicians and designers. The predicted role of commercial VET (24% of employers said that they were likely to use this form of provision) and FE providers (21% of employers) in skills upgrading was limited, reflecting a reliance on internal training and the cascading of skills from equipment suppliers. Case study research highlighted examples of good practice in employer-trainer engagement, but FE providers in particular noted that smaller employers in the sector struggled to resource time off for training. Current funding models also encourage FE providers to prioritise providing structured, full-time learning rather than the bespoke, workplace-oriented services sought by many employers.

Financial services employers reported highly qualified workforces (75% had core/main employees qualified above S/NVQ3). 90% of employers identified skills upgrading needs. Teamwork, leadership and problem-solving were prioritised, but the majority of employers also identified technical skill needs. Drivers include the introduction of new regulation and technology; the need to provide higher quality and more proactive customer services; and the increasing complexity of financial products. Predicted use of commercial VET was relatively common (42% of all employers, compared to 26% predicting *some* role for FE). The role of these providers will be limited by a necessary focus on internal training on company-specific products and systems and (for higher skilled staff) a reliance on learning through professional institutes. However, there may be a future role for FE/VET in facilitating professional learning, delivering sector-contextualised soft skills and supporting continuing professional development, *if* providers can demonstrate their ability to add value to existing training. Case study research showed that some providers have developed effective relationships with employers, by providing flexible services linked to accredited professional learning.

Metal/machine manufacturing in Northern Ireland reported a high proportion of core/main employee groups qualified to NVQ2 (35%) and NVQ3 and above (36%). 90% of employers predicted skills upgrading needs, particularly teamworking and technical skills (the effective use of machinery and new design technologies). A relatively high proportion of employers predicted *some* role for FE (43%) and VET (53%) in skills upgrading, although most training is likely to be delivered internally. Case studies highlighted the success of Northern Ireland's Centres of Excellence in developing the flexible, highly specialised provision sought by employers. The transferability of such approaches will require sufficient demand and resources among employers and the capacity to engage employers and develop bespoke provision among providers.

Architectural and engineering employers reported highly qualified core/main employee groups (87% at NVQ3 or above) and predicted skills upgrading needs (90%, with 67% prioritising technical skills, mainly focusing on the use of new design technologies). Similar proportions of employers predicted a role for FE (34%) and commercial VET (36%), but there is also likely to be a heavy reliance on internal training and learning through professional institutes. Case study research showed that FE/VET providers have made progress in developing flexible services, but that the dominance of SMEs and micro-employers can make it difficult to establish commercially viable new provision.

Printing and publishing employers reported a diverse range of qualification and skills profiles (in total 53% of core/main employees were qualified at NVQ3 or above). Two-fifths of employers predicted skills upgrading needs (the introduction of new technologies was the main driver). The relatively limited predicted role for FE (17%) and commercial VET (27%) reflects a reliance on internal training. Case study research with a leading FE provider identified good practice in delivering highly specialised, technical training sought by print employers, but it was acknowledged that there remains work to do to challenge negative perceptions of the FE sector and NVQ training routes.

There are clear **cross-sectoral and cross-national themes** that should inform broader lessons for skills policy. Across all sectors it is clear that the funding and planning of future vocational training provision must be informed by a commitment to delivering services that are demand-responsive and highly specialised/bespoke in nature (and, if necessary, delivered through peripatetic and/or workplace-based approaches). Turning such an aspiration into a reality may require considerable investment to ensure that (especially FE) provision is ‘fit for purpose’, in terms of the content of programmes, the quality of training facilities and the expertise of staff. It is also clear that if FE/VET is to play a greater role (where considered appropriate) in skills upgrading, incentives need to be in place to encourage providers to engage with employers. Training providers across sectors discussed above – like those participating in previous studies in England and Wales – often lacked the resources to develop specialised provision required, struggled to find the time to establish long-term relationships, and encountered problems in identifying a ‘critical mass’ of employers with sufficient training budgets to make the establishment of demand-responsive services viable. If employers’ identified skills upgrading needs are to be addressed, governments in Scotland and Northern Ireland may need to revisit issues around providing targeted funding incentives for SMEs in particular, while also considering how to most effectively support FE providers’ attempts to develop long-term strategies to respond to employers’ needs. Finally, there is a basic need for improved communication between employers and trainers, so that the latter can communicate the benefits associated with their services, build trust and confidence, and learn about what employers want.

CONCLUSIONS AND IMPLICATIONS FOR POLICY

There are specific actions required in each of the sectors, but also more general implications for policy emerging from our research with employers, training providers and other key stakeholders.

1) Raising awareness of the need for skills upgrading to 'shift up the value chain'

A first priority for all key stakeholders involved in the sector skills agenda must be to reinforce the case for the benefits of skills upgrading among employers. Not all employers participating in our research saw skills upgrading as a priority – across all sectors between one-third and three-fifths saw no technical skills upgrading needs for the near future. There is therefore a constant need to assist employers to identify business development opportunities and implications for skills, and to demonstrate the business benefits associated with skills upgrading. The many employers who were aware of the need to take action should be helped to identify and articulate specific skills upgrading activities that will enable them to shift their business 'higher up the value chain'. Clearly, there is a role for Sector Skills Councils (working in partnership with other key stakeholders) in encouraging the consideration of these issues, and in making the business case for skills investment to employers.

2) Helping employers to take forward the skills upgrading agenda

The majority of employers across all sectors predicted addressing future skills upgrading needs primarily through internal training mechanisms. In many cases internal provision will be appropriate, but there may be benefits in further action to help employers to make an informed decision on training provision having considered all the potential external and internal mechanisms available. Some sectors would benefit from an 'FE/VET advocate' or intermediary to raise awareness among employers of what training providers have to offer. The role of such an intermediary should not be seen as 'selling' the services of any one type of provider, but merely as informing employers and assisting them to plan the most effective combination of training interventions. Sector Skills Councils may be best placed to take forward such an intermediary/advocacy role, working in partnership with sector specialists within devolved administrations and their executive agencies.

3) Trainers' commitment to employer engagement is essential

Case study research across all sectors demonstrated the value of FE and VET providers having the time and resources to build relationships of trust with employers and learn about their skills upgrading needs. Encouraging such providers to set aside time and resources to build relationships with employers should be retained as a key feature of the Centres of Excellence model in Northern Ireland and of any future initiatives by devolved administrations to develop 'hubs' of expertise in the FE sector. In the more immediate term, there is a need to build upon and integrate the work of the Sector Skills Councils, Training Councils and Workforce Development Forums in Northern Ireland, and Local Enterprise Companies in Scotland in effectively linking employers with providers.

4) The value of promoting 'first contacts' and deepening relationships

In all the sectors studied employers regularly expressed satisfaction with both FE and other forms of VET provision, and FE/VET users were much more likely to consider using the same type of services for future skills upgrading. There is therefore a case to be made for initiatives that establish 'first contacts' and then deepen relationships between training providers and industry, which may take the form of 'Lecturers into Industry' learning exchanges or short pilot training initiatives. There may be scope for Sector Skills Councils to work with training providers and relevant key stakeholders to facilitate such initiatives.

5) Improving communication lines

In a number of sectors there appears to remain a need to provide regular and consistent information to employers about the availability of local FE, Higher Education (HE) and VET provision. In sectors where a database of such information is readily available, employers need to be made aware of this resource. Information services should retain a local focus, while also linking to UK-wide information of available provision. The development of improved information facilities is therefore likely to require partnership-working between local, national and UK-wide stakeholders.

6) Responding to specialist technical skill needs and context-specific soft skill needs

Our research with employers demonstrated that successful relationships with trainers are based on the latter providing highly specialised, detailed, technical training of immediate practical value. Even when softer skills were discussed, it is notable that some employers wanted to access training that delivered commercial or communication skills within a sector-specific context. It is essential that the offer of such specific training, based on strong consultation processes with industry, is a key part of attempts to engage with employers. Sector Skills Councils need to work with employers to more clearly define and articulate the specialist skills provision required within each sector, and to work with funders and providers on ways to make that provision available. Sector Skills Agreements are one vehicle to achieve this. There may also be scope for joint-working between Sector Skills Councils to identify shared/similar skill needs across industries, to help inform the development of FE/VET provision that can be easily adapted to the specific needs of a number of different sectors.

7) Spreading good practice from 'entrepreneurial' FE/VET providers

Our case study research identified a number of examples of good practice where FE and commercial VET providers have been able to develop bespoke, highly specific and expert training of value to employers. The same examples of good practice were often marked by a commitment to delivering training in the flexible formats required by employers, in terms of location, duration, timing and method (including e-learning and peripatetic workplace-based services). Yet training providers and key stakeholders have acknowledged that the FE sector is not always able to demonstrate the flexibility and expertise demanded by employers. Strategic leaders within the FE sector in the devolved nations (and indeed in England) need to continue to challenge colleges and professionals to demonstrate their capacity to deliver high-quality, practical, relevant services. Even successful FE and VET providers participating in our research faced problems in identifying a 'critical mass' of employers willing to commit to new training (especially in sectors dominated by smaller establishments with limited time and resources for skills upgrading). One way to establish a 'critical mass' among smaller employers may be to develop cross-sectoral training initiatives, based on the shared skill needs of employers in different sectors. There may be an important role for joint-working between Sector Skills Councils in facilitating such co-operation between sectors.

8) Promoting excellence in FE/VET provision

Many of the priorities discussed above – promoting trainer-employer engagement; developing sector-specific and context-specific training content; and encouraging an entrepreneurial ethos among FE providers – may be most effectively accomplished through an increasing emphasis on 'hubs' of expertise and specialist facilities. By concentrating sector-specific expertise and resources in a single institution or closely linked consortium of providers there may be opportunities for synergy and capacity building. Such an approach implies a strengthening of the Centres of Excellence approach in Northern Ireland, CoVEs in England and Networks of Excellence in Wales. Policy makers and funders in Scotland should consider lessons from these initiatives in planning future investment in FE provision. In all cases, there is a need to carefully assess the likely return on investment in supporting the development of such hubs. Careful consideration is also required regarding the location of any hubs – services need to be strategically located to maximise accessibility, while still acknowledging that peripatetic, outreach and workplace-based provision is likely to remain important.

9) Promoting the formalisation, not just the accreditation, of in-house learning

All the sectors discussed above were marked by a reliance on internal, often informal, training. There is a need for Sector Skills Councils and partners to promote the formalisation and accreditation of in-house learning, and our stakeholder interviews identified this as a key strategy in some sectors. We should guard against promoting 'qualifications for their own sake', but formalising and accrediting training arrangements can help to 'lock in' good practice and eliminate cascading errors, and may also help to address recruitment and retention problems. Progress towards the formalisation and accreditation of training need not always involve heavy input from training providers, but FE and VET professionals may have the capacity to add value through their expertise in both the relevant subject area and in effectively delivering learning. To this end, there may be a role for FE/VET providers in helping to formalise in-house provision through 'training the trainers' initiatives. It is also essential that Sector Skills Councils work with trainers and qualifications authorities to arrive at a framework for vocational qualifications that is flexible, credible and relevant to employers' needs.

10) Supporting smaller employers to undertake crucial skills upgrading

In some sectors there was evidence that micro-employers and SMEs had identified pressing skills upgrading needs, but struggled to resource training or to allow core employees time off. It is difficult to make the case for large-scale training subsidies, but there may be scope for carefully targeted additional funds to provide incentives to both employers and trainers, where smaller employers are able to clearly demonstrate the planned benefits that would accrue from urgently needed short-term support. *Train to Gain* in England (which offers employers support to access external provision and compensates time off for training) has enjoyed some success in targeting 'hard to reach' employers. Funders in Scotland and Northern Ireland should consider the transferability of this model.

11) Towards a continuing process of in-depth employer consultation and research

It is hoped that the research reported in this document adds value to existing sector-based studies and national skills surveys. The research has deployed a range of quantitative and qualitative research tools to compare issues across sectors, reporting the perspectives of employers, training providers and strategic stakeholders. Similar methodologies may be usefully deployed to identify common areas for policy intervention in other sectoral, national and regional contexts. Future cross-sectoral research may add most value by developing more detailed, qualitative insights into the specific issues faced by key groupings of employers and investigating the opportunities and barriers associated with the emergence of demand-responsive skills provision.

12) Reflecting on the role of FE/VET in responding to employers' skills upgrading needs

As noted above, the Leitch Review has called for a "demand-led skills system" to deliver a "radical step change" in participation in skills upgrading. Policy makers and other stakeholders agree that FE and VET provision must be guided by the needs of industry if we are to achieve this necessary step change. FE providers are committed to skilling their students for the world of work. But the same providers tend to have less of a role in addressing the urgent skills upgrading needs identified by employers seeking to maximise the potential of their current workforce. This is understandable given that funding arrangements incentivise FE providers to deliver highly structured, long-term, full-time learning rather than the flexible provision demanded by employers. While it is not the role of publicly funded organisations to act as employers' private training providers, there needs to be a broader debate about the role, resources and responsiveness of FE (and even HE) institutions in facilitating skills upgrading. The funding, targets and content of FE provision in all UK nations need to be reviewed within this context. Many employers are aware of the urgent need to develop their staff so that they can compete 'higher up the value chain', but are unsure of the extent to which external providers can assist in this process. The time has come for devolved administrations, UK government agencies, and funders and providers involved in the sector skills agenda to fundamentally re-consider the role of vocational education and training institutors in "embedding a culture of learning" in the workplaces of Scotland, Northern Ireland and beyond.

1. INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION TO THE RESEARCH

This report presents the findings of research exploring employers' skills upgrading needs and engagement with Further Education (FE) and commercial vocational education and training (VET) providers in Scotland and Northern Ireland. The research was commissioned by the Sector Skills Development Agency (SSDA) in line with the themes outlined by the SSDA's Research Prospectus 2005-2007 (and with particular relevance to its priorities on 'understanding the demand for skills' and 'identifying and meeting skill needs'). The research was conducted by members of the Employment Research Institute, Napier University, Edinburgh; the Policy Research Institute, Leeds Metropolitan University; and the Business and Management Research Institute, University of Ulster.

The aim of the research was to investigate the nature of employers' skills upgrading needs, and FE/VET providers' responses, in selected sectors in Scotland and Northern Ireland. It focused upon skills gaps (where existing employees are not considered by the employer to have the skills to carry out their job with full proficiency in future) and resulting upgrading needs, and not skills shortages (which apply to potential new employees). Specifically, the research sought to explore a number of questions:

- In the selected sectors, what are employers' main skills upgrading requirements, with particular reference to the occupation groups that they believe to be critical to their organisations' future performance?
- To what extent do employers rely upon external FE and commercial VET providers to help meet these skills upgrading needs and what alternative approaches do they take?
- How do employers make decisions around engaging with FE and commercial VET providers, and what are the main factors that influence employers' decisions?
- What types of training provision are most attractive to employers as a way of meeting their skills upgrading requirements?
- For FE and commercial VET providers heavily involved in supplying services to employers, what are the main factors that help to nurture these relationships? And what are the main barriers faced by providers not heavily involved in supplying training services to employers?
- What specific kinds of changes in the organisation and funding of FE and commercial VET providers would help them to respond more effectively to employers' training needs?

The research sought to address these issues through an extensive series of telephone interviews with employers in a diverse range of manufacturing and service sectors in Scotland and Northern

Ireland. The sectors that provided a focus for the research were textiles and financial services in Scotland; and metal/machine manufacturing, architectural, engineering and related activities, and printing and publishing in Northern Ireland. While it is hoped that each 'sector chapter' offers insights into industry-specific issues, the research was designed to identify general, cross-sectoral issues regarding future skills upgrading needs and factors affecting the responsiveness of training provision. The research also built and reflected upon previous studies conducted in England and Wales (see Section 8.3 for comparative discussion) in order to identify both implications for policy that are UK-wide as well as issues that are specific to the devolved nations.

Seeking to move beyond the standard 'skills survey' approach that has provided useful, but essentially quantitative, data under previous studies, the research also involved in-depth, face-to-face follow-up discussions with a small sample of employers, designed to provide detailed qualitative insights and unpack issues raised during telephone interviews. Case studies with training providers then sought to identify good practice in engaging with employers and identify opportunities and problems associated with building improved employer-trainer relationships. Finally, the findings and implications for policy presented below were discussed with relevant policy actors and key stakeholders, with their views on the emerging policy context reported alongside our conclusions.

1.2 BACKGROUND TO THE RESEARCH

Policy makers in both Scotland and Northern Ireland have emphasised the need to ensure that training provision is responsive to the needs of employers. Within the broader policy context, the **Leitch Review of Skills**[3] has reinforced the view that the UK must urgently 'raise its game' and set itself a greater ambition to have a world-class skills base by 2020. The report recommends a range of actions including those relating to:

- increasing employer investment in Level 3 and 4 qualifications in the workplace;
- promoting a 'pledge' for employers to voluntarily commit to train all eligible employees to Level 2 in the workplace;
- strengthening the work-focused *Train to Gain* and *Learner Account* initiatives in England;
- strengthening employer voice and increasing employer engagement and investment in skills, primarily through the empowerment of Sector Skills Councils;
- promoting integrated employment and skills services based upon existing structures with a view to increasing sustainable employment and progression;
- generally increasing employers' and individuals' awareness of the value of skills.

[3] HM Treasury, 2006: Prosperity for all in the global economy – world class skills, Final Report.

These recommendations are to be underpinned by the principles of shared responsibility between employers, individuals and government, a focus on demand-led, economically valuable skills, adaptability and responsiveness, and continuity through improving existing structures.[4]

Many similar themes have been present in the policy agenda in Scotland and Northern Ireland. Skills policy in Scotland is guided by the key national enterprise and lifelong learning strategies – **A Smart Successful Scotland** and **Life through Learning, Learning through Life** respectively.[5] In terms of building workforce learning provision, much of the emphasis in 'Life through Learning, Learning through Life' is on the need to promote quality assurance in FE and professional development for FE officers. However, the Scottish Executive has also acknowledged the need for employers and training providers to work more closely together. 'Life through Learning, Learning through Life' notes that evidence from the Scottish Employer Skills Survey suggests a relationship between skills gaps and organisations choosing internal training as their sole approach to skills upgrading. The Strategy notes that too much of employer training is "unfocused or of poor quality, and therefore of little value to either the organisation or the client"[6], and argues for further support for smaller employers, which tend to have less well developed human resources (HR) and training functions. It is clear that there is the potential for a more pro-active role for the FE sector in responding to workforce skills upgrading needs – a review of the **Supply and Demand for FE in Scotland**[7] for the Scottish Funding Council has argued for further consideration as to how the FE and post-16 system can be more demand-driven and skill needs-driven. A **Review of the Skills for Business Network in Scotland**[8] concludes that key stakeholders in Scotland need to work more closely in partnership to promote pro-active engagement between skills providers, employers and funders. The SSDA, Sector Skills Councils and partners continue to work with key stakeholders in Scotland in order to develop and build on current successful partnership working.

The Department for Employment and Learning, Northern Ireland (DELNI) published **The Skills Strategy for Northern Ireland: A Programme for Implementation**[9] in February 2006. This sets out a vision for skills which includes: a highly competitive economy based on high value added jobs; a literate and numerate workforce with good ICT skills; a better understanding of the current and future demand for skills; and employers who can anticipate future skill needs and are willing to invest in the skills of their employees. DELNI has highlighted the importance of collaboration between employers and the VET system so that training providers can have a better understanding of employers future skills needs, improving the focus of training. The strategy also outlines the relevance of proposals in

[4] ibid.
[5] Scottish Executive, 2004: A Smart, Successful Scotland; Scottish Executive 2003: Life Through Learning, Learning Through Life: the Lifelong Learning Strategy for Scotland.
[6] Scottish Executive, 2003: Life Through Learning, Learning Through Life: the Lifelong Learning Strategy for Scotland.
[7] Scottish Funding Council, 2005: Supply and Demand for Further Education in Scotland.
[8] Scottish Executive, 2006: Review of the Skills for Business Network in Scotland.
[9] DELNI, 2006: The Skills Strategy for Northern Ireland: A Programme for Implementation.

the **FE Strategy for Northern Ireland** ‘FE Means Business’ which points to a greater role for the FE network in economic development.[10] In order to deliver these proposals there is to be a major re-organisation of the FE sector, with the merging of the existing 16 FE colleges to form 6 new larger regional colleges by August 2007. It is envisaged that larger and more influential colleges will enhance the FE sector’s profile and status, particularly with employers and employer representative bodies. DELNI expects that the new structure will also enable the sector to play an increased role in regional planning and economic development (through the provision of relevant vocational and business skills for individuals, and in supporting business creation, incubation and product development). DELNI has also committed to the reform of Northern Ireland’s qualifications structure to ensure that qualifications are ‘responsive’ and ‘fit for purpose’. The aim is to produce a more consistent approach to accrediting skills in line with the needs of employers.

The brief review of policy and strategy above touches on the context for the research reported in this document. The UK government, and policy actors in Scotland and Northern Ireland, have emphasised the need for a step change in promoting skills upgrading within our economies. Improved workforce development and high quality, demand-responsive, flexible FE and VET provision are seen as crucial to taking forward this agenda. Our research has sought to investigate the current and potential role of FE and commercial VET providers in helping employers to address skills upgrading needs. The implications for policy discussed as part of our conclusions (Chapter 8) and throughout highlight the need for continuing action to improve employer-trainer relationships, and assist employers to arrive at the most effective skills upgrading solutions for their workforces.

The remainder of the report is structured as follows:

- Chapter 2 discusses the methodology and sectoral focus for the research;
- Chapter 3 discusses findings from research with employers and training providers in the textiles sector in Scotland;
- Chapter 4 discusses findings from research with employers and training providers in the financial services sector in Scotland;
- Chapter 5 discusses findings from research with employers and training providers in the metal and machinery manufacturing sectors in Northern Ireland;
- Chapter 6 discusses findings from research with employers and training providers involved in architectural, engineering and related design activities in Northern Ireland;
- Chapter 7 discusses findings from research with employers and training providers in the printing and publishing sectors in Northern Ireland;
- Chapter 8 presents an overview of findings and conclusions from the preceding research, discusses the responses of key stakeholders, and identifies implications for policy.

[10] DELNI, 2006: Further Education Means Business: A Programme for Implementation.

2. METHODOLOGY

The research was carried out in five phases:

- an extensive review of literature and policy;
- telephone interviews with 312 employers across the target sectors;
- in-depth follow-up interviews with 15 of these employers (designed to unpack issues raised by employers during the telephone interview phase);
- case study research with 14 training providers engaging, or attempting to engage, with employers in the target sectors;
- interviews with/feedback from representatives of government bodies and other key stakeholder agencies involved in the skills agenda.

Sectors for the research were selected following consultations with key stakeholders, including the Scottish Executive, SASScot and Futureskills Scotland and the Department for Employment and Learning, Northern Ireland (DELNI), and in agreement with the project Steering Group (which included representation from the SSDA, Sector Skills Councils and devolved government departments). The mix of sectors selected was designed to ensure the participation of employers facing a wide range of skills, productivity and business development issues, thus maximising the generalisability of lessons drawn from the analysis. Accordingly, an extensive analysis of official statistics datasets, skills survey data and other sources resulted in the selection of sectors reflecting a mix of:

- manufacturing and service industries (in both cases predominantly private sector-oriented);
- different levels of labour productivity and foreign trade exposure;
- different levels and types of skills and training requirements;
- different levels of reported internal employee skill gaps;
- barriers to workforce development (including perceived gaps in local VET provision);
- different levels of engagement with FE and other training providers for workforce upskilling.

A number of the sectors selected also played a distinctive role within the regional labour market, or had experienced distinctive processes of employment or skills change in the recent past.

The **textiles** sector in Scotland, defined according to Standard Industry Classification (SIC) sectors 17-19, employs approximately 17,000 people in 450 companies. The sector's employment has declined by approximately 50% from 1997 (when 33,800 people were estimated to work in textiles). However, despite a difficult period of restructuring, employment (especially in higher skilled design and production jobs) has more recently grown in the sector. Scotland's textiles sector also benefits from a number of internationally recognised brands (ranging from Harris Tweed to Goretex) and a particularly strong technical textiles industry, which accounts for 25% of employment and 40% of turnover in the sector in Scotland.[11] However, levels of qualification have traditionally been poor among many textiles staff and investment in skills is complicated by the high proportion of SMEs and micro-enterprises in the sector (micro-enterprises make up more than 60% of all employers).

The **financial services** sector in Scotland employs approximately 108,100 people based across more than 2,000 sites. The sector has rapidly expanded in recent years, with an average annual growth rate of over 5%, around four times that of the Scottish economy. The Scottish financial services sector, based around Edinburgh and Glasgow, continues to increase its contribution to the UK economy, and presently accounts for almost 8% of total financial services output. The sector in Scotland is also distinctive due to the concentration of both major insurers and investments/fund management companies – these areas of activity provide a higher proportion of Scottish finance jobs than in any other regional labour market outside London, reflecting Scotland's status as a major centre of 'high end' financial services. As a result, Scotland is also distinctive in regional terms in hosting a number of very large 'processing' and contact centre operations. Accordingly, these areas of activity, and other activities auxiliary to financial intermediation (SIC 66-67) provided the focus for our research.

The **metal and machinery manufacturing** sectors in Northern Ireland (SIC 27-29) employ approximately 13,750 people across more approximately 1,160 establishments (although it should be noted that almost three-quarters of all establishments employ less than five members of staff). The sector is therefore distinguished by its relative importance within Northern Ireland's economy (in comparison to other areas of the UK) and the particular dominance of micro-enterprises and SMEs, which raises specific challenges in relation to the delivery of training.

Architectural, engineering and related activities (SIC 7420) mainly linked to the technical design requirements of the construction industry account for more than 1,000 establishments in Northern Ireland. Levels of qualification tend to be high, but this can result in recruitment problems – recent research suggested that almost half of Northern Ireland employers had recently struggled to recruit. UK figures again suggest that micro-enterprises dominate the sector, with more than 90% of employers reporting less than 10 staff.[12]

The Inter-Departmental Business Register suggests that there are 365 VAT-registered establishments in the **publishing, printing and reproduction of recorded media** sector in Northern Ireland (SIC 22). Approximately 6,640 people are employed in the broader 'Manufacture of paper products, publishing and printing' sector. Specifically referring to the print sector, the relevant SSC

[11] Scottish Enterprise, 2007: A Strategy for the Scottish Textiles Industry in Scotland.
[12] Construction Industry Council, 2004: Built Environment Professional Services Skill Survey.

has noted that almost three-quarters of these 190 employers are micro-enterprises.[13] The sector also requires a diverse range of skill sets, covering a range of publishing, media production, and printing activities. Across all areas of the sector, advances in publishing, printing and design technologies have raised challenges for skills upgrading.

A sample framework for telephone interviews was developed for each of the sectors using Annual Business Inquiry and Inter-Department Business Register data, in an attempt to ensure that micro-employers, and small, medium and large establishments were adequately represented within the research. Very small micro-employers (with less than 5 staff) were excluded from the research. Initial sizeband and overall targets for responses from each sector were revised due to varying response rates. Specifically, initial overall targets of a total of 75 interviews per sector in Scotland were not achieved due to variable response rates and time pressures. In Northern Ireland, the response rate among printing and publishing employers was particularly low (resulting in an initial target of 50 interviews being revised to only 30). In contrast, response rates among metal/machine manufacturing employers were particularly high, so that an initial target of 75 interviews was exceeded. The data, as presented in the analysis below, have not been weighted, so that it is important to acknowledge that the results are representative of the sample of employers participating in our research rather than the total population of employers in each sector.

The telephone interviews gathered basic business details (regarding areas of activity and recruitment trends), and information on workforce qualifications and skills, predicted skills upgrading needs and drivers, and previous and predicted engagement with training providers. The research was given a specific focus by concentrating on the skills upgrading needs of ‘core’ employees – those employees considered by employers to be central to the effective operation of the business. Establishments with 10 or more staff were asked to concentrate on the skills of these employees; establishments with 5-9 staff were asked about their staff in general as it was not considered practical to require such micro-employers to sub-divide an already limited workforce. An additional focus was provided by our specific concentration on the technical knowledge and skills required by employers in the immediate/medium term – although employers were given the opportunity to discuss ‘soft’ skills (such as communication and teamwork skills) we sought to particularly focus discussions on the skill sets that are highly specific to individual sectors, areas of business and occupations. The telephone interview schedule was deployed by researchers based mainly at the Survey Research Centre at the Policy Research Institute, Leeds Metropolitan University. The interview schedule was devised so as to allow researchers to probe interviewees’ responses and record verbatim comments.

[13] Proskills, 2006: Sector Skills Agreement, Stage 1 Report: Skills Needs Assessment for Northern Ireland.

In-depth interview participants were purposively selected to reflect the different size and type of employers participating in the research. Urban/rural classification frameworks used by the Scottish and Northern Ireland administrations were also deployed in an attempt to provide coverage of employers seeking to train staff in different geographical contexts. Face-to-face interviews were conducted with participants, recorded and analysed. Drawing on the findings of our telephone and in-depth interviews, as well as consultations with key stakeholders, case study institutions were selected to represent the range of organisations involved in responding, or attempting to respond, to employers' skills upgrading needs. Case study visits and in-depth interviews were therefore undertaken with commercial VET, FE, HE and other providers.[14]

A summary of the research undertaken in each sector and key stakeholders providing feedback/interviews is provided in the tables below.

Table 2.1 Number of interviews/case studies in target sectors

Sector	Telephone interviews	In-depth interviews	FE/HE/VET case studies
Textiles (S)	62	3	4
Financial services (S)	73	4	4
Metal/machine manufacturing (NI)	87	4	2
Architectural and engineering/related (NI)	60	2	3
Printing and publishing (NI)	30	2	1

Table 2.2 Key stakeholder feedback/interviews

Scotland	Northern Ireland
Financial Services Skills Council	Association of Northern Ireland Colleges
Scottish Enterprise: financial skills group	DELNI: FE strategy group
Scottish Enterprise: textiles group	Engineering Training Council
Scottish Executive: finance; manufacturing groups	Invest Northern Ireland
Scottish Further Education Unit	Learning and Skills Development Agency
Scottish Funding Council	Proskills (printing sector SSC)
Skillfast-UK (textiles sector SSC)	SEMTA (metal engineering sector SSC)

[14] See appendices for sample framework for telephone interviews and interview schedules (only available on the website version of the report at www.ssda.org.uk).

3. THE TEXTILES SECTOR IN SCOTLAND

KEY ISSUES FROM THE RESEARCH IN THE TEXTILES SECTOR

- 62 telephone interviews and 3 in-depth face-to-face interviews were carried out with textiles employers. 4 case studies were undertaken with FE, HE and VET providers in the sector.
- The sector is rapidly changing and many employers are therefore committed to future skills upgrading. 63% suggested that their workforces/core employee groups had required upskilling during the previous 2-3 years, with new products and work practices the main drivers.
- Nearly half of all employers predicted a need for sector/occupation-specific technical skills as a key future skills upgrading priority. Many employers were also concerned with softer skills, such as teamwork, leadership and communication skills, but those participating in in-depth interviews were wary of ‘off the shelf’, generic courses in communications or business skills. Instead, they prioritised highly specialised training to allow skilled technicians to apply and communicate their work within a commercial setting, in order to market existing products, plan and budget for new products, and gather information on potential customer requirements.
- Previous and planned use of FE and commercial VET provision was relatively limited among employers – the main barriers were a perceived lack of need for their services; and the view that the skills required were too specific to be offered by such providers. However, employers who had previously used FE and/or VET were much more likely to have plans to use these providers in the future, suggesting that initiatives to promote ‘first contacts’ between employers and trainers or short ‘taster’ training may lead to sustainable relationships.
- Employers’ future skills upgrading activities will largely involve a familiar combination of relatively brief training sessions provided by equipment suppliers, and the cascading of learning from one employee to another through internal (and often informal) on-the-job training. There may be scope for external providers to assist employers to formalise and accredit their training – formalised structures can ‘lock in’ good practice and help to eliminate errors in the cascading of skills. However, if FE/VET is to play a greater role there is a clear need to strengthen networks between employers and providers, so that employers can articulate the need for highly specialised training delivered in flexible formats, and training providers can demonstrate their expertise.
- Case study research with training providers highlighted the limited resources available to build relationships with employers. However, there were also examples of good practice, where FE and VET providers had responded to employers’ skill needs by developing blended learning that combined flexible services with specialist training in the workplace (delivered by peripatetic trainers). There is scope for key stakeholders to further develop such approaches in response to future skills upgrading needs.

3.1 INTRODUCTION

There are approximately 17,000 people employed in 450 companies in the apparel, footwear and textiles (hereafter simply 'textiles') sector in Scotland. The geography of textiles employment is more diverse than in many other sectors – the city of Glasgow hosts the largest number of textiles employers, but there are also important areas of activity in the Scottish Borders (particularly around Hawick and Selkirk), Fife, Tayside and East Ayrshire. The relevant Sector Skills Council, charged with working with partners to ensure the responsiveness of skills provision, is Skillfast-UK.[15]

The sector faces significant challenges in relation to skill needs. Its workforce is ageing, with a slightly older age profile than the general labour force. According to Scottish Employer Skills Survey, internal skill gaps are also much more prevalent among individual textiles employers – 32% of textiles employers reported skill gaps compared to 21% of all employers.[16] However, these skill gaps were mainly concentrated in non-technical areas such as teamwork and customer services.

The manufacture of textile products and apparel are clearly key activities and sources of employment within the textiles sector. Accordingly, our research focused on employers engaged in the general 'manufacture of textiles' (SIC 17), and the 'manufacture of apparel' and 'manufacture of footwear' (SIC 18-19). A total of 62 telephone interviews were undertaken with employers across Scotland. Emerging issues were followed up during in-depth interviews with 3 of these employers, and through case study research with 4 institutions involved in the provision of training services to the sector. Finally, interviews with representatives of key stakeholder bodies (see Chapter 2 of this report for a list of stakeholders) enabled the research team to discuss the responsiveness of current skills provision and areas for policy action. The remaining sections of this chapter report the findings of our research with employers (3.2) and training providers (3.3), before discussing conclusions and the implications for policy (3.4).

3.2 FINDINGS FROM RESEARCH WITH EMPLOYERS

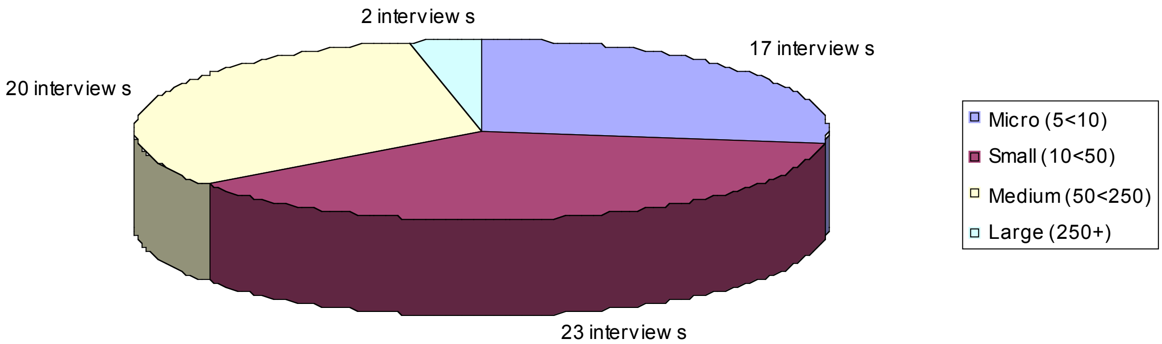
3.2.1 Sample for survey research and selection of in-depth interviews

The findings below discuss responses from 62 telephone interviews with textiles establishments. Of these, 50 interviews were undertaken with establishments involved in the manufacture of textiles (SIC 17), 11 with establishments working in the manufacture of apparel (SIC 18) and a single

[15] Skillfast-UK has a remit to help employers to access an appropriately skilled workforce, by ensuring that skills provision and qualifications are responsive to employers' needs. The Skillfast-UK 'sector footprint' covers the apparel, footwear and textiles supply chain. It encompasses raw material supply, through all processing stages, to finished goods, including as ancillary functions such as design, trading, wholesaling, converting and support services.
[16] Futureskills Scotland, 2006: Skills in Scotland.

interview with a footwear manufacturer (SIC 19.30). Just over one-quarter of the sample (17 of 62 employers or 27%) were micro-establishments with less than 10 staff, and a further 23 (37% of all responses) were small establishments with 10<50 staff. 20 interviews (32%) were conducted with medium-size establishments (50<250 staff) and 2 (3%) with large establishments which had more than 250 staff.

Figure 3.1 Sample of employers by employment sizeband



In addition to the telephone survey research a series of 3 in-depth, face-to-face interviews was undertaken (with interviews lasting between 60 and 90 minutes). Respondents for in-depth interviews were purposively selected to reflect a range of locations, establishment sizes, skill profiles and areas of manufacturing activity. In-depth interviews were therefore undertaken with:

- a specialist knitwear manufacturer; based in Selkirk, Scottish Borders (classified as an ‘accessible small town’; population 5,800); medium-size establishment (150 staff);
- a woven fabrics manufacturer; based in Forfar, Angus (‘accessible/other urban area’, population 13,200); large establishment (300 staff);
- a specialist geo-textiles and woven fabrics manufacturer; based in Dundee (‘large urban area’, population 143,000); small establishment (45 staff).

Findings from these in-depth interviews are reported alongside the telephone survey results below, in order to provide more detailed insights into employers’ attitudes and approaches towards upskilling.

3.2.2 Workforce and recruitment issues

Recruitment issues

The majority of employers interviewed for the research reported relatively stable workforce numbers. Although most had recruited staff in the previous year (see below) in many cases this flowed from staff turnover rather than expansion. The largest single group of employers (28 of 62, or 45% of employers interviewed) reported no change in the workforce numbers during the previous year. 19

employers (31%) reported an increase in their workforce (although only 5 of these employers described the increase as 'large or medium sized'), while only 14 (23%) reported reducing staff numbers (1 employer was not trading 12 months prior to the research). For those adding to their staff numbers, 'increased turnover' was most often cited as the main reason.

While only 19 employers reported an increase in their total workforce, 44 (71%) had recruited to their core or main employee group in the previous year. For many of these employers, recruitment had proved difficult – 32 of the 44 employers recruiting (73% of these and 52% of all employers) said that it was 'difficult' or 'very difficult' to recruit appropriate people. The main reasons for recruitment problems focused on a lack of applications (mainly reflecting the tightness of the Scottish labour market) and the lack of technical knowledge and skills among applicants. It is notable that textiles employers were much more likely to be concerned with inadequate technical skills and experience than other 'softer' skills – the only other skill shortages among applicants mentioned by employers related to a lack of communication, problem-solving, 'business/commercial' and literacy skills (individually mentioned by one employer each).

Table 3.1 Reasons for recruitment difficulties to core or main employee group

Reason for recruitment difficulty	Number of employers
Lack of technical knowledge/skills of applicants	14 (23%)
Too few applications	13 (21%)
Relatively low pay in sector	8 (13%)
Sector not seen as attractive job location	5 (8%)
Lack of relevant experience of applicants	5 (8%)
Poor attitude of applicants	5 (8%)
Lack of relevant qualifications of applicants	4 (6%)
Other skill gaps of applicants	4 (6%)
Location of employment/training	2 (3%)

N = 62 (Figures expressed as percentage of all surveyed employers, rather than employers who had recently recruited.)

A number of employers raised the problem of the image of the textiles sector following the recent period of restructuring that has seen a decline in overall employment across the sector. Several suggested that many textiles specialists had left the sector to seek better paid, more stable work and that the same drivers acted as a barrier when trying to recruit new talent into the sector. All three in-depth interviewees noted these problems and pointed to how other sectors were more able to attract the kind of skilled staff valued by textiles employers (including people trained, but then recently made redundant by, textiles companies).

> *The insecurity within the textiles sector means that people are not being attracted, they go elsewhere.*
> Knitwear manufacturer, medium-size employer, Scottish Borders [in-depth interview]

> *There seems to be a great shortage in textiles technicians, due to people being lost from the industry. Skilled technicians have been made redundant and then not rejoined the sector. That has become apparent in Dundee, where there were once many weaving mills. Now there are only a few, so it should be easy to recruit experienced staff, but it is difficult.*
> Geo-textiles/woven fabrics manufacturer, small employer, Dundee [in-depth interview]

Some employers suggested that textiles is seen as a low paying sector, particularly given that many of the skill sets of textiles specialists are transferable to the oil/energy sector, which is perceived as offering higher levels of pay. For both of the in-depth interviewees located north of Scotland's central belt, the 'pull' of the energy sector was consistently raised as feeding into recruitment problems.

Predicted workforce development

In terms of future workforce development, the majority of employers predicted no change in their total number of employees during the next twelve months (36 of 62 employers or 58%); 18 (29%) predicted an increase; and 6 (10%) thought that their workforce would decrease (2 respondents did not know). Increasing turnover was again seen as the main driver of workforce expansion among those planning to recruit additional staff. A number of employers raised the need to recruit skilled staff in order to replace retiring employees. When this issue was probed further during in-depth interviews, it emerged as a major concern for all 3 employers. Similar issues around the image of the sector and its ability to compete with pay rates elsewhere were at the centre of concerns about the recruitment of skilled staff. Employers acknowledged that their skilled employees had a fairly 'old' age profile, so that skills renewal will emerge as an important problem in the short-medium term.

> *It's very difficult to recruit technicians, who have an important skill set – they execute what the designers design. We have a number of key technicians, all 60 or nearing it. We have tried to bring people in with the skills but it has been difficult.*
> Geo-textiles/woven fabrics manufacturer, small employer, Dundee [in-depth interview]

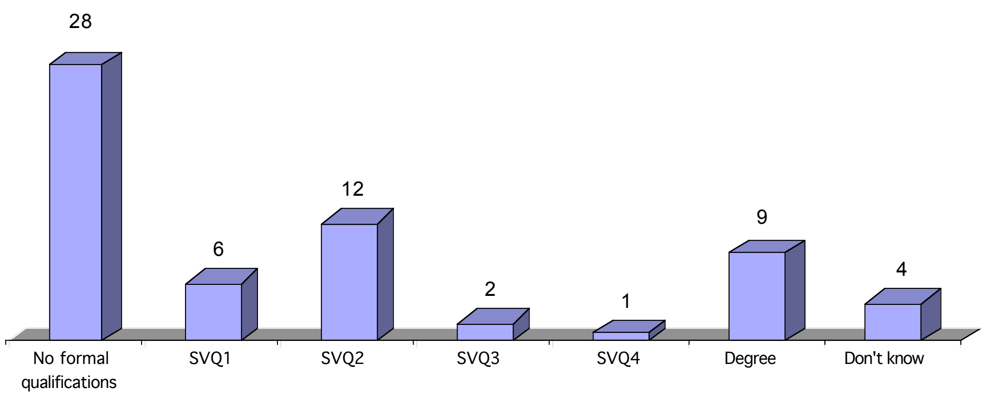
> *We will have a skill shortage in terms of darners over the next five years and from then on as the majority of the workforce who are now in their mid-forties approach retirement. A solution has yet to be found to address this…*
> Knitwear manufacturer, medium-size employer, Scottish Borders [in-depth interview]

3.2.3 Workforce skills and skills upgrading needs

Workforce qualifications

Employers were asked about the qualifications of 'core' employees – those employees central to the effective operation of the business – or (for micro-employers with under 10 staff) the qualifications of their staff in general. Those participating in our telephone interviews described a variety of levels of qualification within this group. The largest group of respondents (28 of 62 or 45%) reported staff holding no formal qualifications. Elsewhere workers were qualified to level SVQ1 (10%); SVQ2-3 (23%); and SVQ4 and above (16%). Accordingly, while a minority of our sample relied upon highly qualified core staff groups, the level of *formalised, accredited* skills within many textiles workforces was relatively low, with 46 of 62 employers (almost three-quarters of the sample) describing their core/main employees as qualified below level SVQ3.

Figure 3.2 Level of qualification of core or main employee group (n = 62)



Occupational skills

However, in terms of occupational skill sets, employers described a range of skilled and semi-skilled positions that made up their *core* employee groups. Of the 44 SMEs and large employers the majority highlighted the work of machine operatives, with 'Production or machine operatives', along with knitting and sewing machine operatives making up the core employee group for 29 (66%) of these employers.

Skills of new recruits

The majority of employers who had recruited to their core or main employee group during the preceding year thought that new recruits had most or all of the skills required (23 of 44 employers, 52%). 18% of employers suggested that new recruits had few or none of the required skills. During our in-depth interviews, employers again noted that despite the reduced number of jobs available in the textiles sector, skilled and experienced staff were difficult to recruit. As one noted: "we are having to recruit people with as near to the best skills match we can find, but then spending a lot of time training them on our systems" (Geo-textiles and woven fabrics manufacturer, small employer, Dundee, in-depth interview).

Skills upgrading needs

Just over three-fifths of employers (39 of 62, 63%) suggested that their workforces or core employee groups had required upskilling during the previous 2-3 years, with the development of new products (44%), new work practices (39%) and the introduction of new forms of technology (32%) the main drivers. There was little evidence of a clear relationship between pre-existing levels of qualification and recent skill changes, but smaller employers were generally less likely to report recent skills upgrading, with less than half of micro-employers reporting pressures to upskill, compared to more than two-thirds of other employers.

More than three-quarters of employers (76%) suggested that their core/main employee group would require some form of skills upgrading during the next year, with the development of new products and the introduction of new technology (37% in each case) and the introduction of new work practices (40%) again the main drivers. A further 23% of employers thought that new legal regulations would require staff to be upskilled. In general terms, employers with the highest qualified workforces/core employee groups were slightly less likely to consider skills upgrading activities. There was no evidence of a clear relationship between employer size and perceived future upskilling needs.

Soft skills required

In terms of the content of future skills upgrading needs, soft skills were prioritised by a number of employers. Teamwork and leadership skills were mentioned by 47% and 42% of interviewees respectively. Communication skills (37% of employers) and problem-solving (32%) were also areas of concern. These types of soft skills were much more regularly identified as in need of upgrading than basic skills such as literacy and numeracy. It should be noted, however, that 'general' IT skills (such as the use of Windows Office and basic web design software) were a priority of more than one-third of all interviewees.

Technical skills required

Employers most often prioritised sector-specific or occupation-specific technical skills (mentioned by 50% of employers). Medium-size and large employers were clearly more likely to report specific technical skills upgrading needs (more than two-thirds of establishments with more than 50 staff predicted a need for improved technical skills, compared to less than two-fifths of smaller establishments). A range of technical, sector-specific skill needs were identified by employers, often relating to the introduction of specific, new software and/or machinery.

Table 3.2 Employers reporting future skills upgrading needs

Type of skills upgrading	Number of employers
Sector-specific technical or IT skills	31 (50%)
Teamwork skills	29 (47%)
Leadership skills	26 (42%)
Communication skills	23 (37%)
‘General’ IT skills	21 (34%)
Problem-solving skills	20 (32%)
Customer service skills	18 (29%)
Literacy skills	7 (11%)
Numeracy skills	6 (10%)
Language skills	5 (8%)
Any of above skills needs	47 (76%)

N = 62

Our in-depth interviews confirmed the complexity of the future skills needs envisaged by employers. All 3 interviewees described a series of highly specific technical skill sets that might require upgrading in the near future, relating to “the installation of new weaving machinery” (Knitwear manufacturer, medium-sized employer, Scottish Borders); “the need to more efficiently deploy existing weaving machinery”, requiring the upskilling of a broader range of staff (Woven fabrics manufacturer, large employer, Angus); and “the introduction of new types of electric loom machinery” and CAD systems (Geo-textiles and woven fabrics manufacturer, small employer, Dundee). For these employers, there were problems in balancing the need to concentrate on achieving the day-to-day business goals, while considering how best to plan for future skills upgrading needs. As a result, there were limited opportunities for detailed planning of future upskilling. For example, there was often an assumption that skills needs arising from the installation of new machinery would most likely be met through the delivery of short training units by original (or used) equipment manufacturers.

> *For our people in production, we will need training possibility in one year’s time when we add in new looms... Our technicians and weavers don’t have the skills to operate these looms, so those new skills will be needed… In these types of cases we will often rely on the actual supplier for all training.*
>
> Geo-textiles/woven fabrics manufacturer, small employer, Dundee [in-depth interview]

Another interesting finding to emerge from our in-depth interviews relates to the pressure on companies to skill their core or main employee groups so as to encourage multi-tasking, with specific reference to business and management skills. Providing technical specialists with the skills to apply their knowledge in a business-oriented setting (whether in terms of budgeting activities or management and communication) was a priority for all interviewees.

> *…I'm thinking particularly of things like man management skills and supervisory skills… where you put somebody into a position as a supervisor and generally speaking they will have all of the technical skills… but what they will be lacking in are the management skills, the communication skills and you are looking at training interventions to help them with that…*
> Woven fabrics manufacturer, large employer, Angus [in-depth interview]

There was also a concern that core employee groups, highly skilled in the design and/or manufacture of textiles, should become more active in sales and commercialisation activities. It is important to acknowledge that employers were not arguing for a general shift in training priorities towards generic 'business skills' – rather, they identified a need for highly specific skills upgrading activities that would allow specialist technicians to communicate with customers more effectively.

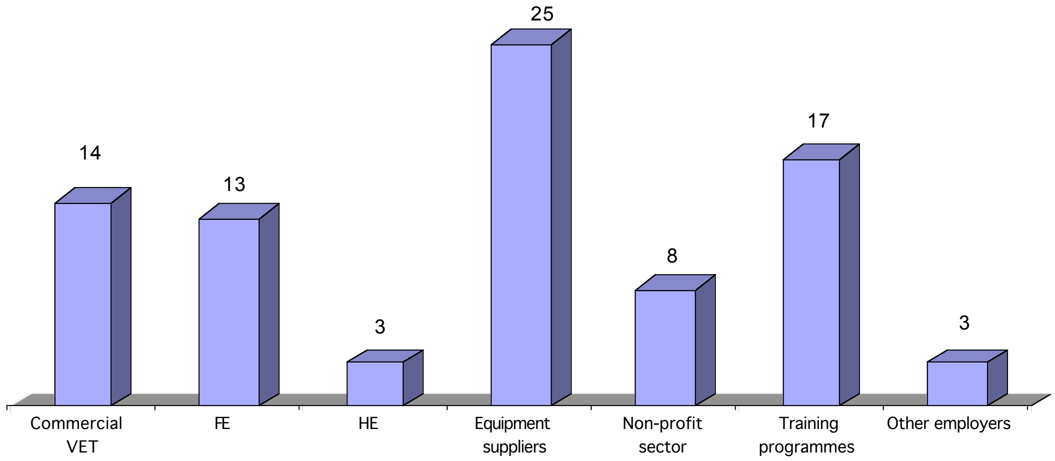
> *The sector is changing rapidly. Designers are required not only to present the design but to have more marketing and commercialisation skills. They need more skills around business and dealing with customers. It's not just design skills that are needed; there's an added need for commercialisation and marketing skills. They have to develop marketing skills now – clients want to discuss the design more. The designers are the face of the company.*
> Geo-textiles/woven fabrics manufacturer, small employer, Dundee [in-depth interview]

With the future of textiles manufacture seen by employers as involving high value added products demanding highly specialised skills, there was an acknowledgment of the need for skilled employees to become more involved in communicating their ideas and demonstrating the quality of their products. Accordingly, there is a need for commercial skills provision with a strong sectoral focus – training that will enable technical specialists to deploy and communicate their skills more effectively in specific business and market contexts.

3.2.4 Previous skills upgrading and use of FE/VET provision

As suggested above, more than three-fifths of employers participating in our telephone interviews acknowledged that their core or main employee groups had required upskilling during the preceding 2-3 years. However, engagement with commercial VET and FE providers to address these needs was limited. Only 23% of respondents had used commercial VET providers to upskill staff during the previous 2-3 years; 21% had used FE providers; 11% reported using both FE and commercial VET provision; and 22% used at least one of these. However, equipment manufacturers/suppliers were more often used to upskill staff (40%). In total, 60% of employers used at least one of these main forms of training provision discussed during the telephone interviews. As noted above, 39 of the 62 employers (63%) interviewed reported undertaking skills upgrading activities of some kind – so only two employers (3%) relied *entirely* upon internal training.

Figure 3.3 Number of employers previously using training provision (n = 62)



Employers' characteristics and use of FE/VET

In relation to the qualifications of the core or main employees of those who used commercial VET providers, it is clear that employers whose core or main employee groups were unqualified were least likely to take up this form of provision. Only 11% with unqualified core or main employee groups had previously used commercial VET providers, compared to 37% of employers reporting some form of formal qualification among their staff. Similarly, only 7% of employers reporting unqualified core/main employee groups had recently used FE, compared to 33% of those with qualified core/main employee groups. There was no clear relationship between size of employer and the use of commercial VET providers, although larger employers were more likely to have used FE services.

Employers' assessment of FE/VET services

The assessment of those employers using commercial VET and FE services was generally positive.

- Of those employers previously using commercial VET and FE providers all (14 and 13 respectively) considered the content of provision to have been relevant and appropriate.
- 12 of 14 employers (86%) using VET and all employers using FE thought that training providers demonstrated a good understanding of their skills needs.
- 12 of 13 employers (92%) using FE considered it a cost-effective option; 9 of 14 employers (64%) using commercial VET provision considered it cost-effective.

Employers had more mixed views about the flexibility of available training provision. 9 of 14 (64%) described commercial VET provision as ‘flexible’ or ‘very flexible’, but 5 (36%) did not consider services flexible (3 of these described their VET provider as ‘not at all flexible’). A further 3 (25%) employers previously using FE services described these services as ‘not at all flexible’, although it should again be noted that the majority (9 of 12 former FE users, 75%) were satisfied with this aspect of their services. Those employers who had been frustrated by perceived inflexibilities in FE and/or VET provision were vocal in their criticism of the available services.

> *They run a timetable that suits the college, not the business.*
> Textile weaver, medium-size employer, Highlands [telephone interview]

> *The course times don’t seem to fit with the running of the business.*
> Household textiles manufacturer, medium-size employer, Edinburgh [telephone interview]

Reasons for using or not using FE and VET services

These concerns featured more widely when we asked all employers participating in telephone interviews to identify reasons why they had not used commercial VET and/or FE provision, or not used these services more. A lack of sufficient need was the most often cited reason for not using FE and commercial VET provision. Those suggesting that they had ‘no need’ for FE/VET services were fairly evenly divided between employers who, in general, thought that they had no skills upgrading needs and those who thought that their needs would be best addressed through alternative forms of training. Employers citing no need for both commercial VET and FE provision were also less likely to predict *technical*, sector-specific skills upgrading needs for the immediate future, suggesting that those employers most concerned with responding to technological advances have also been more aware of the potential role of external providers in helping to address related skill needs.

Table 3.3 Key reasons given by employers for not using commercial VET services

Reason	Number of employers
Lack of need	16 (33%)
Skills required by staff too specific	12 (25%)
Cost	10 (21%)
Lack of appropriate general provision	9 (19%)
Tradition of/preference for ‘in house’ training	9 (19%)
Concerns over the quality of available provision	6 (13%)

N = 48

Table 3.4 Key reasons given by employers for not using FE services

Reason	Number of employers
Lack of need	16 (33%)
Lack of appropriate general provision	15 (31%)
Skills required by staff too specific	9 (18%)
Tradition of/preference for 'in house' training	7 (14%)
Cost	5 (10%)

N=49

The lack of appropriate training provision was also a concern for a number of employers. This concern had two dimensions. First, many interviewees considered the skill sets of their core or main employee groups to be too specific and advanced to be covered by either commercial VET (mentioned by 12 of the 48 employers who had not used VET services, or 25%) or FE providers (18%). The specialist nature of the skill sets within the sector was consistently used to justify a concentration on in-house training or a reliance on equipment suppliers to deliver all necessary skills.

> *We are unique in what we do. Not many places teach the skills that we need or have the necessary product knowledge.*
> Textile weaver, medium-size employer, Dundee [telephone interview]

> *We use machinery very specific to our industry, so we need to train on-site with existing staff teaching others.*
> Knitwear manufacturer, large employer, Scottish Borders [telephone interview]

A second dimension to concerns about the lack of appropriate services related to a more basic absence of locally accessible training infrastructure (mentioned by 31% non-FE users and 19% of employers in relation to commercial VET). This was particularly problematic for a number of employers based in more rural areas. One such employer suggested that the time and expense involved in previous skills upgrading activities was problematic.

> *The training course that we use has been moved, meaning a journey of 116 miles once a week for a year. The idea of the training was to reduce costs, but when you take into account overtime and mileage allowance it's difficult to see how cost savings could be achieved.*
> Household textiles manufacturer, small employer, Fife [telephone interview]

Other reasons limiting the use of FE and VET provision related to cost and a more general preference for in-house training. The tradition of in-house training was a theme that was pervasive throughout our telephone and in-depth interviews. The textiles tradition of having trainees ‘sitting with’ more experienced colleagues and learning on-the-job apparently remains strong (see also 3.2.5 on future skills upgrading plans).

Our in-depth interviews with textiles employers saw similar themes emerge. All 3 employers had worked with commercial VET and/or FE providers at some point, but had also relied heavily upon equipment manufacturers as the most cost-effective route of delivering new skills to core employees. All 3 were also committed to internal (and often relatively informal) training processes to ensure that core employees received appropriate upskilling.

> *Generally speaking the shift leader will assign* [a trainee] *to the person on the shift whom they feel is best able to transfer the skills, so they might not necessarily be the most skilled person but they will have that combination of the skills and the ability to transfer them to* [the trainee]*… and the communication skills… and so on.*
> Woven fabrics manufacturer, large employer, Angus [in-depth interview]

Where positive relationships had been developed with FE or VET providers, we asked employers to list the 2 main reasons for using these forms of provision. The specific appropriateness of provision was most often mentioned. In a number of cases, trainers’ expertise in delivering sector-specific provision (and even their experience in working through similar issues with other employers) was seen as a key selling point by employers.

> *Knowing that they were experienced in delivering this kind of training, along with knowing that they were responsive and reliable, meant that we wanted to use them* (referring to relationship with FE provider).
> Workwear manufacturer, small employer, Glasgow [telephone interview]

> *Their experience is valuable. The experience of training providers having worked with other companies rubs off on and benefits our employees* (referring to relationship with commercial VET provider).
> Geo-textiles and woven fabrics manufacturer, small employer, Dundee [telephone interview]

Table 3.5 Key reasons given by employers for using commercial VET services

Reason	Number of employers
Appropriateness/specific content of provision	10 (71%)
Knowledge of quality of delivery/expertise	6 (43%)
Cost-effectiveness	4 (29%)
Flexible mode/method of delivery	3 (21%)

N = 14

Table 3.6 Key reasons given by employers for using FE services

Reason	Number of employers
Appropriateness/specific content of provision	7 (54%)
Location/accessibility	5 (38%)
Flexible mode/method of delivery	2 (15%)
Knowledge of quality of delivery/expertise	2 (15%)

N = 13

3.2.5 Future skills upgrading and use of FE/VET provision

As noted above, more than three-quarters of employers (47 of 62 participating in our telephone interviews, or 76%) acknowledged that their core or main employee groups would require skills upgrading over the next year. For those concerned with the sector skills agenda, it is important to acknowledge that while key generic skills such as teamwork, leadership and communication were considered important, sector/occupation-specific technical skills were most often raised by employers (with almost half of the sample, 30 employers, specifically emphasising the need to address these).

In terms of how employers planned to address these skills upgrading needs, interviewees again pointed to a combination of external provision and internal 'cascading' of existing skills and knowledge. In many cases, employers were content to address training needs as and when they arose – the majority of employers did not have a formal training plan in place (65%) and did not have a 'ring fenced' training budget (68%). Commercial VET provision was seen as playing a role in future skills upgrading by relatively few employers – 24% of employers considered it either 'quite likely' or 'very likely' that they would buy in this form of provision during the next year. Slightly fewer employers (21%) thought it likely that they would use FE services. Employers who had used equipment suppliers for skills upgrading in the past were less likely to predict using these services during the next year – only 24% of employers considered the use of this form of provision.

In contrast, employers continued to express a strong preference for in-house training – 79% of employers thought that they would be 'quite likely' or 'very likely' to provide internal, on-the-job training for their core or main employee group during the next year. A further 39% considered it 'quite likely' or 'very likely' that they would deliver some form of internal, off the job training. In total, 81% of our telephone interviewees predicted delivering some form of internal training as a means of addressing future skills upgrading needs.

Table 3.7 Number of employers 'likely' to use forms of training provision

Type of training	Number of employers
In-house, on-the-job	49 (79%)
In-house, off the job	24 (39%)
Commercial VET providers	15 (24%)
Equipment suppliers	15 (24%)
FE providers	13 (21%)
Training initiatives	9 (15%)
Non-profit organisations	7 (11%)

N = 62

The vast majority of employers (89%) confirmed that they planned to provide *most* upskilling 'in house' (on or off-the-job). In some cases there was again a perception that FE or other external training providers could not provide the highly specialised training required.

> *We are likely to carry out most new training in-house. We have to train this way due to the specialised nature of the skills and the lack of provision elsewhere.*
> Cotton manufacturer, small employer, Highlands [telephone interview]

Employers' characteristics and future use of FE/VET

Medium and larger employers were more likely to predict using commercial VET and/or FE providers for future skills upgrading. There was also an apparent relationship between the level of qualification within the core or main workforce and planned use of FE and VET provision. For example, employers with core or main employee groups qualified above the level of SVQ3 were twice as likely to be considering using VET as those with employees without that level of qualification. In terms of the relationship between specific skills drivers and the use of FE or VET provision, the clearest association in both cases appears to have been between the drive to develop new products and the need to engage with external providers. More than two-fifths of all employers predicting the need to upgrade skills due to new product/service development also thought that they would use FE and/or VET to address these skill needs.

Role of previous use of FE/VET

Crucially, more than two-thirds of those employers planning to upgrade skills using FE had used FE during the previous 2-3 years (compared to approximately one-fifth of the total sample previously using FE). The message would appear to be that where FE providers have been able to establish an initial relationship with employers, this can lead to a continued commitment on the part of employers. Similarly, more than half of those employers planning to upgrade skills using commercial VET providers had used such provision during the previous 2-3 years.

A number of employers pointed to the lack of infrastructure for apprenticeship-level training in textiles, and argued that more accessible services of this type would encourage them to engage with the FE sector in particular. However, they all also acknowledged that low take up among employers contributed to the limited availability of apprenticeship-level training.

> *We have a definite problem in recruiting skilled people… and that's for a number of reasons. It's partly because companies like us and lots of other similar companies have stopped training apprentices. We haven't taken an apprentice on for 10 or 12 years now so the flow of people through into those work tasks has diminished.*
> Woven fabrics manufacturer, large employer, Angus [in-depth interview]

> *The main difficulty of training core skill employees arises from the decline in the industry. With the plentiful supply of apprentices in the past, it was viable for providers to run regular training courses but this is no longer the case and consequently many courses are no longer available.*
> Knitwear manufacturer, medium-size employer, Scottish Borders [in-depth interview]

Finally, employers' views on the measures required to improve training provision varied widely, but consistent themes included improved sector-specific training and sector-relevant business and management training, greater flexibility in the mode and method of delivery of FE training, and more accessible government funding/assistance for skills upgrading. Throughout, a strengthening of *locally accessible* training infrastructures was a priority for many employers.

3.3 FINDINGS FROM THE CASE STUDY RESEARCH

3.3.1 Introduction to case study research

The aim of the case study phase of the research was to discuss challenges and opportunities around FE and VET providers' engagement with textiles employers, identify examples of good practice, and analyse barriers and opportunities associated with improving employer-trainer interaction. Case study institutions were selected in order to reflect a range of geographies, types of provider and approaches to engaging with employers. Following consultation with employers and key stakeholders, the following organisations were selected for the case study research:

- Division of Design and Fashion, Cardonald College, Glasgow;
- Brilliant Red Consulting, Edinburgh;
- School of Textiles and Design, Heriot Watt University, Galashiels;
- Centre for Advanced Textiles, Glasgow.

3.3.2 Key services and responding to sector skill needs

Our case study research highlighted the manner in which the contraction of textiles employment has meant that FE and higher education (HE) institutions have been able to develop only limited training relationships with employers, with most activity focused on the delivery of long-term, often full-time courses at HNC/D or degree level. Respondents involved in leading and delivering textiles training at Cardonald College (CC) in the FE sector and Heriot Watt University (HWU) acknowledged a shift in their approach from structured "operative training" to "bespoke consultancy services", reflecting the decline of bulk textiles production in Scotland. The limited resources available from the SMEs and micro-employers that dominate the sector has meant that recent employer engagement around commercial training has been fragmented (despite strong relationships with employers providing student work placements). Similarly, the Centre for Advanced Textiles (CAT), operating in the HE sector, has delivered a range of direct consultancy services to employers in Scotland and elsewhere, but planned training for the domestic market has been undermined by problems in identifying a 'critical mass' of employers to make course development and delivery viable.

However, our case study research also highlighted that – where there are adequate resources to develop tailored provision for employers – FE and VET providers have been able to deliver effective services. The *Training in the Workplace* initiative (2004-05), led by Scottish Textiles and Skillfast-UK, aimed to assist FE providers and textiles companies to work together to identify and address the latter's training needs. Additional funding support was received from the European Social Fund. As part of the initiative, peripatetic trainers from CC worked with a number of employers, delivering on-site training needs analyses, consultancy support and bespoke training. Crucially, employers were awarded funding to 'buy out' staff time for training, based on an analysis of predicted business benefits. Interviews with providers and participating employers highlighted the value of this highly flexible form of provision, but with textiles providers required to compete with other sector specialists for resources from Scottish Enterprise's Workforce Development budget, maintaining the programme has proved difficult. In terms of commercial and management training, Brilliant Red Consulting (BRC) was recently commissioned to develop and deliver bespoke learning tools under the *Scottish Textiles Business Development Programme*, with Scottish Textiles providing the incentive of covering 50% of fee costs for employers. The programme involved a series of seminars and one-to-one consultancy support sessions aimed at assisting senior managers within market leader companies, and sought to challenge existing organisational cultures and drive forward innovation.

Table 3.8 Case study institutions and responsiveness to employers' skill needs

Institution/programme	**CC**	**BRC/BDP**	**HWU**	**CAT**
Key training services	NC-HND textiles design and production; has delivered bespoke training through targeted initiatives	Bespoke business development/ strategic leadership skills.	Degree level in textiles and clothing design and manufacture.	One-to-one consultancy on CAD, digital textiles. Training placements for students.
Geographical focus	Regional. National under targeted initiatives. Works with employers internationally.	National.	Regional, national. Works with employers internationally.	Local (students); national/ international commercial work.
Relationship with employers	Limited in relation to standard, structured provision. Where funding available (e.g. *Training in the Workplace*) has developed effective bespoke provision.	Short-term programme; effectively engaged senior managers to deliver tailored training.	Strong links due to student placements, etc. but very limited in relation to training delivery.	Very limited on training side. Seeking to develop *ad hoc* training into more structured provision.
Capability to meet future skill needs	Limited through structured NC/HNC provision. Has demonstrated capacity/expertise to deliver effective bespoke training, but lacks resources to engage with employers/employers reluctant to buy in FE services.	Programme completed, but similar provision planned to target senior managers. No plans to develop strategic/commercial training for skilled manufacturing staff, but training could be adapted with resources.	Limited through structured degree provision. Has capacity/expertise to deliver effective bespoke training, but lacks resources to engage with employers/develop this provision.	Strong expertise in CAD and other aspects of colour/ design in non-traditional textiles. Limited capacity but could contribute to 'training the trainers' type initiatives.

These examples of good practice demonstrate that some FE/VET providers have the skills and capacity to respond to employers' skills upgrading needs if there are appropriate funding mechanisms to support employer engagement. In more general terms, all the case study providers acknowledged employers' prioritisation of flexible, bespoke training (a key finding of our research reported above), but again noted that current funding structures incentivise the provision of longer-term, structured learning for full-time students. Both CC and HWU representatives highlighted the need for both funding incentives for smaller employers to engage with trainers and support for training providers to conduct employer engagement activities. Case study respondents were generally familiar with the technical skills upgrading needs articulated by employers (especially around CAD technology). For example, in responding to the results of our research with employers (which emphasised the specific nature of skills needs and concerns over the capacity and flexibility of FE providers to meet these needs), staff and managers at CC argued that many employers were not aware of the level and depth of expertise offered by FE providers. Far from lacking in highly specialised skills, trainers were reported to have considerable expertise in the high-level use of CAD and 3-D pattern design and visualisation systems (a partnership with Gerber Technology has established state of the art IT design facilities at the College).

3.4 CONCLUSIONS AND IMPLICATIONS FOR POLICY

Employers, training providers and key stakeholders agree that the future of the Scottish textiles sector lies in increasingly high-tech, high valued added approaches to design and manufacture. There is therefore a need to promote innovation and skills upgrading throughout the sector. Future skills upgrading needs identified by employers focused on technical manufacturing and design skills, often at operative level, but also for higher skilled technicians and designers. Our research with employers flagged up the potential problems the sector faces in retaining the skill sets of technicians and even machine operatives – it is important that provision is in place to replace the skills of workers leaving the sector, while improved, formalised training and progression routes may be one way of encouraging staff retention.

Some employers also highlighted the need for business development and commercialisation skills among skilled core employee groups, so that technicians and designers are better able to communicate and apply their skills within a commercial setting. The Scottish Textiles Business Development Programme highlighted the way in which VET providers can add value by delivering learning for senior decision makers within organisations. There may be scope for business development services to be extended to skilled core workers within the textiles sector. It is likely that employers will require *some* financial support in facilitating such training.

There are a number of challenges associated with developing the role of FE/VET providers in responding to this agenda. First, despite the presence of core workers with complex skill sets, levels of accreditation and formalised training are weak in some areas of the sector. A reliance on informal, in-house training to cascade 'how to' skills delivered by machine manufacturers has limited the role of external providers. While internal training is often effective and appropriate, some FE and VET providers have the expertise and teaching skills to help employers to ensure that core employee groups maximise the potential of their production machinery and fully understand their role in the manufacturing process. There is a need to communicate these benefits to employers, and provide incentives for both employers and FE/VET providers to experiment with closer joint-working.

In more general terms, relatively few of the employers participating in our research had recently engaged with FE and/or VET providers – the main barriers appear to relate to the perception that they did not need these forms of provision (again reflecting the dominance of internal training); and the perception that the skills required are too specific to be addressed by external providers. FE and HE providers participating in the case study research argued that they have sufficient expertise across a range of skill areas to add value to employers' work – but it was also acknowledged that current modes of provision, which favour structured, long-term (often full-time) engagement with students are not appropriate for workforce skills upgrading. It is not surprising that, with limited employer or public funding for such work, FE and HE institutions continue to 'follow the money' and focus on structured, full-time education and training rather than services for employers. There is a need for incentives and support for both employers and training providers to encourage greater collaboration. However, training providers must also demonstrate a willingness to be flexible – the examples of good practice described above share a commitment to blended learning approaches offering flexible provision including bespoke, highly specialised training delivered in the workplace through peripatetic trainers.

A number of specific policy implications flow from the discussion above.

- There is a need for an intermediary/advocacy role promoting improved collaboration between FE/VET providers and textiles employers *where appropriate*. Even a single 'outreach advocate' could play an important role in informing employers of the range of services available from, and highly specialised skills of, FE and other training providers. Such a position would allow FE/VET providers to communicate their expertise to employers and facilitate feedback from employers on skills upgrading and training needs.
- There is a clear relationship between previous use of FE and/or VET provision and planned future engagement. There is therefore a need to promote and incentivise 'first contacts' between FE/VET providers and employers. Additional resources for employer-trainer exchange initiatives (in line with 'Lecturers into Industry' elsewhere) may allow FE and other trainers to demonstrate their expertise within a workplace context, while allowing them to learn about the challenges faced by employers planning skills upgrading.

- Many textiles employers have effective internal training in place, but there is a need to assist those with limited resources (especially micro-employers and SMEs) to formalise and accredit their skills upgrading activities. Support for micros and SMEs to strengthen internal training, link that training to the Scottish Credit and Qualifications Framework, and work with external providers where appropriate to achieve these aims, may help these employers to formalise their skills upgrading activities. The formalisation of in-house training offers potential benefits in relation to: encouraging recruitment and retention by providing clear progression and development; 'locking in' good practice and ensuring the consistency of training; and guarding against the *potential* danger of errors being transferred through informal skills cascading.
- FE and VET providers need to consider how best to develop provision that addresses the needs articulated by employers, in terms of:
  - the delivery of flexible, bespoke skills upgrading tailored to employers' and individuals' needs (as identified in training needs analyses);
  - flexibility in the structure, mode and method of delivery, responding to employers' capacity to allow time for training;
  - expertise in delivering basic, intermediate and high-level textiles skills, including specialist knowledge of CAD and other complex design technologies;
  - the provision of peripatetic and on-site training, and a commitment to overcoming problems of remoteness and accessibility.
- There is a need to consider how best to promote and develop Modern Apprenticeship provision across the sector.
- Some employers also expressed a need for tailored training to enable technicians and designers to understand the business context for their work and effectively communicate and 'sell' their ideas within a commercial setting. There is a need for further consultation to scope out the potential content of any such provision. The kind of intensive, bespoke services provided by the Scottish Textiles Business Development Programme (which targets senior managers) may provide a useful template for sector-specific business and communications training for skilled staff.
- SMEs and micro-employers, which play an important role in the Scottish textiles sector, can struggle to find the 'time off' for staff training and resources to buy in specialist provision. Large-scale, indiscriminate subsidies for employer training cannot be justified and are likely to be subject to considerable deadweight effects. However, there is a need to support smaller employers to buy in crucial skills provision and allow core employees time off for training. Any (*limited, short-term*) subsidised services or financial support should, of course, be linked to employers being able to evidence long-term business benefits (for example, through the development of an appropriate business/training plan), and be used to provide only essential specialised, tailored skills provision (potentially delivered by FE and/or commercial providers).

4. THE FINANCIAL SERVICES SECTOR IN SCOTLAND

KEY ISSUES FROM THE RESEARCH IN THE FINANCIAL SERVICES SECTOR

- 73 telephone interviews and 4 in-depth face-to-face interviews were carried out with financial services employers (particularly focusing on two distinctively strong sectors in Scotland – insurance broking and administration, and management and administration of financial investments/funds). 4 case studies were carried out with FE, VET and other providers.
- The sector is both growing and changing rapidly and many employers are therefore committed to future skills upgrading. 84% of employers suggested that their workforces or core employee groups had required skills upgrading during the previous 2-3 years, with 90% predicting the need for skills upgrading in the immediate future. The main drivers were the introduction of new working practices, products and services, and the need to respond to regulation. In-depth interviews revealed more complex drivers around the rationalisation of contact centre functions (requiring increasing multi-skilling); the shift towards a more pro-active and sales-focused contact centre model; and the increasing complexity of products and markets.
- In terms of the content of future skills upgrading needs, soft skills were prioritised by a number of employers. Teamwork skills (mentioned by 69% of employers), leadership skills (67%), problem solving skills (67%) and customer handling skills (66%) were seen as particularly important. 56% of employers also prioritised sector-specific technical or IT skills.
- Approaches to skills upgrading differ somewhat according to occupational group – 'front office' staff (often based in contact centres) require training in customer services, some product knowledge, and basic 'operations' around the processing of new and existing business (which often focuses on the 'keystroke' practices of effectively using internal IT systems). 'Back office' staff – financial services professionals – require continuing skills upgrading in relation to highly technical aspects of business processing, and a deeper, more technical knowledge of products and markets.
- The majority had recently used VET providers for *some* form of training. Use of FE provision was much more limited. The main barriers to engagement appear to be: a necessary reliance on internal training on company-specific systems, products and practices; the importance of examination-focused learning accredited by professional institutes; and the perception that FE in particular is unable to provide the flexibility, specific provision and expertise to add value.
- Nevertheless, there may be opportunities for FE and other providers to play a greater role by adding value to professional institute learning through intensive tuition and support; developing sector-relevant soft skills training; and facilitating continuing professional development.

4.1 INTRODUCTION

There are approximately 108,100 employees in the financial services sector in Scotland, around 5% of all jobs. The sector has an average annual growth rate of over 5% - around four times that of the Scottish economy. The Scottish cluster of Edinburgh and Glasgow continues to increase its contribution to the UK economy, and presently accounts for almost 8% of total financial services output. The relevant Sector Skills Council is the Financial Services Skills Council which, along with the financial services group at Scottish Enterprise and employers' groups such as Scottish Financial Enterprise, supports the continuing development of the sector. There are a high proportion of sales, administration and customer service staff in the financial services sector – around one-third of all financial services sector employees. The sector also has a relatively young age profile. Our research particularly focused on 2 strands of the sector of specific importance in Scotland: insurance broking and administration, and management and administration of investments/funds. Both are distinctive in that they provide a higher proportion of Scottish financial service jobs than in any other regional labour market outside London, reflecting Scotland's status as a major centre of advanced financial services. Scotland is also distinctive in regional terms in hosting a number of very large 'processing' and contact centre operations.

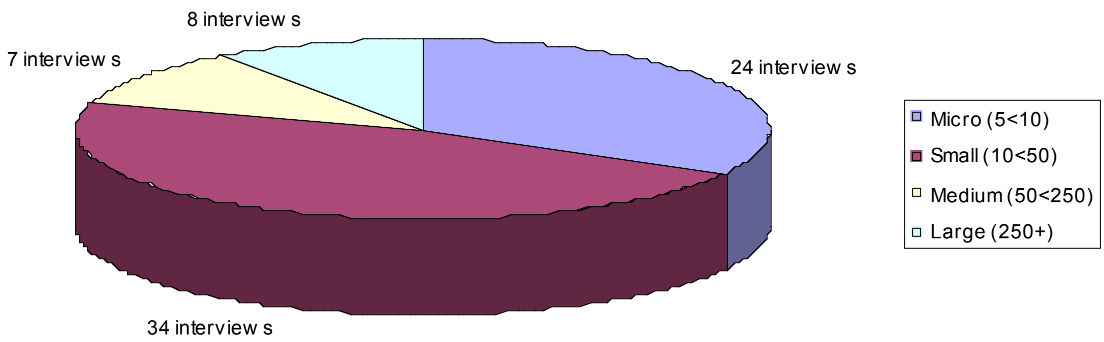
The remaining sections of this chapter report the findings of our research with employers (4.2) and training providers (4.3), before discussing conclusions and implications for policy (4.4).

4.2 FINDINGS FROM RESEARCH WITH EMPLOYERS

4.2.1 Sample for survey research and selection of in-depth interviews

The findings below discuss responses from 73 telephone interviews with financial services employers. Of these, 39 interviews were undertaken with employers involved in insurance and pension funding, or activities auxiliary to insurance (SIC 66), while 21 were with employers involved in security broking, fund management and the administration of financial markets (SIC 67). A further 13 interviews were with employers involved in more general activities auxiliary to financial intermediation, often centring on the work of independent financial advisers (SIC 67). Nearly half of the sample were small employers (34 out of 73 employers or 47% had 10<49 staff), and a further 24 (33%), were micro-employers with less than 10 staff. 7 (10%) interviews were conducted with medium-size employers (50<249 staff) and 8 (10%) with large employers which had more than 250 staff. Accordingly, while micro-employers and SMEs were strongly represented in the sample (reflecting the importance of smaller employers to the insurance broking and financial advice service sectors) our research also captured the views of some of Scotland's largest financial employers – 5 of those interviewed employed more than 500 people at the single site under discussion, while 3 of these employed more than 2,500 people on site.

Figure 4.1 Sample of employers by employment sizeband



In addition to the telephone survey research a series of 4 in-depth, face-to-face interviews was undertaken (with interviews lasting between 60 and 90 minutes). Respondents for in-depth interviews were purposively selected to reflect a range of establishment sizes and skill profiles. Despite attempts to engage employers in interviews at a range of locations, the concentration of the sector in Scotland's 'central belt' cities was reflected in the final sample for in-depth interviews. In-depth interviews were therefore undertaken with:

- a specialist non-life insurance broker, based in Glasgow (classified as 'large urban area', population 585,000); small establishment (16 staff);
- an insurance/pension funding firm, based in Glasgow, medium-size establishment (180 staff);
- an insurance/pension funding firm, based in Glasgow, large establishment (550 staff);
- a security broking/fund management firm, based in Glasgow, large establishment (1,400 staff).

Findings from these in-depth interviews are reported alongside the telephone interview results below, in order to provide more detailed insights into employers' attitudes and approaches towards skills upgrading and engagement with training providers.

4.2.2 Workforce and recruitment issues

Recruitment issues

The largest single group of employers (35 of 73, or 48%) reported an increase in workforce numbers during the previous year; 40% reported no change in workforce numbers, while 11% reported a decrease (one employer was unable to respond to this question). 73% of employers had recruited to their core or main employee group in the previous year. However, for some of these employers, recruitment had proved difficult – 53% of those recruiting (i.e. 38% of all employers) said that it had been 'difficult' or 'very difficult' to find appropriate people. The main reasons for recruitment problems focused on a lack of technical knowledge and a lack of applications (mainly reflecting the tightness of the Scottish labour market). It is notable that employers were far more likely to be concerned with inadequate technical skills and experience than other 'softer' skills.

Table 4.1 Reasons for recruitment difficulties to core or main employee group

Reason for recruitment difficulty	Number of employers
Lack of technical knowledge/skills of applicants	10 (14%)
Too few applications	8 (11%)
Lack of relevant qualifications of applicants	8 (11%)
Relatively low pay in sector	3 (4%)
Competition from other employers	3 (4%)
Attitude/motivation of applicants	2 (3%)
Applicants not attracted to location	2 (3%)
Applicants not attracted to part-time work	1 (1%)
Lack of 'commercial understanding' of applicants	1 (1%)

N = 73 (Figures expressed as percentage of all surveyed employers, rather than employers who had recently recruited.)

A number of employers mentioned the problem of competition in the local area with skilled applicants being quickly "snapped up" by competitors and the fluidity of the market making it difficult to recruit. As one employer noted:

> *It is getting harder to recruit. We are looking at our recruitment strategy. We are not expanding. The competitiveness of the sector means that there are a lot of call centres in Glasgow.*
> Non-life insurance company, medium-size employer, Glasgow [telephone interview]

Employers participating in our in-depth interviews also noted that there remained work to do to challenge negative perceptions of the 'processing' or 'contact centre' positions that provide much of the entry-level employment in key areas of the sector.

Predicted workforce development

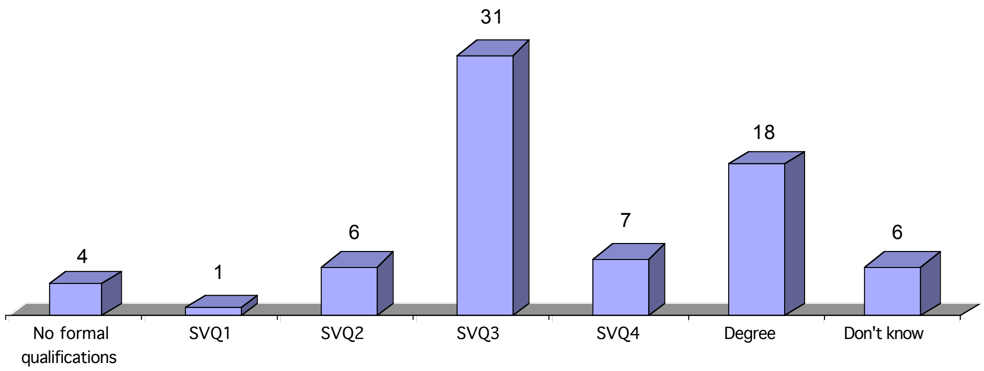
In terms of future workforce development, the majority of employers predicted an increase in their total number of employees during the next twelve months (53%); 44% predicted no change; and only 3% thought that their workforce would decrease. Increased business turnover was again seen as the main driver of workforce expansion among those planning to recruit.

4.2.3 Workforce skills and skills upgrading needs

Workforce qualifications

Employers were asked about the qualifications of 'core' employees – those employees central to the effective operation of the business – or (for micro-employers with under 10 staff) the qualifications of their staff in general. Those participating in our telephone interviews described a variety of levels of qualification within this group, but the sector's reputation for prioritising accredited learning is reflected in the findings. The largest group of respondents (43%) reported staff qualified to SVQ level 3, and 77% reported most staff qualified at this level or above. 25% reported staff educated to degree level or above. (It should be noted that in some cases these staff held professional industry-accredited rather than academic qualifications.) Only 6% reported core or main staff groups holding no qualifications.

Figure 4.2 Level of qualification of core or main employee group (n = 73)



Occupational skills

In terms of occupational skill sets, employers described a range of skilled and semi-skilled positions that made up their *core employee* groups. Of the 49 establishments employing 10 or more staff the majority highlighted financial administration, the processing of insurance claims and customer servicing as core employee group roles. (Of these 49 employers, 30 operated in the insurance sector, 13 in fund management and investments, and 6 in other auxiliary financial services functions.) Without more detailed information on job tasks it is difficult to further classify these job roles and there may be some overlap between categories.

Skills upgrading needs

84% of all employers suggested that their workforces or core employee groups had required skills upgrading during the previous 2-3 years, with the development of new working practices (75%), the introduction of new legislation (73%), the introduction of new products and services (64%) and the introduction of new technology (63%) as the main drivers. The vast majority of employers (90%) suggested that their core employee group would require some form of skills upgrading during the next year. The development of new products and services (73%), new legislation (69%), new work practices (63%) and the introduction of new technology (63%) were again seen as being the main drivers. There was again little evidence of a relationship between qualifications and previous or predicted skills upgrading activities, although those with the most highly qualified employees (educated to degree level) were slightly less likely to be considering future skills upgrading.

Table 4.2 Employers reporting future skills upgrading needs

Type of skills upgrading	Number of employers
Teamwork skills	50 (69%)
Leadership skills	49 (67%)
Problem-solving skills	49 (67%)
Customer service skills	48 (66%)
Sector-specific technical and/or IT skills	41 (56%)
‘General’ IT skills	38 (52%)
Communication skills	35 (48%)
Literacy skills	13 (18%)
Numeracy skills	13 (18%)
Language skills	6 (8%)
Any of above skills needs	66 (90%)

N = 73

Soft skills required

In terms of the content of future skills upgrading needs, soft skills were prioritised by a number of employers. Teamwork skills (69%), leadership skills (67%), problem solving skills (67%) and customer handling skills (66%) were seen as particularly important. Also important were general IT skills (52%) and general communication skills (48%). Of less importance were literacy and numeracy skills (18%). With the increasing use of contact centres there was recognition of a split in the skill needs of staff. A number of employers spoke of the distinction between front office customer service or ‘operations’ staff (dealing with customers, often in a contact centre environment, and processing basic transaction functions) and back office specialists with high-level technical skills (such as 'Investment Advice Certificate'-qualified stockbrokers in the case of the fund/investment management sector or qualified underwriters in the insurance sector). For contact centre staff it is sales skills and customer handling skills that were important, whereas 'back-office' staff were seen as needing more technical skills, a finding which was replicated in our in-depth interviews. As one employer stated in relation to their organisation:

> *Strong customer service skills are absolutely essential – it's something that we are always looking for. Again, if there is evidence that the person has the right attitude and approach we are willing to train these skills.*
> Insurance and pension funding firm, large employer, Glasgow [in-depth interview]

Technical skills required

Medium-size and large employers were clearly more likely to report specific technical skills upgrading needs (more than three quarters of employers with more than 50 staff predicted a need for improved technical skills, compared to less than half of smaller employers). Recurring themes for technical skills upgrading included: the use of client and product IT systems; company-specific product/market knowledge; other occupation-specific continuing professional development relating to a deeper knowledge of markets and products; and knowledge of regulatory changes.

Our in-depth interviews also highlighted the complexity of skills up-grading issues in the sector. Of particular importance for employers was the role of the regulator, the FSA, in requiring evidence of continuing professional development, and professional institute accreditation bodies such as the Securities and Investment Institute (SII) in the fund management sector and Chartered Insurance Institute (CII), in defining the parameters of their future skills needs. FSA-regulated, technical, examination-based training towards certificate and diploma-level qualifications have therefore emerged as a key theme for training in the sector (particularly for specialist professionals carrying out highly technical job roles). It was clear from telephone and in-depth interviews that supporting both entry-level staff and especially technical specialists to progress towards such qualifications will remain a key focus for skills upgrading.

A strengthening of training and progression routes for entry-level staff was also seen as a priority. Despite well-developed internal training, employers with contact centre staff noted retention problems among those (especially young people) working in entry-level positions. A *perceived* lack of progression routes to professional positions was seen as feeding into a culture where contact centre 'operations'/customer service staff did not see their work as part of a career path.

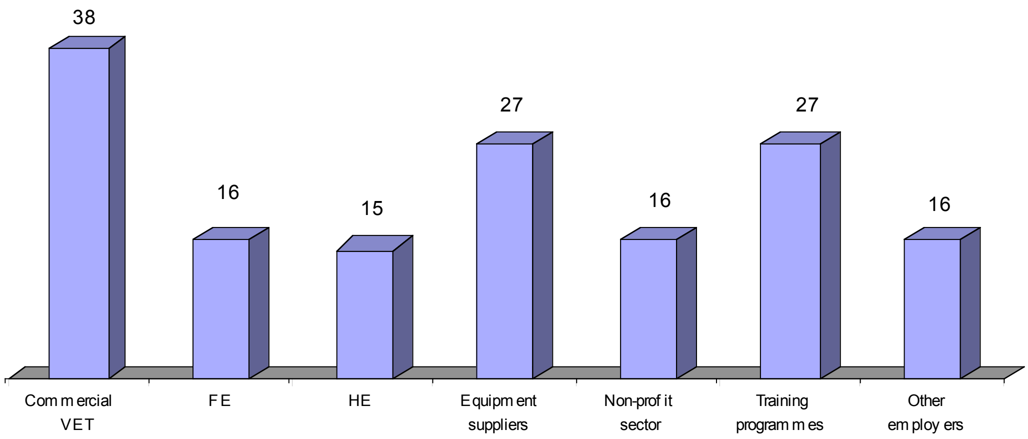
> *Research has flagged up that a lack of training opportunities for operations staff feeds into retention problems. We need to make it clear to staff that their work is a specialism; we need to use training to make them feel that they have specialist skills in sales or customer services.*
>
> Insurance and pension funding firm, large employer, Glasgow [in-depth interview]

Finally, a crucial recurring theme from the in-depth interviews across both sectors referred to the increasing need for multi-skilling at all levels and the complexity of emerging skill sets. Insurance employers noted that customers were increasingly demanding and discerning, expecting added value from dealing with 'UK contact centres' in the form of more in-depth product knowledge. Furthermore, in both sectors, some contact centre 'operations' staff were increasingly being asked to adopt a more pro-active, sales-oriented approach, rather than merely processing the requests of clients. This more pro-active approach requires a deepening of product knowledge and the delivery of specialist customer service training. Skilled, back office professionals are also increasingly challenged by more complex markets and products, especially in the fund management/investments sector. Promoting continuing professional development, in line with FSA regulations, to respond to these challenges was a priority for all interviewees.

4.2.4 Previous skills upgrading and use of FE/VET provision

81% of all employers reported using external skills providers during the previous year. The use of commercial VET providers was most common (52%, compared to only 22% using FE provision). The 'training programmes' referred to by 37% of employers appear to reflect their direct engagement with accredited examination bodies such as the CII in insurance and SII in securities and investment.

Figure 4.3 Number of employers previously using training provision (n = 73)



Employers' characteristics and use of FE/VET

In relation to the qualifications of the core or main employees of those who used commercial VET and FE providers, it is clear that employers whose core or main employee groups were higher qualified were most likely to take up this form of provision. There was no clear relationship between size of employer and the use of commercial VET providers, but size appears more significant in the take up of FE services. Medium-large employers were almost twice as likely to have taken up this form of provision as small employers, and more than three times as likely as micro-employers.

Employers' assessment of FE/VET services

The assessment of those employers using commercial VET and FE services was generally positive.

- Of those employers previously using commercial VET 37 out of 38 (97%) found it to be relevant and all of the employers using FE providers considered the content of provision to have been relevant and appropriate.
- 92% of employers using VET and 56% of those using FE thought that training providers demonstrated a good understanding of their skills needs.
- 92% of employers using commercial VET provision and 94% of those using FE considered these forms of training to be cost-effective.

Accordingly, although a number of employers expressed a lack of detailed knowledge about what FE could offer, those who had engaged with the sector were generally positive about the experience.

> *The FE provision we used was good – we had to encourage them to get the course set up on time but delivery was spot on, we were really pleased.*
> Non-life insurance company, medium-sized employer, Glasgow [telephone interview]

Employers had more mixed views about the flexibility of available training provision, especially in relation to FE services. Less than one-third of employers using FE considered this provision to be flexible, while more than two-thirds considered FE to be 'not very flexible' or 'not at all flexible'.

Reasons for using or not using FE and VET services

Exploring the reasons for employers' non-use of FE and commercial VET provision saw a number of recurring themes. In particular, the services provided by commercial VET were seen as more appropriately provided 'in-house' by more than half of those who had not used commercial providers. One-quarter of these employers cited a general lack of appropriate provision. This reason was also cited by more than half of those who had not taken up FE services. A linked theme was that there was a lack of need for the services that FE can deliver, in some cases reflecting a belief that skill needs were 'covered' by internal training. However, those citing 'no need' for external training provision were also less likely to identify future *technical* skills upgrading needs, perhaps suggesting that those dismissing the need for external assistance are generally less concerned with sector-specific skill needs.

Table 4.3 Key reasons given by employers for not using commercial VET services

Reason	Number of employers
Preference for 'in-house' training	19 (54%)
Lack of appropriate provision/skills required too specific	9 (26%)
Cost	6 (17%)
Lack of need	6 (17%)
Training needs covered by other providers	5 (14%)
Training not prioritised within company	1 (3%)

N = 35

Table 4.4 Key reasons given by employers for not using FE services

Reason	Number of employers
Lack of appropriate provision/skills required too specific	29 (51%)
Lack of need	13 (23%)
Preference for 'in-house' training	11 (19%)
Don't know what is available	5 (9%)
Cost	3 (5%)
Training needs covered by other providers	2 (4%)

N = 57

At this point it is important to acknowledge that our in-depth interviews (and our research with key stakeholders, see Chapter 8) consistently reinforced the view that two factors – the importance of in-house training; and the extensive use of 'professional institute'-accredited home study – inherently limit the role of commercial VET providers and especially FE in delivering skills upgrading. First, interviewees noted that processing and customer service roles carried out by front office staff revolved around tailored company products and bespoke IT systems making internal training provision essential. Some employers also suggested that data protection issues precluded buying in external provision, although it is notable that others had established 'model office' internal training systems with invented client data. Second, for higher skilled professionals, Institutes such as the CII (insurance), or the SII or CFA Institute (securities and investment/fund management) issue their own learning materials, and administer and accredit professional examinations (under FSA regulation). Examinations cover 'certificate'-level courses for relatively junior professionals up to diploma and advanced post-graduate equivalents (for example, the 'Advanced Diploma in Insurance' or ACII; or 'Chartered Financial Analyst' qualification). While private training providers in particular can support learning towards these qualifications, in many cases employers work directly with the professional institute and encourage staff to undertake home study (with some support in the workplace). All 3 medium and large employers participating in in-depth interviews subsidised employees' fees and learning materials costs to undertake such professional institute qualifications.

> *We basically require all underwriters and even many contact centre claims staff to do CII exams. We want to see evidence towards progression.*
> Insurance and pension funding firm, medium-size employer, Glasgow [in-depth interview]

Where positive relationships had been developed with FE or VET providers, the appropriateness of provision (in terms of specific content) and the expertise of tutors were they key drivers.

Table 4.5 Key reasons given by employers for using commercial VET services

Reason	Number of employers
Appropriateness of provision	20 (52%)
Past experience/expertise of providers	19 (50%)
Cost-effectiveness/support with costs	8 (21%)
Flexible mode/method of delivery	6 (16%)
Established working relationship	5 (13%)
Location/facilities	2 (5%)
Need for accredited learning	1 (3%)

N = 38

Table 4.6 Key reasons given by employers for using FE services

Reason	Number of employers
Appropriateness of provision	10 (63%)
Past experience/expertise of providers	4 (25%)
Location/facilities	4 (25%)
Cost-effectiveness/support with costs	2 (13%)
Flexible mode/method of delivery	2 (13%)
Need for accredited learning	1 (6%)

N = 16

In-depth interviews carried out with employers reinforced these findings. All 4 employers heavily relied upon internal training to deliver company-specific product and practice knowledge. The 3 medium-large employers also directed staff through professional institute learning – the two large insurers working directly with the CII and supporting employees' efforts through time off for study and refresher sessions, while the security broking firm had used a leading commercial VET provider to support learning towards SII examinations. All 3 of these employers had sometimes used other commercial providers for specific training functions. It was suggested that commercial VET providers were able to provide the specific, flexible and bespoke provision needed. One employer outlined the critical success factors informing their engagement with a leading commercial provider.

> [The providers] *have shown willingness to be flexible in terms of the format through on-line learning; location, where they have delivered face-to-face stuff here* [in the workplace]*; they were willing to collapse a 3-day session into 2 days – we worked with them to identify the essential content. They have expertise. They provided personalised support for our employees through on-line tutoring…*
> Security broking firm, large employer, Glasgow [in-depth interview]

However, despite employers reporting few problems in sourcing services, there remained concerns that information flows about the availability of *local* provision were weak.

> *If local providers can offer value for money and the right provision then we will consider using them… At present I have to 'Google' around looking for local provision, and it is still difficult to find what we want. More information and a more proactive approach from FE would be welcome… If we can make a business case for buying in local training we will do it.*
> Security broking firm, large employer, Glasgow [in-depth interview]

Finally, it is perhaps notable that the *type of provision* often delivered through the FE sector in particular rarely featured in employers' descriptions of previous training provision. There were few employers who reported taking up SVQ or MA-type provision, and indeed one employer noted that 'generic' customer services provision under the vocational qualifications framework had proved inappropriate for the needs of contact centre staff.

> *We trialled an SVQ on customer service skills but there was a big drop-out rate. We were trying to boost and accredit their customer service skills. But it didn't work out. There was a sense that the SVQ route is perhaps not the best route to go down.*
> Insurance and pension funding firm, large employer, Glasgow [in-depth interview]

4.2.5 Future skills upgrading and use of FE/VET provision

As noted above, 90% of employers participating in our telephone interviews acknowledged that their core or main employee groups would require skills upgrading over the next year. A combination of soft skills (focusing on teamwork, leadership and customer servicing) and technical knowledge is likely to be required. 76% of all employers (83% of those reporting skills upgrading needs) confirmed that they planned to provide *most* skills upgrading 'in house'. In total, 96% predicted delivering some form of internal training during the next year. 42% of employers predicted that they would use commercial VET providers to upgrade skills. Training programmes (including learning materials directly provided by professional institutes) were mentioned by 35% of respondents and 26% thought that they would use FE services.

Table 4.7 Number of employers 'likely' to use forms of training provision

Type of training	Number of employers
In-house, on-the-job	70 (96%)
In-house, off-the-job	45 (61%)
Commercial VET providers	30 (42%)
Training programmes	25 (35%)
Equipment suppliers	21 (29%)
FE providers	19 (26%)
Other employers	19 (26%)
Non-profit organisations	16 (22%)

N = 73

In terms of their future skills upgrading plans, our in-depth interviewees described a familiar mix of internally-delivered product and systems knowledge alongside support for professional institute-accredited learning and (in some cases) specific provision sourced from VET providers. Employers again emphasised that training on using IT programs for 'keystroke' processing and on company-specific products would necessarily be delivered internally.

> *On the technical aspects of insurance we will train in-house – it's cheaper; our in-house trainers are there and ready to deliver, so we might as well use them; and the training focuses on our specific products and practice.*
>
> Insurance and pension funding firm, large employer, Glasgow [in-depth interview]

Only 1 of the 4 in-depth respondents saw an immediate role for FE providers (in this case in delivering specialist accident claims assessment training). The other employers were open to an emerging role for FE providers, but often knew little of local services and were sceptical of the capacity of the sector to deliver appropriate professional education towards examination or even targeted soft skills. The general view was that professional institute learning provision and (in some circumstances) commercial VET services were better placed to deliver the required highly specific skills in an appropriately flexible format.

Employers' characteristics and future use of FE/VET

Medium and larger employers were more likely to predict using commercial VET and/or FE providers for future skills upgrading. A similar relationship was apparent when it came to predicted use of FE provision (although employers were less likely to use FE provision in all cases). There was also an apparent relationship between qualifications within the core or main workforce and planned use of FE and VET provision. Employers with higher qualified core/main employee groups were significantly more likely to consider using both FE and commercial VET providers for skills upgrading.

Role of previous use of FE/VET

Crucially, more than two-thirds of those employers planning to upgrade skills using FE had used FE during the previous 2-3 years. The message would again appear to be that where FE providers have been able to establish an initial relationship with employers, this can lead to continued collaboration. Similarly, almost two thirds of those employers planning to upgrade skills using commercial VET providers had used such provision during the previous 2-3 years.

4.3 FINDINGS FROM THE CASE STUDY RESEARCH

4.3.1 Introduction to case study research

The aim of the case study phase of the research was to discuss challenges and opportunities around FE and VET providers' engagement with finance employers, identify examples of good practice, and analyse barriers and opportunities associated with improving employer-trainer interaction. Case study institutions were selected in order to reflect a range of geographies, types of provider and approaches to engaging with employers. Following consultation with employers and key stakeholders, the following organisations were selected for the case study research:

- 7city Learning, London;
- BPP Professional Education, Edinburgh;
- Accounting Section, Ayr College;
- British Insurance Brokers Association.

4.3.2 Key services and responding to sector skill needs

Two of the organisations providing a focus for the case study research were commercial VET providers – 7city Learning (7C) and BPP Professional Education (BPP). Both organisations deliver preparatory training for a range of key professional qualifications through 'in house' visits to Scotland-based establishments, distance learning and structured classroom provision (7C delivers services at the company's London training centre; BPP has an Edinburgh base). These services are designed to support learners towards the successful completion of qualifications accredited by professional institutes such as the Securities and Investment Institute (which accredits professional Certificates and Diplomas and its 'threshold competency' Investment Administration Qualification), the Chartered Financial Analyst (CFA) Institute and others. Both companies consider that they have built successful relationships with large fund management employers, based on the credibility associated with specialist training staff and a commitment to delivering highly flexible services. Our 7C interviewee described "short surgical strike sessions" based around the syllabus, web cast training sessions linking trainers in the company's London centre with workplace learners in Scotland, on-line learning materials, and "2-3 day deep immersion programmes" delivered in the workplace, all of which complement home study packs and additional study material. Representatives of both companies also highlighted the importance of investing time and resources in developing one-to-one relationships with employers prior to and during the delivery of training.

FE colleges face considerable challenges in establishing a role for themselves given the success of such private VET providers in building relationships with major employers. However, the Accounting/ Financial Services Section at Ayr College (AC) has recently built upon long-established accountancy provision to diversify into generic financial services training (at HNC/D level) and Chartered Insurance Institute professional qualifications, and is planning to deliver a Professional Development Award in partnership with the Securities and Investment Institute (the award will link to the Institute's Investment Administration Qualification). While generic financial services provision has been difficult to sustain, take up of specialist services linked to professional qualifications has remained strong. AC seeks to promote its services as adding value by offering intensive support from professional tutors. It was acknowledged by AC representatives that there remain challenges in establishing relationships with employers – the time and resources to undertake employer engagement activities is severely limited – but this college has been able to demonstrate that there can be a role for FE in providing basic forms of professional education for the sector.

In responding to the findings of our research with employers, all providers acknowledged the sector's need for training that was highly specialised and practical. Supporting progression towards professional qualifications through intensive, focused training was the key service provided by the commercial VET providers studied, and an increasing focus for our FE provider. Disseminating highly technical, specialist product knowledge was also the focus for our final case study – the British Insurance Brokers' Association (BIBA), a professional association which hosts technical training (often delivered by specialists from major companies) for brokering companies. The specialist knowledge sought by employers was therefore present in all case study organisations, although in some cases (as with our FE provider) the capacity to deliver high level services was inherently limited by the limited number of specialist trainers available.

Table 4.8 Case study institutions and responsiveness to employers' skill needs

Institution/ programme	7C	BPP	AC	BIBA
Key training services	Support for SII, CFA and other professional qualifications; tailored CPD for investments sector.	Support for SII, UKSIP, CFA and other professional qualifications; tailored CPD and bespoke training for investments and other sectors within financial services.	SVQ-HND accounting and financial services. Professional institute qualifications in accounting (ACCA), insurance (CII), and investments (SII/IAQ)	Specific technical insurance training for those in the broking industry. Organised on semi-formal basis by employers, supported by major insurers.
Geographical focus	National. Delivers in-workplace, on-line and distance learning for Scottish employers.	Nationally with a base in Scotland. Delivers in-workplace, on-line and distance learning for Scottish employers, as well as structured courses in Scotland.	Local, regional (west of Scotland).	Scotland-wide.
Relationship with employers	Very strong relationship with employers in specific sub-sector. Uses client relationship managers to ensure effective tailoring of services to client needs.	Very strong. Works closely with employers to identify training needs; delivers mainly structured courses and on-line/distance learning, but also bespoke provision.	Some contact with local SMEs, but services are mostly geared towards students.	Trade association for brokers and close links to major insurers. Employers organising training for themselves.
Capability to meet future skill needs	Well placed to meet skill needs of employers in fund management/ investments sector due to expertise in facilitating profess-ional institute-accredited learning, highly skilled trainers in place. If sufficient market for high level training emerges will consider establishing structured provision in Scotland.	Expertise to meet skill needs of employers in fund management/ investments sector. Has the capacity and ability to respond to increases in demand for different types of delivery. However, expansion of service likely to be limited by the scale of the sector in Scotland.	May be able to offer intensive support for CII/SII candidates, but may need to develop more pro-active strategy for engaging employers. Inflexible timing of FE provision (with courses dates matching term times) may be problematic.	Well placed to respond to the immediate needs of the broking industry/ deliver expert training, but limited capacity for expanding provision or long-term planning due to voluntarism/ limited resources.

One of the other priorities identified by our employers – the availability of flexible, bespoke services – is clearly a major element of the provision offered by commercial VET providers such as 7C and BPP. Our AC representative acknowledged that the FE sector cannot be equally flexible, and that the highly structured content of provision (even if delivered through evening, part-time or distance learning) can limit relationships with employers. Another key finding relating to employers' preference for internal training to teach staff basic product knowledge and processing techniques was not seen as problematic by training providers. It was acknowledged that internal training was the most effective means of delivering 'keystroke' skills and company-specific product knowledge.

Training providers were familiar with many of the emerging skills upgrading needs identified by employers. One training manager noted that, with Scotland hosting a number of 'processing centres' for fund management activities, there will be new challenges associated with the increasing complexity of financial products such as derivatives (a point previously raised by a number of employers). Increasing product complexity means that such staff are likely to require substantial skills upgrading if Scottish employers are to retain their competitiveness in the medium-term. Similarly, the increasing importance of hedge funds is likely to require new skills and knowledge among staff and managers. Those involved in training insurance professionals also acknowledged the need to provide progression routes for contact centre staff – it was suggested that increased efforts to formalise training for entry level staff could impact positively on retention and productivity.

Finally, in responding to employers' skills upgrading needs, both FE and VET providers were confident of their ability to deliver high quality services. However, the limited scale of specialist sectors such as investment fund management is likely to continue to raise challenges in terms of achieving economies of scale in programme development and delivery (which will continue to limit opportunities to work with employers outside standardised examination-based formats). Commercial VET providers acknowledged the concerns raised by some employers regarding the potential limitations of examination-focused training (i.e. the danger that training will become about "passing the exam" rather than developing a broad base of knowledge about the principles of fund management activities).

4.4 CONCLUSIONS AND IMPLICATIONS FOR POLICY

The financial services sector's growth is predicted to continue in the immediate to medium term in Scotland. Our research suggests that employers will need to develop a range of skills upgrading solutions to improve teamworking, customer service and leadership skills, but also technical knowledge. Indeed, as in other sectors, there will be increasing pressure for Scotland's financial services employers to provide high value-added services with an emphasis on quality and expertise across a range of complex markets. Increasing product complexity will require a strong commitment to continuing professional development among employers in, for example, the investments/fund management sector. At the same time, domestic customers are becoming increasingly demanding and quality-conscious, so that contact centre staff require deeper product knowledge and improved service skills, while financial services employers are seeking to rationalise and re-engineer their organisations, so that multi-skilled employees can combine basic 'operations' and business processing, responsive customer services and more pro-active sales roles.

FE and commercial VET providers will have some role to play in facilitating skills upgrading, but there will be limits due to the necessary emphasis on internal training for both 'front office', customer-handling staff and 'back office' professionals who deal with the highly technical aspects of financial services products. In both cases, company-specific products, practices and systems mean that in-house training will remain important – it is notable that the training providers participating in our case studies were focused on complementing rather than challenging these internal training arrangements. Employers also currently tend to source professional-level learning services from specialist commercial VET providers (such as those discussed in the case study research) or by interacting directly with professional institutes. However, there may be some scope for FE, HE or other providers to add value to professional institute-accredited provision, by offering localised, intensive support and tuition. Indeed, there may be value in FE providers continuing to work with the SQA and professional institutes in an attempt to integrate examination-focused professional education with broader financial services provision.

A number of specific policy implications flow from the discussion above.

- Financial services employers are aware of the need for skills upgrading to respond to the changing demands of the sector. The FSSC and partners should support the sector's planning of training (reflecting the need for more responsive contact centre services or, at the higher skills level, increasingly complex products) and work with providers to ensure that there is adequate, relevant provision as the sector in Scotland seeks to develop services 'higher up the value chain'.
- While the role of FE and commercial VET will continue to be limited by the preference for internal training on company-specific products, practices and systems, there is a need for further research on the potential role of external providers in assisting employers to develop accredited in-house training and stronger progression routes for entry-level staff. At present, there are concerns among employers that entry-level (especially contact centre) staff do not see their work as the first step in a financial services career – there may be a role for external providers in helping employers to deliver more transferable, accredited training for these staff.
- The role of FE in particular has also been limited by the importance of professional institutes' accredited learning provision within the sector. However, there is scope for the development of

services to support and tutor learners undertaking institute courses. Some employers' were concerned that the 'institute route' can lead to a focus solely on 'passing the exam' rather than developing a broader-based knowledge of the principles of financial services. There may therefore be opportunities to more closely integrate institute materials and qualifications with the broader-based financial services learning currently provided by some FE/HE institutions. FE and other providers will need to consider the viability of developing such local services.

- In more general terms, the FSSC, the SQA, Scottish Enterprise and other relevant stakeholders should continue to work together to ensure that SVQ, MA and other forms of vocational provision more accurately reflect the needs of employers. Improving the integration and complementarity of these forms of provision with professional institute learning should be a priority.
- If FE and other providers are to build on existing relationships with employers they need to be able to demonstrate how they can add value to professional institute learning materials by offering additional, high quality support for learners. There are important lessons from the leading providers highlighted in our case study research regarding the need for training that is: bespoke and responsive to employers' specific skill needs; delivered by professionals with expertise in specific areas of learning and practice; tailored to support progress towards relevant professional qualifications; delivered in a range of flexible formats, from on-line learning to one-to-one tuition. Certain rigidities in the funding, structure, timing and delivery of FE provision are likely to remain problematic, and FE providers and stakeholders need to consider how to promote flexibility.
- Employers also articulated the need for teamworking, customer service and leadership skills. There is likely to be a continuing potential role for FE/VET providers in developing appropriate, context-specific and sector-specific 'soft skills' provision.
- Given that commercial VET and FE users were generally positive about these services and were more likely to predict using similar provision in the future, there is again an argument to be made for a specific 'first contact' initiative, allowing employers to learn about the expertise and range of provision available from training providers (especially FE). More generally, there is a need to promote improved communication between FE and HE providers and the sector.
- SMEs and micro-employers (such as small, independent advisers or brokers) often rely upon internal continuing professional development activities and seminars provided by industry bodies, reflecting the limited resources to undertake more formal skills upgrading. There is a continuing need for the FSSC, Scottish Enterprise and other stakeholders to ensure that these smaller employers are aware of, and have access to, appropriate formal skills upgrading provision.
- Finally, all employers were committed to delivering support for 'continuing professional development', but it was noted that the quality of learning varied considerably between financial services employers. FE and VET providers, and other key stakeholders, should work with employers to identify potential opportunities for training providers to facilitate more effective, flexible 'continuing professional development' activities in line FSA regulations.

5. THE METAL AND MACHINERY MANUFACTURING SECTORS IN NORTHERN IRELAND

KEY ISSUES FROM THE RESEARCH IN METAL AND MACHINERY MANUFACTURING

- The research involved telephone interviews with a sample of 87 employers in the metal/machinery manufacturing sector (SIC27-29). In-depth interviews were then undertaken with 4 employers and case studies with 2 institutions providing training to the sector.
- 83% of employers suggested that core/main employee groups had required skills upgrading during the previous 2-3 years. 91% said that they would require upgrading during the next year, with compliance with regulation and the introduction of new technology the main drivers.
- Equipment suppliers were most often used to deliver skills upgrading (59% of employers), but there was also relatively high use of FE services (49%) and commercial VET provision (54%).
- Employers' assessment of both FE and VET training was generally very positive, although concerns were raised regarding the cost-effectiveness of commercial VET services (raised by 22% of VET users) and inflexibilities in the delivery of FE services (35% of FE users).
- Employers who had not used FE and VET services cited most often the specific nature of their skills upgrading needs, which they believed could not be met by these providers.
- Employers were most likely to predict upgrading needs with reference to teamwork skills (70%) and sector-specific technical skills (64%). Technical skills prioritised by employers included familiarisation on existing production machinery and the effective use of new technologies. Most employers predicted using mainly in-house training to meet future skills upgrading needs – 87% of employers predicted undertaking internal training, compared to 53% who expected that they would use commercial VET providers and 43% planning to use FE services.
- Case study research focused on two centres of excellence at the North East Institute and the North Down and Ards Institute. Both have developed strong links with major employers, delivering bespoke provision. The tailored nature of training services, the expertise of staff, and the availability of time and resources to build relationships have been critical success factors. The limited ability of small employers to buy in provision, and the problems these employers face in freeing up staff time, have been barriers to greater engagement with micros and SMEs.
- The findings suggest that policy action is required in a number of areas, including: measures to ensure that training providers can respond to the need for highly specialised training at the cutting edge of manufacturing and design technologies; the further development of bespoke training that enables employers to combine specialist skill sets; the spreading of good practice on employer engagement from centres of excellence to other parts of the institution and to FEs more generally; and the strengthening of funding mechanisms to engage employers and assist micros and SMEs to buy out employee time for training.

5.1 INTRODUCTION

There are approximately 7,750 people employed in the manufacture of metals and metal products in Northern Ireland. A further 6,000 people are employed in the manufacture of machinery and equipment. Inter-Departmental Business Register data suggest that there are 35 establishments involved in the manufacture of basic metals; a further 730 involved in the manufacture of fabricated metal products; and 395 involved in the manufacture of other machinery and equipment. It should be noted that across these three areas of activity, just over half of all establishments employ less than five members of staff (and therefore fell outside the remit of this study). Northern Ireland's main centres of metal manufacturing activity are located in the urban centres of Belfast and Lisburn, although there are a number of other clusters (e.g. Dungannon approximately 65km from Belfast).

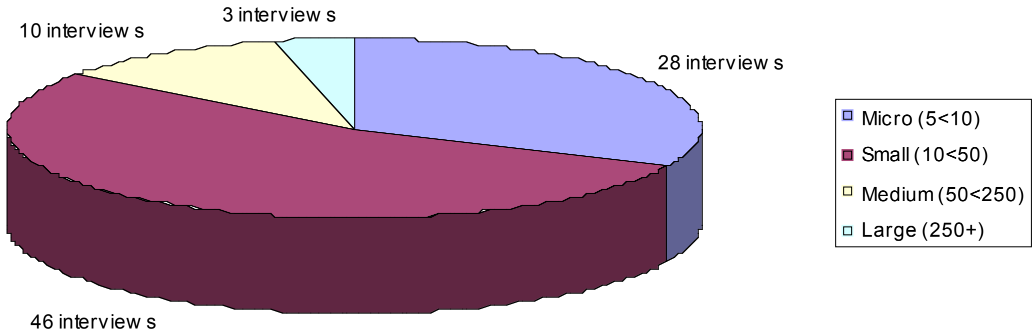
Previous detailed sector-level data are difficult to obtain, but general findings on manufacturing from the 2005 Northern Ireland Skills Monitoring Survey suggest that a similar proportion of manufacturers experience skill gaps as employers in other sectors. SEMTA – the Sector Skills Council for Science, Engineering and Manufacturing Technologies – has a remit to help employers to access an appropriately skilled workforce, by ensuring the skills provision and qualifications are responsive to employers' needs. In Northern Ireland, SEMTA works with the Engineering Training Council to support the development of skills provision in the metal manufacturing sector. The remaining sections of this chapter report the findings of our research with employers (5.2) and training providers (5.3), before discussing conclusions and policy implications (5.4).

5.2 FINDINGS FROM RESEARCH WITH EMPLOYERS

5.2.1 Sample for survey research and selection of in-depth interviews

A total of 87 telephone interviews were undertaken with employers across Northern Ireland. Given the importance of these 'metal manufacturing' activities within the Northern Ireland manufacturing sector, our research focused on employers involved in: 'manufacture of fabricated metal products' sector (SIC 28; 46 interviews), but a number of interviews were also undertaken with employers working in the manufacture of basic metals (SIC 27; 6 interviews) and manufacture of other machinery (SIC 29; 35 interviews). Just under one-third of the sample (28 of 87 employers) were micro-employers employing less than 10 staff, and a further 46 (53% of all responses) employed 10<50 staff. 10 interviews were conducted with medium-size employers (50<250) and 3 with large employers with more than 250 staff.

Figure 5.1 Sample of employers by employment sizeband



In addition to the telephone survey research a series of 4 in-depth, face-to-face interviews was undertaken (with interviews lasting between 45 and 80 minutes). Respondents for in-depth interviews were purposively selected to reflect a range of locations, employer sizes, skill profiles and areas of manufacturing activity. In-depth interviews which were therefore undertaken with:

- a specialist metal equipment manufacturer (specialising in the manufacture of cooling equipment); based in Armagh (classified as ‘medium town’, approximately 65km from Belfast, population 14,500); micro-establishment (8 staff);
- a ‘general mechanical engineering’ employer; based in Lisburn (‘urban area’ within the Belfast Metropolitan Area, approximately 15km from Belfast, population 71,400); small establishment (10 staff);
- a ‘general mechanical engineering’ employer; based in Carrickfergus (‘urban area’ within the Belfast Metropolitan Area, approximately 11km from Belfast, population 27,200); small establishment (40 staff);
- a metal roll forming manufacturer; based in Strabane (‘medium town’, approximately 135km from Belfast, population 13,400); medium-size establishment (50 staff).

Findings from these in-depth interviews are reported alongside the telephone survey results below in order to provide more detailed insights into employers’ attitudes and approaches towards upskilling.

5.2.2 Workforce and recruitment issues

Recruitment issues

The majority of employers interviewed for the research reported an increase in workforce numbers during the previous year (54%) or no change (38%), while few reported losing staff (8%). Almost all employers adding to their staff numbers cited ‘increased business turnover’ as the key driver for workforce expansion. Other employers had recruited to replace staff so that in total 69% had recruited to their core or main employee group in the previous year. Employers again reported considerable difficulties in finding and retaining appropriately skilled labour – for 65% of employers taking on new staff (i.e. 45% of all employers) recruitment had proved ‘difficult’ or ‘very difficult’.

Table 5.1 Reasons for recruitment difficulties to core or main employee group

Reason for recruitment difficulty	Number of employers (%)
Lack of technical knowledge/skills of applicants	17 (20%)
Too few applications	12 (14%)
Lack of relevant qualifications of applicants	10 (11%)
Lack of relevant experience of applicants	8 (9%)
Sector not seen as attractive job location	7 (8%)
Relatively low pay in sector	5 (6%)
Tight labour market/competition for skilled labour	3 (3%)
Poor attitude of applicants	2 (2%)
Other skill gaps of applicants	2 (2%)
Location of employment/training	2 (2%)

N = 87 (Figures expressed as percentage of all surveyed employers, rather than employers who had recently recruited.)

The main reasons for recruitment problems reported by employers focused on a lack of specific technical knowledge among applicants (mentioned by 20% of all employers) and a general lack of applications (reflecting the tightness of the Northern Ireland labour market – one employer characterised Northern Ireland as “a zero unemployment labour market”). Relevant, *sector-specific* experience and qualifications were a priority for employers, and applicants’ lack of these was a component of recruitment problems for 11% and 9% of employers respectively. Finally, some employers pointed to the image of the sector as problematic in attracting applicants, and especially skilled young people. One of these employers said that the sector needed an “image change”, and a number of others suggested that the image of metals engineering and manufacturing as involving difficult and physically demanding work conditions remained a barrier to recruitment.

> *It’s the type of work – it can be noisy, dirty, heavy work.*
> Metal structures manufacturer, small employer, Belfast [telephone interview]

Predicted workforce development

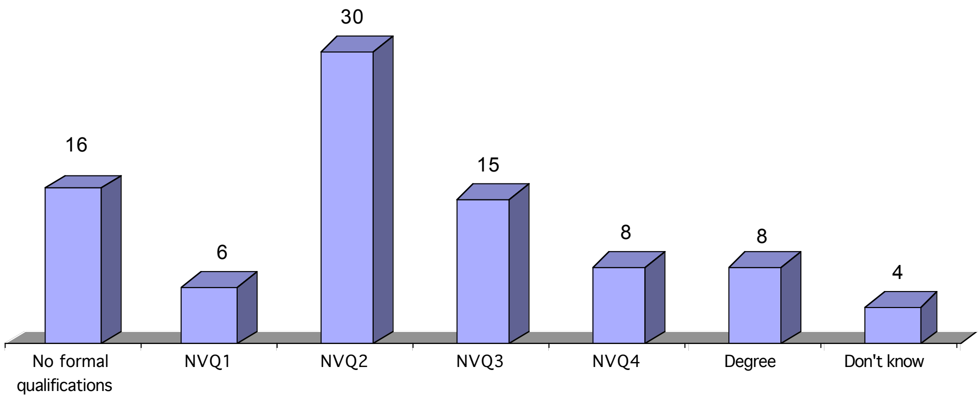
In terms of future workforce development, the majority of employers were optimistic, predicting increased turnover and a growth in employee numbers during the next twelve months (63%); only 3% of employers predicted a decrease; and 31% thought that their workforce would remain stable (2% did not know). According to these employers, it is likely that there will be opportunities for employment growth within the sector in the immediate to medium-term – it is therefore all the more important that skills upgrading provision is well placed to meet employers' growing needs.

5.2.3 Workforce skills and skills upgrading needs

Workforce qualifications

Employers with more than 10 staff were asked about the qualifications of 'core' employees – those employees central to the effective operation of the business – while smaller employers were asked about the 'main' body of their workforce in general. There appears to be a reliance on core employees qualified to NVQ2-3, while relatively few employers reported their core or main group of workers qualified to only level NVQ1 or below (25%). The largest single group of employers reported core/main employees qualified to level NVQ2 (34%), while others reported staff at level NVQ3 (17%); and NVQ4 and above (18%). 5% of employers were unable to identify a 'typical' level of qualification for their core/main staff.

Figure 5.2 Level of qualification of core or main employee group (n = 87)



Occupational skills

In terms of occupational skill sets, employers described a range of skilled positions that made up their core employee groups, with a strong emphasis on 'engineering' job roles. Of the 59 employers with 10 or more staff asked to describe the occupations of their *core employee groups*, 21 highlighted the work of people in a range of engineer positions. 'Production or machine operatives' (11 employers), welders (8) and fabricators (6) were also repeatedly highlighted as core employee occupations. It was clear from discussions with employers that in recruiting to these posts they were seeking staff with highly specialised skill sets, including expertise in the use of specific branded production machinery, experience in computer-aided design and manufacturing (CAD/CAM) and knowledge of computer numerical control (CNC) systems.

Skills of new recruits

The largest group of employers who had recruited to their core or main employee group during the preceding year thought that new recruits had most or all of the skills required (45% of those employers recruiting). A further 25% thought that new recruits had some of the required skills; 27% suggested recruits had few or none of the required skills (2% did not know).

Skills upgrading in last 2-3 years

83% of all employers suggested that core/main employee groups had required skills upgrading during the previous 2-3 years, with the main drivers including: the need to respond to new legislation (63%); the introduction of new technology (61%) and related work practices (51%); and the development of new products (54%).

Skills upgrading needs during next year

The vast majority of employers (91%) suggested that their core or main employee group would require some form of skills upgrading during the next year, with the main drivers again compliance with legislation (61%); the introduction of new products (60%) and new technology (59%); and the introduction of work practices (51%). It is clear that different types of employer experience different pressures to undertake training. For example, the introduction of new technology was predicted to be a driver of skills upgrading for 75% of medium-large employers (employing more than 50 staff), but only 50% of micro-employers (employing less than 10 staff). It may be that larger organisations with resources to invest in new technologies were accordingly more likely to consider the skills upgrading implications of such moves. Conversely, micro-employers were significantly more likely to predict skills upgrading in response to regulations/legislation (71%, compared to 54% of other employers).

Soft skills required

Employers most often prioritised teamwork skills (70%), closely followed by sector-specific or occupational-specific technical skills (64%). No other skill sets were being prioritised by more than half of our sample of employers. A small number of employers also pointed to the increasing numbers of skilled migrant workers in the sector. While the technical skills of these workers (many of whom come from 'Accession 8' EU countries) appear to be strong, language and literacy can be an issue – 23% of employers thought that literacy skills would require upgrading over the next year; 17% thought that language skills would require upgrading.

Technical skills required

Medium-size and large employers were clearly more likely to report specific technical skills upgrading needs (more than 92% of employers with more than 50 staff predicted a need for improved technical skills, compared to less than 60% of smaller employers). A range of technical, sector-specific skill needs were identified by employers relating to, for example:

- skills updating on existing or new machinery (often in relation to 'familiarisation' with new products and manufacturing processes);
- computer-aided design/manufacturing (CAD/CAM) skills;
- IT-based production skills, including the use of computer numerical control (CNC) and programmable logic controller (PLC) systems;
- other electronics-related skills, for example in compliance with National Inspection Council for Electrical Installation Contracting (NICEIC) electrical installation regulations.

Table 5.2 Employers reporting future skills upgrading needs

Type of skills upgrading	Number of employers
Teamwork skills	61 (70%)
Sector-specific technical or IT skills	56 (64%)
Leadership skills	39 (45%)
'General' IT skills	38 (44%)
Communication skills	23 (26%)
Literacy skills	20 (23%)
Problem-solving skills	20 (23%)
Customer service skills	18 (20%)
Numeracy skills	18 (20%)
Language skills	15 (17%)
Any of above skills needs	79 (91%)

N = 87

Our in-depth interviews confirmed the range and depth of predicted skills upgrading needs. For one employer, the increasing use of CAD alongside web-based tools for communicating engineering designs meant that specific IT training (most likely to be delivered in-house and through equipment and software suppliers) was a priority.

> *Something like AutoCAD is continually evolving and will continue to need* [skills] *upgraded. We are also looking at more web-based data retrieval systems to allow our customers to go to the web and pull down information about our systems – a 'window to our web' if you like.*
> General mechanical engineer, small employer, Lisburn [in-depth interview]

For this employer, there was a constant need for on-the-job skills upgrading to ensure that core employees were familiar with both evolving design practice and the most effective use of technology.

For another small employer, the priority was for future training that would facilitate multi-skilling and multi-tasking. For this enterprise, which specialised in mechanical fitting work for the construction sector, there was a predicted need for internal and/or ‘bought in’ training that would bring together the skills of ‘fitters’ and ‘welders’.

> *The only change we are trying to do is to make our employee’s more flexible. We need a welder to be a fitter. We need a fitter-welder* [who can] *turn his hand to other things…* [rather than] *a welder only who would not do anything that is not welding – any preparation or anything… Recent recruits are fitter-welders and they can do both.*
> Mechanical engineers, small employer, Carrickfergus [in-depth interview]

But for a third medium-size employer, establishing and reinforcing basic engineering and machine production skills was a concern alongside considering how best to combat literacy problems among (especially younger) semi-skilled production operatives.

> *There are basic engineering skills that are needed and we need people to be numerate to be able to use measuring equipment. We would like to have other things but basic literacy is a big one – we are finding that it is very hard to get at times.*
> Metal roll forming manufacturer, medium-size employer, Strabane [in-depth interview]

Table 5.3 Employers reporting future technical skills upgrading needs

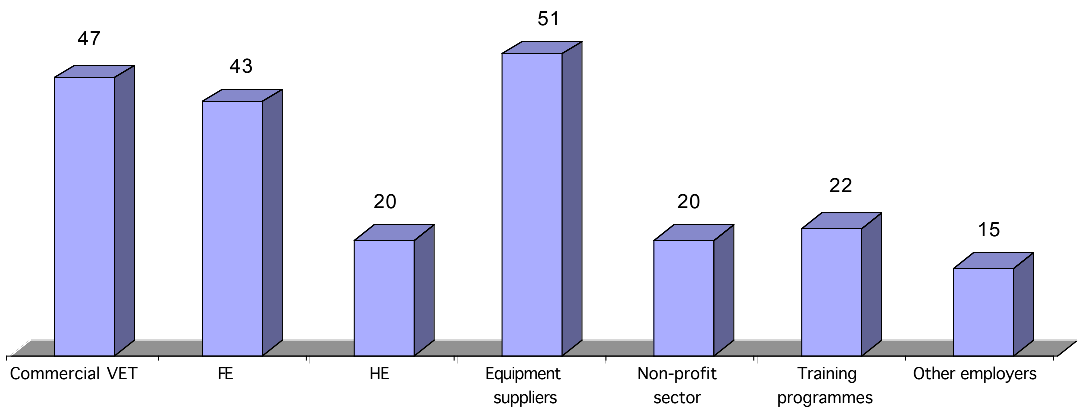
Type of skills upgrading	Number of employers
Machinery and production skills (general)	26 (30%)
CAD/CAM skills	11 (13%)
Other IT systems skills	11 (13%)
Machinery and production skills (electronics)	8 (9%)
Welding skills	6 (7%)
CNC skills	4 (5%)
Other engineering skills	3 (3%)
Customer service skills	1 (1%)
Quality assurance skills	1 (1%)

N = 87

5.2.4 Previous skills upgrading and use of FE/VET provision

As noted above, 83% of employers participating in telephone interviews suggested that their core/main employee groups had required skills upgrading during the previous 2-3 years. The majority of employers reported using equipment/machinery suppliers to train core or main employee groups (59%). However, both commercial VET and FE providers had also been regularly used to address skills upgrading needs – 54% had used commercial VET providers to upskill staff during the previous 2-3 years; 49% had used FE providers; 74% of employers had used one of these forms of provision and 29% reported using both.

Figure 5.3 Number of employers previously using training provision (n = 87)



Among the employers that provided our in-depth interviewees, there was a similar combination of in-house training and *some* provision bought in from FE and commercial VET providers. For one engineering employer, there was a distinction to be made between core employees' skills upgrading (primarily delivered through equipment suppliers and in-house training) and the higher level learning of longer-term strategic value to the organisation (and delivered through FE or HE institutions).

> *The main skills are technical skills in CAD and AutoCAD… these are got through on-the-job learning. A couple of the guys are doing night classes but they are more career-based and not so specific in nature. So they are doing an MSc in Engineering and also some environmental courses. These might have a long-term benefit to the company in the future. We give them some incentive to do these by offering to pay the fees if they pass the course.*
>
> General mechanical engineer, small employer, Lisburn [in-depth interview]

A medium-size employer, while using FE services to accredit the skills of especially younger staff members, characterised informal, in-house, on-the-job training as central to basic skills upgrading activities in the workplace.

> *Our core workers are in a machine shop where they are employed in turning and fabrication. These skills are acquired through training on-the-job, working with a supervisor. It's all in-house… in this organisation we have a core set of guys who can pass the skills on down the line.*
>
> Metal roll forming manufacturer, medium-size employer, Strabane [in-depth interview]

Another employer described a close relationship with its local FE provider in delivering apprenticeship-type training for new recruits.

> *The main skills needed are in plumbing, electrical and welding skills. We send people to Lisburn College* [i.e. Lisburn Institute] *and they do two years' training… For the first six months they do two days in Lisburn and then three days here. They are also paired with the contract engineers here, where they learn skills, but they will not be able to do things like welding until they have been here for a year or so. It will take five years to serve your time and after that you are an engineer*
>
> Manufacturer of cooling equipment, micro-employer, Armagh [in-depth interview]

But the same employer also acknowledged that most skills upgrading for existing, full-time staff was carried out through internal training or by working with equipment suppliers: "we use company [equipment suppliers] training if there is a need to upgrade skills, if something new is happening with their products".

Employers' characteristics and use of FE/VET

Returning to the results of our telephone interviews, the use of commercial VET providers was clearly least common among micro-employers – less than two-fifths of these employers had recently used VET compared to more than three-fifths of larger employers. The difference between micro-employers and other establishments was less pronounced when it came to the use of FE services, although these small employers were also least likely to take up this form provision. Take up of both FE and commercial VET services was also highest among employers with higher qualified staff.

Employers' assessment of FE/VET services

The assessment of those employers using commercial VET and FE services was generally positive.

- 91% of those employers previously using commercial VET and 77% of those using FE considered their provider to have a 'good' or 'very good' understanding of their skill needs;

- 96% of VET users and 91% of FE users considered the services that they had received to be relevant to their business;
- 87% of VET users and 65% of FE users considered the delivery of provision to have been sufficiently flexible;
- 72% of VET users and 89% of FE users described these services as cost-effective;
- 93% of those employers previously using VET and 86% of those using FE suggested that training had proved useful and effective.

These evaluations suggest that for the majority of those using both FE and commercial VET provision, the experience has been a positive one. A number of employers particularly referred to the specific expertise offered by some commercial VET trainers, and their efficiency in combining a range of skills sets required to meet construction industry regulations.

> *We used a consultant – the training was very relevant. They run the construction industry registration courses that we require and the forklift and health and safety training we need.*
> Mechanical engineers, small employer, Dungannon [telephone interview]

Some employers using both FE and VET provision remained concerned about the limited flexibility demonstrated by providers in the mode and method of service delivery. In the case of FE service users, these concerns were raised by a substantial minority (35% of former FE users), and across both forms of provision the issue was serious enough to result in employers considering alternative training options in the future.

> *It's not very flexible. You have to fit in with the time that suits the training provider* (referring to engagement with a commercial VET provider).
> Mechanical engineers, medium-size employer, Armagh [telephone interview]

> *We work to the college's timetable not ours. We lose people from the production process during the day* (referring to engagement with an FE provider).
> Mechanical engineers, medium-size employer, Strabane [telephone interview]

There were also some concerns over the cost-effectiveness of certain forms of provision – 22% of those previously using commercial VET services considered them to be less than cost-effective. Furthermore, for a minority of employers, there were some concerns around the effectiveness of FE services (12% of those previously using these services were not convinced of their effectiveness). One employer was concerned that his local FE college have "fallen behind the times" in terms of access to and use of the most advanced engineering machinery. In general, employers repeatedly emphasised the need for highly specialised training and advanced expertise among trainers.

Reasons for not using FE and VET services

The same issues were at the heart of some employers' reluctance to consider using FE and/or commercial VET providers. Employers who had not used FE or VET services often cited a lack of need, taking the view that they had few internal skill gaps that could be addressed by these providers. Those suggesting that they had previously had no need for both FE and/or VET services were less likely to predict future technical skills upgrading needs – almost three-fifths of these employers reported no technical skill needs compared to less than two-fifths of the total sample. Only a few employers volunteered further explanation as to why they had no need for these services. For example, for those who had not used commercial VET a 'lack of need' reflected a satisfaction with training provision sourced from elsewhere (4 employers) or delivered in-house (2 employers), or the belief that the company was adequately skilled (2 employers).

There were also concerns about the general lack of appropriate provision – "they don't do the kind of courses that would be of interest to us. More importantly, among the most common reasons for ruling out both forms of provision related to the view that the skills upgrading required by employees was too specific, or at too high a level, to be provided by FE or commercial VET institutions.

> *They very seldom offer training relevant to our work. For example, I know of no CNC machinist courses.*
> Pressing and roll forming works, small employer, Belfast [telephone interview]

This attitude was often combined with a belief that internal training and advice from equipment suppliers negated the need for additional training. In total, 4 employers rejected FE services while 8 employers had ruled out commercial VET services due to a preference for either internal training or the services provided by equipment/ machinery suppliers.

> *I don't see the need to use* [commercial VET providers]. *We need and use specialist machinery advice from our main supplier.*
> Mechanical engineers, small employer, Belfast [telephone interview]

Our in-depth interviews with employers saw similar themes emerge. Employers tended to have developed relationships with FE or VET providers in order to meet particular skill needs but remained heavily reliant upon internal, on-the-job training and (less often) the advice of equipment suppliers, which was then cascaded down to relevant staff members. FE providers, for example, were not always seen as a practical route for upgrading the standard occupational skills required by core employees – one employer's view was that "we need more practical skills taught at colleges".

Table 5.4 Key reasons given by employers for not using commercial VET services (%)

Reason	Number of employers (%)
Lack of need	14 (34%)
Skills required by staff too specific	11 (27%)
Cost/time off for staff	8 (20%)
Lack of appropriate general provision	6 (15%)
Tradition of/preference for 'in house' training	4 (10%)
Tradition of/preference for using main equipment supplier	4 (10%)
Lack of knowledge/never been approached	1 (2%)

N = 41

Table 5.5 Key reasons given by employers for not using FE services

Reason	Number of employers
Lack of need	14 (32%)
Skills required by staff too specific	10 (23%)
Lack of appropriate general provision	8 (18%)
Cost/time off for staff	4 (9%)
Lack of knowledge/never been approached	4 (9%)
Tradition of/preference for 'in house' training	2 (5%)
Tradition of/preference for using main equipment supplier	2 (5%)
Concerns over quality of provision	1 (2%)
Lack of flexibility in mode/method of delivery	1 (2%)

N = 44

Reasons for using FE and VET services

Where our telephone survey interviewees reported *positive* relationships with commercial VET and FE providers it was their capacity to deliver highly specific, tailored provision that was most often mentioned (by 63% of employers using commercial VET and 65% of those who had used FE services). Employers' knowledge that these providers had the specific expertise and facilities to deliver high quality services was also regularly highlighted (37% of employers using commercial VET and 19% of employers using FE services).

> *We have a good relationship with the college and are aware of the services that they provide – we know about their relevance to our business. They have been good for assessment and accreditation.*
> Mechanical engineers, medium-size employer, Londonderry [telephone interview]

Finally, it is notable that relatively few employers highlighted the flexibility offered by training providers as the basis for a successful relationship (although this was mentioned by 12% of those using FE services) – it may be that employers have already factored in whether provision can be delivered at convenient times and locations before even considering individual providers.

Table 5.6 Key reasons given by employers for using commercial VET services

Reason	Number of employers
Appropriateness/specific content of provision	29 (63%)
Knowledge of quality of delivery/expertise	17 (37%)
Mandatory accreditation requirements	6 (13%)
Cost-effectiveness	6 (13%)
Location/accessibility	3 (7%)
Flexible mode/method of delivery	2 (4%)

N = 46

Table 5.7 Key reasons given by employers for using FE services

Reason	Number of employers
Appropriateness/specific content of provision	28 (65%)
Location/accessibility	12 (28%)
Knowledge of quality of delivery/expertise	8 (19%)
Flexible mode/method of delivery	5 (12%)
Cost-effectiveness	5 (12%)
Mandatory accreditation requirements	3 (7%)

N = 43

5.2.5 Future skills upgrading and use of FE/VET provision

As noted above, the vast majority of employers (91%) suggested that their core or main employee group would require some form of skills upgrading during the next year, with a clear majority (64%) targeting sector-specific, technical skills upgrading. However, there was still limited formal planning of training activities – the majority of employers (54%) did not have a formal training plan in place and did not have a 'ring fenced' training budget (59%).

In terms of how employers plan to address these skills upgrading needs, internal training systems are likely to play a dominant role. In-house, on-the-job training was predicted to be an important element of skills upgrading activities for 79% of employers. Many of these employers were also planning to undertake in-house, off the job training (mentioned by 64%). In total, 87% of employers predicted delivering some form of in-house training during the next year.

Table 5.8 Number of employers 'likely' to use forms of training provision

Type of training	Number of employers (%)
In-house, on-the-job	69 (79%)
In-house, off the job	56 (64%)
Commercial VET providers	46 (53%)
Equipment suppliers	41 (47%)
FE providers	37 (43%)
Training initiatives	24 (28%)
Non-profit organisations	20 (23%)
HE providers	17 (20%)
Other employers	11 (13%)

N = 87

Commercial VET provision was seen as playing a role in future skills upgrading by many employers – 53% of employers in total considered it either 'quite likely' or 'very likely' that they would buy in this form of provision during the next year. Indeed, employers were more likely to predict using commercial VET services than those of equipment suppliers – 47% of employers thought it likely that they would take up such services. Fewer employers thought it likely that they would use FE services (a total of 43% of the sample suggesting that they were likely to use this form of provision over the coming year). In total, 66% of employers thought that they would use either FE or commercial VET services during the next year; 30% thought that they would use both.

As in other sectors, where employers had established an initial relationship with training providers, they were much more likely to plan using these services for skills upgrading in the future. Of the 37 employers planning to upgrade skills using FE during the next year, 31 (84%) had used FE during the previous 2-3 years. Similarly, of the 46 employers predicting that they would use commercial VET services over the next year, 36 (78%) had previously used similar services. Larger employers were more likely to predict using FE and/or commercial VET providers for future upskilling. For example, just over three-fifths of medium-large employers thought it likely that they would be likely to use commercial VET provision over the next year, compared to slightly over two-fifths of the micro-employers (i.e. those with less than 10 staff on site).

Finally, employers' views on the measures required to improve training provision tended to focus on the need for additional government funding/assistance for skills upgrading, and particularly a strengthening of demand-led, highly specialised training in mechanical engineering and/or specific skill sets within metals manufacturing. Employers expressed a number of different priorities for taking forward this training agenda, ranging from the need for specialised content that addresses skills for services auxiliary to the construction sector, to the need for modes of delivery that are more short-term, flexible and bespoke.

> *More specific training is needed in the sector. We need a clear dividing line between construction skills and training in services for construction.*
>
> Manufacturer of cooling systems, micro-employer, Limavady [telephone interview]

Similar themes emerged from our in-depth interviews. There was a shared perception that FE services in particular, while of value, are not sufficiently practical or flexible to deliver to highly specific skills required within particular enterprises. A related argument was that FE and other training providers must respond to the fact that SMEs have limited resources for training, and that they are therefore likely to deploy these resources in areas where there are immediate practical benefits for the business.

> *There seems to be adequate facilities, but it seems not to be run in a way that helps industry. The quality of what is taught in FE places doesn't seem to work its way down the line to companies like us… They need to realise that small businesses are the most important* [in this sector] *now. They need to realise that.*
>
> Manufacturer of cooling equipment, micro-employer, Armagh [in-depth interview]

Once again, a strengthening of locally accessible training was mentioned by a number of employers. However, the priority for action most often singled out by employers was clearly the need for more specific provision. The problem for training providers and funders is that employers' own specific priorities varied widely (from welding skills to CNC machine use; from forklift driving to general engineering skills upgrading). Developing a sufficient range of flexible training measures that can respond to these highly specific needs will remain a considerable challenge for all key stakeholders.

5.3 FINDINGS FROM THE CASE STUDY RESEARCH

5.3.1 Introduction to case study research

The aim of the case study phase of the research was to discuss challenges and opportunities around FE and VET providers' engagement with metal and machinery manufacturing employers, identify examples of good practice, and analyse barriers and opportunities associated with improving employer-trainer interaction. Case study institutions were selected in order to reflect a range of geographies, types of provider and approaches to engaging with employers. Following consultation with employers and key stakeholders, the following organisations were selected for the case study research:

- Centre of Excellence for Manufacturing Engineering, North East Institute of Further and Higher Education, Ballymena;
- Technology and Innovation Centre, North Down and Ards Institute of Further and Higher Education, Bangor.

5.3.2 Key services and responding to sector skill needs

Both units at the 'North East Institute' (NEI) and 'North Down and Ards Institute' (NDAI) have been granted 'Centre of Excellence' status by DELNI, which has enabled managers to invest in new training infrastructure/machinery, staff skills upgrading, new programme development and employer engagement activities. Both institutes specialise in mechanical and electrical engineering, delivering Modern Apprenticeship, NVQ and HNC/D provision through structured programmes. However, much time and effort has been invested in developing services for employers. Representatives of both institutes pointed to close working relationships with the Engineering Training Council and SEMTA (the relevant SSC), but also particularly emphasised the value of direct engagement with employers as a means of building trust and identifying skills upgrading needs. By demonstrating flexibility (in terms of the format and location of services) and building programmes reflecting employers' specific needs, both institutes suggested that they have enjoyed considerable success in developing relationships with large enterprises. For example, NEI has provided extensive bespoke services and then hosted major training operations centres for companies such as Toyota and Michelin.

In responding to the findings of our research with employers, representatives of both institutions pointed to their capacity to deliver bespoke training of the type sought by employers and their expertise in key skill areas such as CAD/CAM, robotics/mechatronics, and use of CNC machinery (all skill sets prioritised by our employers). However, case study interviewees also acknowledged certain limitations of the transferability and potential for expansion of such Centre of Excellence models. It was noted that the extensive, long-term employer engagement work undertaken by staff at both institutes was time consuming and resource intensive, while the capacity to respond to employers' needs has resulted from the recruitment of highly skilled staff and substantial investments in training infrastructures. Even then, in both cases, trainers have struggled to engage smaller employers. Representatives of both institutes noted problems in identifying a 'critical mass' of smaller employers to make even structured day-release/evening courses targeted at SMEs and micro-enterprises financially viable. Such smaller employers are also far less likely to have the resources to buy in individualised, bespoke training from institutes such as those at NEI and NDAI.

Table 5.9 Case study institutions and responsiveness to employers' skill needs

Institution/programme	NEI	NDAI
Key training services	MAs, NC-HND in electrical and manufacturing engineering; bespoke training provision developed with employers	NVQ-HND and degree provision in mechanical and electrical engineering; bespoke training in e.g. welding, CAD, PLC use, electronics.
Geographical focus	Regional/national. Employer engagement has broad geographical focus, but many of strongest relationships are local.	Regional/national – but also strong links with local employers and local authorities.
Relationship with employers	Very strong. Centre of Excellence status – has built strong consultancy and training relationships through one-to-one contact and work with ETC. Provider of bespoke training for major employers. 'Lecturers into Industry' has resulted in positive interactions with employers.	Strong. Centre of Excellence status – has built training relationships with local employers primarily through one-to-one contacts. Provider of bespoke training for employers. Employers base machinery for training in – and share its use with - Centre.
Capability to meet future skill needs	Expertise in CAD, CAM, CNC, range of engineering and manufacturing skills. Relationships with employers strong but restricted by capacity – extension of activities will require resource-intensive increase in skilled staff. Cost of engaging SMEs and the barriers that they face releasing staff from the workplace have restricted engagement with small/micro-employers.	Expertise in CAD, CAM, PLC, and other engineering and manufacturing skills. Has successfully developed bespoke provision in areas ranging from CNC use to targeted welding skills. Therefore able to address many skills issues raised by employers, but capacity is limited. Developing a critical mass of SMEs/micro-employers to make provision viable for small enterprises is problematic and current activity focuses on company-specific training for larger employers.

5.4 CONCLUSIONS AND IMPLICATIONS FOR POLICY

The research reported above highlights the two faces of the metal manufacturing sector's approach to skills upgrading in Northern Ireland. More than half of employers responding to our telephone interviews had used commercial VET provision for recent skills upgrading (just under half had used FE providers). However, there also remained a strong reliance on internal, on-the-job training and the cascading of skills from specialist equipment suppliers. The findings above suggest a number of actions that may be required to improve employer-trainer engagement.

- There is a considerable opportunity to develop the market for FE and VET services through a pro-active approach to engaging employers. However, this remains a time consuming and resource intensive process for which there are no quick fixes, and policy needs to recognise this in the design and implementation of future interventions.
- Despite relatively high levels of FE and VET penetration, most employers will seek to address their future skills upgrading needs through internal, often informal, training. Yet there may be benefits in improving employer-trainer engagement in the sector. VET and especially FE providers need to be able to demonstrate that they can deliver specialised, *practical* training to address core skills upgrading needs, including: specific training relating to production machinery; multi-skilling provision based around specialised skill sets such as welding; and training on cutting edge manufacturing and design technologies such as CAD/CAM and CNC. In terms of the content of provision based around new technologies, FE and other providers must be able to evidence their expertise and need to communicate how they can add value to the basic training offered by equipment and software manufacturers.
- At the most basic level, there remains a need to improve employer-trainer engagement in the sector. The majority of employers interviewed for this research thought that they would meet most of their future skills upgrading needs through internal, often informal, training. Employers' beliefs that their skill needs were 'too specific' and that there is an absence of appropriate provision emerged as key barriers to closer working with FE and VET providers. The 'Lecturers into Industry' model highlighted in the case study research represents a useful model of employer engagement, allowing for mutual learning and the opportunity to develop strong, practical relationships. Opportunities to further develop this model should be explored by FE providers and other key stakeholders.
- There is a need for FE providers to have access to resources enabling them to more effectively map employers' specific skill needs, informing the development of more proactive and bespoke FE-provided training. Similarly, more work is required to improve the flow of information between FE, and other VET providers, and the sector. At present, many employers have limited awareness of what provision is available and the potential capacity of providers (especially FE) to respond to specific skills upgrading needs. There is a need to build on the valuable work of the Sector Skills Council (SEMTA), Engineering Training Council and Workforce Development Forums in more effectively linking employers with training providers.
- Based around an entrepreneurial approach by staff and management, and assisted by considerable initial funding support, the two Centres of Excellence that formed the basis of our case studies have been able to establish strong and profitable relationships with industry. FE providers and key stakeholders need to learn from the critical success factors informing the development of these centres:

  - the specific expertise of trainers in many of the skill sets identified as important by employers from established electrical and mechanical engineering to electronics and IT-based design and manufacturing systems (including CAD, CAM, CNC and other technologies prioritised by employers participating in this research);
  - the willingness to develop bespoke, flexible training in response to individual employers' needs, and to deliver training in a range of locations and formats (including in the workplace);
  - the availability of time and resources to develop relationships with employers and engage in outreach and advocacy on behalf of the institution(s);
  - development opportunities for staff, resulting in strong technical and teaching skills, and a pro-active approach to engaging, and establishing credibility with, employers.
- The Centres of Excellence approach has helped to overcome some of the problems associated with the traditional image of FE and effectively engaged employers. However, the approach remains on a relatively small scale, with 8 centres operating across the engineering, construction and software development sectors. Policy should aim to support the transfer of such practice both within specific FE Institutions and FE more generally to increase coverage of the sector, as well as ensuring that employers' interests are fed into curriculum development and delivery. Sector Skills Councils, as well as other key stakeholders such as the Association of Northern Ireland Colleges and Education and Training Inspectorate, will have a key role to play in the dissemination of good practice within the FE sector.
- Resources are crucial to employers' decision-making on training. Many (especially smaller) employers' preference for in-house, on-the-job training reflects a lack of resources to buy in provision. Our case study institutions both struggled to replicate their success in responding to major employers among micros and SMEs – problems in establishing a 'critical mass' to make running structured provision viable means that smaller employers with limited resources are often excluded from such high quality services. Policy needs to guard against deadweight effects that may arise from subsidising employers to get what they could easily provide for themselves or buy on the open market. However, smaller employers are likely to play a crucial role in the future of Northern Ireland metal manufacturing sector. More flexible funding packages that allow for the buying out of staff time and make some subsidy contribution towards training fees may have a powerful impact in encouraging these micro-employers and SMEs to work with skills providers. As in other sectors, it is important that any such support is provided on a short-term basis as a means of establishing relationships and promoting good practice, and based on evidence (articulated in detailed business/training plans) of additionality and potential business/productivity benefits.

6. ARCHITECTURAL, ENGINEERING AND RELATED DESIGN ACTIVITIES IN NORTHERN IRELAND

KEY ISSUES IN ARCHITECTURAL, ENGINEERING AND RELATED DESIGN ACTIVITIES

- 60 telephone interviews and 2 in-depth follow-up interviews were carried out with employers in architectural, engineering and related design consultancy work in Northern Ireland. Case study research was undertaken with 3 FE, HE and commercial VET providers.
- The sector is rapidly changing and the majority of employers are therefore committed to future skills upgrading. 90% suggested that their workforces or core employee groups had required skills upgrading during the previous 2-3 years, and would require skills upgrading over the next year, in both cases driven by the need to conform with new regulations/legislation but also the impact of new technologies and related work practices.
- Two-thirds of employers predicted a need for sector/occupation-specific technical/professional IT skills as a key training priority (for example, in CAD and other design and engineering software). The majority of employers also prioritised soft skills such as leadership skills.
- The majority of employers participating in our research had previously used both commercial VET services and the FE sector for *some* form of skills upgrading, and were 'quite' or 'very' likely to use these providers in the future. Employers prioritising technical skills upgrading were particularly likely to predict using FE services. However, most employers said that most skills upgrading would be undertaken internally.
- There was a clear relationship between previous and predicted use of FE and VET services, suggesting that measures to promote 'first contacts' could be effective in facilitating the emergence of sustainable, longer-term employer-trainer relationships.
- Employers who had used both FE and commercial VET were generally positive about the quality and appropriateness of training provision, with the exception of complaints around the inflexibility of services (which were seen as too often requiring substantial time off away from the workplace – a major commitment for micro-employers and SMEs).
- Any further expansion of the role of FE and commercial VET providers in skills upgrading may be limited by the existence of a strong established market for direct consultancy and training services, the preference among employers for recruiting graduates, and the prevalence of consortia which together provide a range of specialist skill sets to address a single construction project.
- Policy implications include the need to: encourage micro-employers and SMEs to provide formalised professional development and progression; promote flexible, sector-specific training provision; encourage employer-trainer interaction, so that employers can explore the range of potential training solutions available to them; and improve information on available training.

6.1 INTRODUCTION

The research reported in this chapter sought to address the issues faced by employers in areas focusing on technical consultancy and design aspects of creative work, with a particular focus on architectural and engineering activities (sectors that are also crucial to Northern Ireland's rapidly expanding construction industry). These sectors were selected following consultation with the relevant Northern Ireland government department, DELNI. They form an important focus for DELNI's support for 'creative industries'. The UK government's Regional Cultural Development Framework (RCDF) definition of 'creative industries' takes into account the various stages (creation; manufacturing; dissemination; exhibition and reception; archiving and preservation; and education and understanding) through which a given cultural product or service passes from conceptualisation to consumption. Within the "Other business services" Standard Industry Classification grouping, two sub-sectors fall under the RCDF creative industries definition: 7420 (some aspects of Architectural and engineering activities) and 7440 (Advertising). A number of speciality design functions also fall under Standard Industry Classification sub-sector 7484 (part of 'other business services').

Official data on the number of architectural/engineering consultancies in Northern Ireland were not available at the time of writing, but Inter-Departmental Business Register data suggest that there are approximately 1,070 Northern Ireland establishments in the SIC 7420 industry grouping. Skills survey data for the 'Built Environment Professional Services' suggest that Northern Ireland employers spend well above the UK average on skills upgrading, but that almost one-fifth identified a lack of appropriate provision as a barrier to training.[17] For employers involved in construction engineering and architectural activities in Northern Ireland, the Construction Industry Council works with partners to represent the concerns of professionals working across the sector. The Construction Industry Council also represents the views of actors involved in higher-skilled aspects of the industry within ConstructionSkills – the Sector Skills Council for construction.

60 telephone interviews were undertaken with employers working in architectural and other forms of construction/engineering-related design consultancy (SIC 7420; 58 interviews) – a small number of interviews were also undertaken with employers working in related aspects of design consultancy (SIC 7484; 2 interviews). In-depth follow-up interviews were then undertaken with 2 employers involved in architectural consultancy work. Case study research was undertaken with 3 training providers involved in the delivery of relevant skills provision.

[17] Construction Industry Council, 2004: Built Environment Professional Services Skill Survey.

6.2 FINDINGS FROM RESEARCH WITH EMPLOYERS

6.2.1 Sample for survey research and selection of in-depth interviews

The findings below discuss responses from 60 telephone interviews with employers involved in architectural and engineering, and related design activities. Exactly half of the sample (30 of 60 employers) were micro-establishments employing less than 10 staff, and a further 25 (42% of all responses) were small establishments with 10<50 staff. 3 (5%) interviews were conducted with medium-size establishments (50<250 staff) and 2 (3%) with large establishments which had more than 250 staff. With the majority of employers drawn from smaller employee sizebands there are challenges around generalisability of findings for this and other sectors. However, it is important to note that the sector is dominated by micro-enterprises and SMEs.[18]

In addition to the telephone survey research 2 in-depth, face-to-face interviews were undertaken (with interviews lasting between 60 and 90 minutes). Respondents for in-depth interviews were purposively selected to reflect a range of locations, employer sizes, skill profiles and areas of activity. In-depth interviews which were therefore undertaken with:

- an architectural consultancy; based in Belfast (‘urban area’, population 277,000); small establishment (10 staff);
- an engineering consultancy; based in Coleraine (‘large town’, approximately 90km from Belfast, population 57,000); micro-establishment (5 staff).

6.2.2 Workforce and recruitment issues

Recruitment issues

The majority of employers interviewed for the research reported increases in workforce numbers (37 of 60 employers or 62%). The largest single group of employers (45%) reported a small increase in workforce numbers during the previous year while 17% reported a larger increase. 30% reported no change in workforce numbers, while only 7% reported reducing staff numbers (2% were not trading 12 months prior to the research). When recruitment to address staff turnover is factored in 67% of employers had *externally* recruited to their core or main employee groups during the previous 12 months. For many employers, recruitment had proved difficult – 63% of recruiting employers (i.e. 42% of all employers) said finding appropriate people had been ‘quite difficult’ or ‘very difficult’. The main reasons for recruitment problems focused on a lack of applications, perhaps reflecting the general ‘tightness’ of the Northern Ireland labour market and the level of skills and qualifications

[18] Most recent Inter-Departmental Business Register data for the whole of the UK suggest that 90% of the more than 47,000 employers working in the ‘architectural and engineering’ field are micro-enterprises (i.e. with less than 10 staff).

sought by employers in the sector (28% of employers). Applicants' lack of practical experience and relevant qualifications were also problematic. One employer participating in our in-depth interviews confirmed that recruiting from the local labour supply had become more difficult. It was suggested that the specialist skills required and the growth of the sector lay behind recruitment problems.

> *Our recruitment base has broadened with us looking a lot further a field for recruits… we are finding it harder to find local recruits and we have found that the business has expanded so quickly that the local market has not really kept up to pace with the demand for employees.*
>
> Architectural consultancy, small employer, Belfast [in-depth interview]

Table 6.1 Reasons for recruitment difficulties to core or main employee group

Reason for recruitment difficulty	Number of employers
Too few applications	17 (28%)
Lack of suitable qualifications	9 (15%)
Lack of practical experience	8 (13%)
Lack of technical knowledge	4 (7%)
Relatively low pay in sector	4 (7%)
Lack of generic skills/attitude	2 (3%)
Don't know/other	2 (3%)

N = 60 (Figures expressed as percentage of all surveyed employers, rather than employers who had recently recruited.)

Predicted workforce development

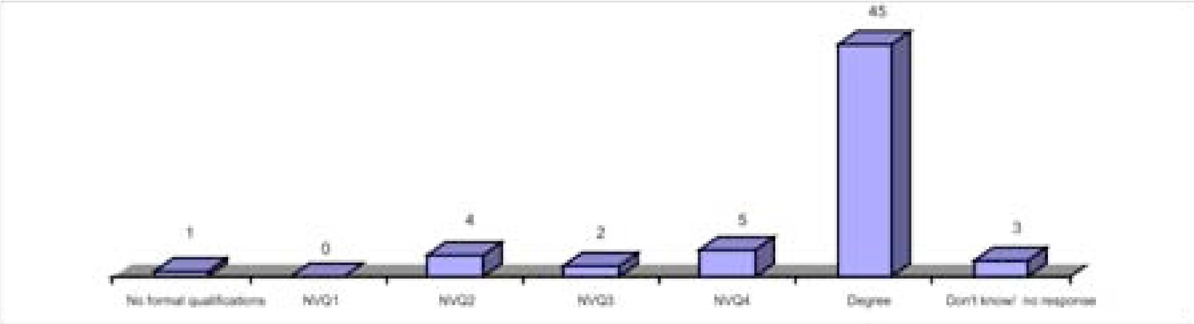
In terms of future workforce development, the majority of employers *predicted* a small increase in their total number of employees during the next twelve months (65%). A further 8% thought that their workforce would see a *large* increase; 25% predicted no change; and 2% did not know. Increasing turnover was again seen as the main driver of workforce expansion among those planning to recruit.

6.2.3 Workforce skills and skills upgrading needs

Workforce qualifications

Employers were asked about the qualifications of 'core' employees – those employees central to the effective operation of the business – or (for micro-employers with under 10 staff) the qualifications of their staff in general. The largest group of respondents (75%) reported that their staff were qualified to at least degree level. 83% of employers reported staff qualified to at least level NVQ4 equivalent.

Figure 6.1 Level of qualification of core or main employee group (n = 60)



Occupational skills

In terms of occupational skill sets, employers described a range of skilled positions that made up their *core* employee groups. These data were gathered from only the 30 employers with more than 10 staff. The majority of SMEs and large employers highlighted skilled and professional positions as their core employee base.

Table 6.2 Description of occupation of core employee group (SMEs and large employers)

Core employee occupation	Number of employers
Architect or architectural technologist/consultant	8 (27%)
Surveyor or senior surveyor	6 (20%)
Engineer or engineering consultant	5 (17%)
Sales/finance roles	3 (10%)
CNC technician/other technician roles	2 (7%)
Other professional designer/planner roles	2 (7%)
Fabricator/other skilled manual roles	2 (7%)
Other machine operative roles	1 (3%)
Don't know/no answer	1 (3%)

N = 30

It is likely that a similar range of skill sets dominated within micro-employers who were not required to describe a 'core employee' group – a number of these employers volunteered more detailed information on the main business roles within their organisations, with architectural and/or planning activities (9 employers) and civil engineering (5 employers) most often cited.

Skills upgrading needs

The vast majority of employers (90%) suggested that their core or main employee groups had required skills upgrading during the previous 2-3 years, with the introduction of new legislation/regulation (70%), new forms of technology (65%) and the development of new products (62%), the main drivers. There was no significant relationship between pre-existing levels of qualification and recent upskilling. There were also few differences according to size of establishment – micro-employers were also as likely to have undertaken skills upgrading as larger employers. The same proportion of employers – 90% – also suggested that their core employee group would require some form of skills upgrading during the next year, with largely the same drivers identified.

Soft skills required

In terms of the content of future skills upgrading needs, a range of soft skills were prioritised by the majority of employers. Leadership skills (63%) and communication skills (60%) were a particular priority for many employers. The majority of employers also identified skill needs in relation to teamworking and problem-solving, while half prioritised customer handling skills.

Technical skills required

Employers most often prioritised sector-specific or occupation-specific technical and professional IT skills (67%). There is little evidence of a relationship between the level of existing formal qualifications in the workforce and employers' perceptions of the need for technical or IT skills. Technical and specific IT skill needs varied considerably, but there were repeated mentions of the need to upgrade skills around the use of CAD systems, other 3D design packages, and other industry-specific software (10 employers). Other technical skills related to construction/engineering processes and knowledge of new regulations were also repeatedly mentioned.

Table 6.3 Employers reporting future skills upgrading needs

Type of skills upgrading	Number of employers
Sector-specific technical/professional IT skills	40 (67%)
Leadership skills	38 (63%)
Communication skills	36 (60%)
Problem-solving skills	34 (57%)
Teamwork skills	34 (57%)
'General' IT skills	33 (55%)
Customer handling skills	30 (50%)
Language skills	6 (10%)
Literacy skills	5 (8%)
Numeracy skills	4 (7%)
Any of above skills needs	54 (90%)

N = 60

Our in-depth interviews confirmed that specific IT skills would be important in defining employers' future skills needs, particularly in terms of CAD and other forms of design technology.

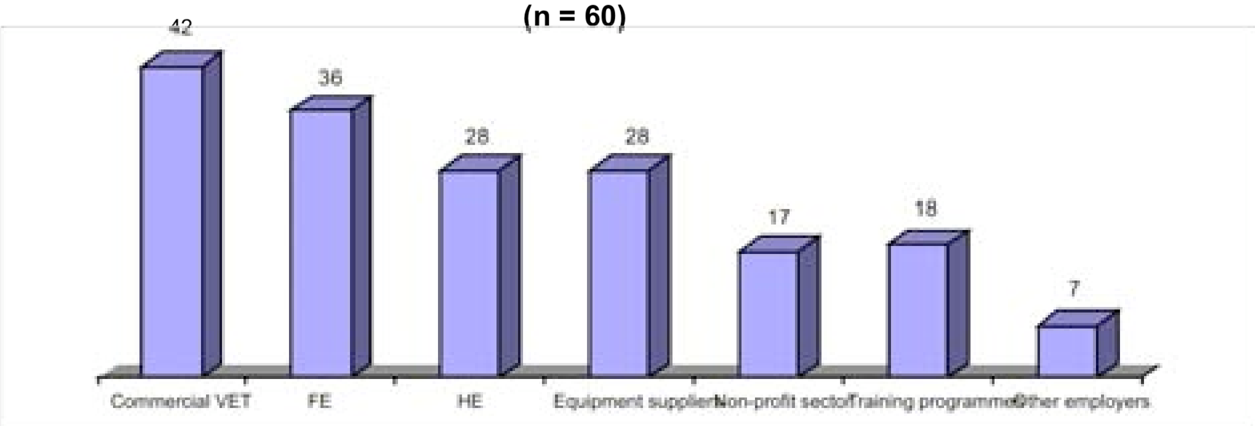
> *I guess on the horizon there is the new technology. When we think that landscape architecture was once done on the drawing board but now it has totally moved on to computer generated images. These are taken for granted now and you do not get a job now unless you have these sorts of skills.*
>
> Architectural consultancy, small employer, Belfast [in-depth interview]

> *Things like CAD and AUTOCAD I see as essential…*
>
> Engineering consultancy, micro-employer, Coleraine [in-depth interview]

6.2.4 Previous skills upgrading and use of FE/VET provision

As suggested above, 90% of employers participating in our telephone interviews acknowledged that their core or main employee groups had required upskilling during the preceding 2-3 years. Accordingly, engagement with commercial VET and FE/HE providers to address these needs was prevalent. 70% of respondents had used commercial VET providers to upskill staff during the previous 2-3 years; 60% had used FE providers. A further 47% reported using HE providers. The delivery of training by equipment/software suppliers was also relatively common (mentioned by 47%).

Figure 6.2 Number of employers previously using training provision (n = 60)



It should be acknowledged that, as in other construction-related sectors, these figures are likely to cover varying forms of skills upgrading activities. In some cases, employers referred to short, legal compliance-related provision such as health and safety training in line with Construction Skills

Register regulations. In other cases, training was more focused on continuing professional development, with provision sourced from a range of providers but accredited and supported by professional institutes such as the Royal Institute of British Architects, Royal Institute of Chartered Surveyors (in some cases continuing development activities accredited by these organisations are compulsory if non-graduate staff are to receive fully professional, 'chartered' status).

Employers' assessment of FE/VET services

The assessment of those employers using commercial VET and FE services was generally positive:

- 95% of employers previously using commercial VET and 94% of those using FE found training to be relevant to their skills upgrading needs;
- 95% of those using commercial VET and 67% of those using FE thought that training providers demonstrated a good understanding of their needs;
- 74% of employers using commercial VET and 97% previously using FE considered these providers to be cost-effective;
- 98% previously using commercial VET and 83% previously using FE considered services to be generally effective.

However, employers' main concerns with previously used training provision again seemed to centre on the perceived lack of flexibility demonstrated by some providers. Of those 42 employers previously using commercial VET, 67% considered services to have been 'quite flexible' or 'very flexible', but a substantial minority (29% of users) described services as 'not very flexible' or 'not at all flexible'. Only 33% of FE users described provision as 'quite flexible' or 'very flexible' while 64% considered services to be 'not very' or 'not at all flexible'.

> *We used FE because we thought that there would be a higher degree of flexibility than* [offered by] *the commercial organisations. The set times that they had for courses made it less flexible than we had thought.*
>
> Engineering consultancy, micro-employer, Londonderry [telephone interview]

> *It was not at all flexible. We could only send so many employees at a time as the courses were held only on certain days, which was inconvenient* (referring to commercial VET provider).
> Surveyors, micro-employer, Coleraine [telephone interview]

Reasons for using or not using FE and VET services

These concerns also featured when we asked employers participating in telephone interviews to identify reasons why they had not used commercial VET and/or FE provision. However, for employers who had not used commercial VET, there was mainly a sense that there was 'no need' for these services (33%), either because of the absence of skill gaps that it was thought could be addressed by VET providers, or because of the perception that staff were adequately skilled and trained already. The perceived lack of appropriate local services and a sense that skill needs were too specific to be addressed by commercial providers were also mentioned. Among those employers who had not recently used FE provision, there were some similar concerns – again, some employers said that there was 'no need' for these services (25%). There was no clear relationship between employers' interest in future technical skills upgrading and previous use of FE, although those not using VET were slightly more likely to emphasise technical skill needs. Only a few employers discussed why they felt that there was no need to take up external provision, with most suggesting that staff were adequately skilled or that skill needs could be addressed internally. In-depth interviews confirmed that, for *some* employers, there can be an emphasis on on-the-job, informal, training.

> *On-the-job, in-house training with senior staff is the main strategy. We don't have a training plan here... It is really quite ad hoc depending on needs that arise…*
> Engineering consultancy, micro-employer, Coleraine [in-depth interview]

Table 6.4 Key reasons given by employers for not using commercial VET services

Reason	Number of employers
Lack of need	6 (33%)
Tradition of/preference for 'in house' training	5 (28%)
Cost	3 (17%)
Lack of appropriate general provision	4 (22%)
Skills required by staff too specific	2 (11%)
Concerns over the quality of available provision	1 (6%)

N = 18

Table 6.5 Key reasons given by employers for not using FE services

Reason	Number of employers
Lack of appropriate general provision	9 (38%)
Lack of need	6 (25%)
Skills required by staff too specific	3 (13%)
Lack of knowledge/awareness	2 (8%)
Cost	2 (8%)
Tradition of/preference for 'in house' training	1 (4%)

N = 24

While there were numerous examples of positive relationships between employers and FE providers, among those who had not engaged with the FE sector there was a perception that college training was too theoretical; not focused on specific practical skill needs; and not sufficiently expert.

> *They have a good knowledge base, but not the practical understanding.*
> Architectural/design consultancy, micro-employer, Londonderry [telephone interview]

> *They* [FE providers] *cannot really offer much; our people have degrees.*
> Architectural consultancy, small employer, Belfast [in-depth interview]

Where positive relationships had been developed with FE or VET providers, the specific appropriateness of provision was most often mentioned. In a number of cases, trainers' expertise in delivering sector-specific provision was seen as a key selling point by employers. A key lesson would appear to be that the development of targeted provision to address employees' specific needs is crucial to effective employer-trainer relationships. There were also a number of other factors impacting on employers' engagement with providers – the accessibility of services and the need to undertake training in line with regulations were regularly mentioned by employers.

Table 6.6 Key reasons given by employers for using commercial VET services

Reason	Number of employers
Appropriateness/specific content of provision	23 (55%)
Knowledge of quality of delivery/expertise	13 (31%)
Locality/convenience	8 (19%)
Mandatory accreditation requirements	7 (17%)
Cost-effectiveness/financial support	6 (14%)
Flexible mode/method of delivery	3 (7%)

N = 42

Table 6.7 Key reasons given by employers for using FE services

Reason	Number of employers
Appropriateness/specific content of provision	20 (56%)
Locality/convenience	10 (28%)
Cost-effectiveness/financial support	7 (19%)
Knowledge of quality of delivery/expertise	6 (17%)
Mandatory accreditation requirements	4 (11%)
Flexible mode/method of delivery	3 (8%)

N = 36

Finally, our in-depth interviews flagged up the importance of joint-working within consortia – as an alternative to or alongside training – as a means of overcoming skill gaps. One employer also described an almost symbiotic relationship with a commercial training provider/consultancy in terms of sub-contracting from each other and the 'sharing' of relevant skills and expertise for mutual benefit.

> *We work with* [private VET providers/consultants] *in terms of sometimes they sub-contract to us and sometimes we subcontract to them. Quite often they would tender for a joint project that needs landscape architects – they are engineers and surveyors so they maybe can't tender sometimes for things without a landscape architect.*
> Architectural consultancy, small employer, Belfast [in-depth interview]

6.2.5 Future skills upgrading and use of FE/VET provision

As noted above, the vast majority of employers (90%) acknowledged that their core or main employee groups would require skills upgrading over the next year. In terms of how employers planned to address skills upgrading needs, interviewees again pointed to a combination of external provision and internal 'cascading' of existing skills and knowledge. In many cases, employers tried to plan ahead to address training needs – the majority of employers *did* have a formal training plan in place (57%) but only a minority had a 'ring fenced' training budget (37%).

Commercial VET provision was seen as playing a role in future skills upgrading by the majority of employers – 60% considered it either 'quite likely' or 'very likely' that they would buy in this form of provision during the next year. Slightly fewer employers (57%) thought it likely that they would use FE services. In contrast, employers continued to express a strong preference for in-house training – 80% thought that they would be likely to provide in-house, on-the-job training for their core or main employee group during the next year, while 62% predicted that they would deliver in-house, off-the-job training. In total, 88% of employers thought it likely that they would provide some form of in-house training during the next 12 months.

Employers' characteristics and future use of FE/VET

There appears to be a relationship between the need for technical skills upgrading and the predicted use of FE services – 63% of those employers reporting sector-specific technical or IT skill needs thought it 'quite likely' or 'very likely' that they would use FE in the coming year, compared to 45% of those employers who did not emphasise technical skills upgrading. There was no difference in the reported likelihood of these two groups using commercial VET provision. This may reflect the manner in which commercial VET provision has been used to respond to a range of skill needs, including specific technical skills but also soft skills and learning related to compliance with industry standards.

Table 6.8 Number of employers 'likely' to use forms of training provision

Type of training	Number of employers
In-house, on-the-job	48 (80%)
In-house, off the job	37 (62%)
Commercial VET providers	36 (60%)
FE providers	34 (57%)
Training initiatives/programmes	27 (45%)
Universities	26 (43%)
Equipment/software suppliers	22 (37%)
Non-profit organisations	18 (30%)
Other employers	7 (12%)

N = 60

Role of previous use of FE/VET

Of those employers suggesting that it was 'quite likely' or 'very likely' that they would use commercial VET provision over the next year, 92% had previously used this form of provision (compared to 70% of all employers who had used commercial VET during the preceding 3 years). 91% of employers suggesting that it was 'quite likely' or 'very likely' that they would use FE over the next year had previously used that form of provision (compared to 60% of all employers who had used FE). The message is again clear that where FE and VET has been able to establish relationships with employers, employers will continue to consider these providers as a potentially important part of their training strategies. However, it should again be noted that – as in other sectors – most employers were content to do most skills upgrading themselves – 75% of telephone interviewees suggested that it was quite or very likely that most training would be delivered internally in the immediate future.

Finally, employers' views on the measures required to improve training provision varied widely, but consistent themes included the need for help to deal with the cost of training and calls for a strengthening of flexible, sector-specific training. Some employers also argued that a more pro-active approach from trainers, providing information about their services and/or a central point of information for employers on training would be helpful. However, many employers, especially in architecture, suggested that sector was relatively well catered for. Recruitment processes that target graduate level professionals, the practice of working in consortia that bring together a range of skill sets, and the availability of specialist services, especially in Belfast, to either provide direct consultancy support or tailored training, meant that some employers saw limited scope for an expansion of the role of FE or other training providers.

> *Most of our employees come already with a degree… the only* [training providers that] *we use are the commercial trainers and the equipment suppliers because the architects already have their degree when they come in to us. We would say the greater Belfast area is well served for training.*
> Architectural consultancy, small employer, Belfast [in-depth interview]

Nevertheless, as noted above, employers face continuing challenges to ensuring that their staff are adequately skilled to maximise the potential of new technologies and comply with legislation. Given the relatively high levels of FE and commercial VET use among participating employers, there will continue to be scope for training providers to play an active role, but these providers will need to respond to the apparent demand for tailored, sector-specific technical skills.

6.3 FINDINGS FROM THE CASE STUDY RESEARCH

6.3.1 Introduction to case study research

The aim of the case study phase of the research was to discuss challenges and opportunities around FE, HE and commercial VET providers' engagement with employers, identify examples of good practice, and analyse barriers and opportunities associated with improving employer-trainer interaction. Case study institutions were selected in order to reflect different types of provider and approaches to engaging with employers. Following consultation with employers and key stakeholders, the following organisations were selected for the case study research:

- Centre for Building and Civil Engineering, Belfast Institute of Higher and Further Education;
- White Young Green Training Services, Belfast;
- School of the Built Environment, University of Ulster, Jordanstown.

By covering the activities of an FE provider, the Centre for Building and Civil Engineering (CBCE), a private sector training consultancy, White Young Green Training (WYGT) and an HE sector provider, the School of the Built Environment, University of Ulster (SBE), we were able to identify shared issues, and specific barriers to employer engagement in particular training sectors.

6.3.2 Key services and responding to sector skill needs

Representatives of our FE provider, CBCE, described a range of employer engagement strategies that support its structured full-time provision. As part of a consortium of 6 FE institutions providing civil engineering, architectural and related training up to HND (now Foundation Degree) level, CBCE has relied upon extensive networking with employers to provide necessary work placements for full-time students, and regularly consults with the sector on course development. Similar employer engagement activities underpin SBE's course development in the HE sector (the School delivers HND to Degree level education in architectural technology and design, surveying, civil engineering and related areas). SBE works with Industrial Liaison Panels, which have employer representation, to ensure that degree programmes reflect industry needs.

Responding to the findings of our research with employers, representatives of CBCE acknowledged the common complaint that FE services were not sufficiently flexible, but pointed to a number of examples of tailored provision developed to meet employers' needs. CBCE is a provider of short Construction Skills Register training and has delivered bespoke civil engineering courses on a day-release basis (a college-wide Workforce Development Unit has helped CBCE staff to build relationships with employers). The Centre also offers a day release Professional Diploma in Civil Engineering Surveying. However, it was accepted that resource constraints meant that further employer engagement activities and the development of bespoke provision remained limited. Staff and managers at SBE were similarly aware that flexibility in training provision was a crucial element in promoting employer engagement – there was an acceptance that employers want "training courses which are very tailored and focused towards their needs", and that some are reluctant to engage with highly structured NVQ-type provision. SBE staff accepted that funding models result in the prioritisation of full-time course development within the HE sector, rather than the delivery of specialised provision in "short, sharp bursts" for employers. Nevertheless, the School has enjoyed some success in developing bespoke provision on behalf of professional institutes such as the Royal Institute of Chartered Surveyors.

Operating in the private sector, WYGT has been better able to develop flexible, bespoke provision in response to employers' needs. Responding to the results of our research with employers, a WYGT representative suggested that his work with employers reflected a similar demand for specialised training in response to the introduction of new technologies or in order to comply with legislation. WYGT currently delivers training and assessment services through a team of around 12 regular training experts. Services to the construction/engineering sector have concentrated upon Construction Skills Register/health and safety training; site management; compliance with Construction Design and Management (CDM) regulations; and compliance with standard construction engineering contract arrangements. The vast majority of training participants are funded by their employers, and employers are the target market for WYGT's services. The company has also developed bespoke in-house training on demand (for example, in CAD for the construction sector). Accreditation arrangements are in place with the Construction Industries Training Board (CITB), Institute of Occupational Safety and Health (IOSH) and other institutes.

Table 6.9 Case study institutions and responsiveness to employers' skill needs

Institution/ programme	CBCE	WYGT	SBE at UU
Key training services	HNC-Foundation Degrees construction, civil engineering; architectural design; architectural technology. Some tailored commercial provision (e.g. CSR); some flexible professional learning (e.g. Dip. Civil Engineering Surveying).	Tailored training in CSR (health and safety); construction design and management; other regulation-required provision. Some bespoke services delivered for individual employers (e.g. in CAD).	HND/Degree-level provision in architectural design and technology; surveying; civil/construction engineering; environmental health/engineering; many related areas. Involved in development and delivery of professional institute-accredited learning; some niche and bespoke provision for employers.
Geographical focus	Northern Ireland/UK/ international for student recruitment. Belfast/ Northern Ireland for employer engagement.	Northern Ireland-wide. Main base in Belfast.	Northern Ireland/UK/ international for student recruitment. Northern Ireland for employer engagement.
Relationship with employers	Employers closely involved in course development, student placements. Strong links through 'Lecturers into Industry'. Some progress in responding to employers' needs through professional diploma and some bespoke provision.	Main focus on delivering VET according to employers' needs; almost all participants funded by employers. Emphasises flexibility, seeks to be able to deliver at time, place and format sought by employers.	Employers closely involved in course development, student placements. Some success in developing services targeted at employers, but on *ad hoc* basis. Improved engagement with employers through 'Constructing Excellence' initiative.
Capability to meet future skill needs	Well placed to provide short, regulation-required training; some progress delivering bespoke provision, but problems identifying critical mass of micros/SMEs to make further development of provision viable; problems responding to range of specialist skills sought by employers.	Leading provider of regulation-required training. Reputation for sector-specific expertise and flexible delivery likely to help maintain relationships. Some problems in identifying critical mass of employers interested in *new* provision. This can be a barrier to innovation.	Has expertise in a wide range of architectural and construction engineering design skill areas. Strong record in delivering tailored training and working with professional institutes, and improved communication through initiatives such as 'Constructing Excellence' will help maintain relationships. Continuing problems engaging SMEs due to lack of resources/ time off for training. Acknowledges need to develop increasingly specific, tailored services.

There was an acknowledgement that all training providers face continuing challenges in developing innovative provision. While companies such as WYGT consider themselves expert at identifying new opportunities to deliver training, they have faced some difficulty in establishing whether there is a 'critical mass' of clients willing to take up provision. To some extent, doubts over the viability of new areas of training can limit innovation. Employers' are keen to have a 'solid schedule' of provision, and training providers are reluctant to disappoint clients by scheduling programmes which then have to be cancelled due to inadequate attendance. As a result, there was an acknowledged pressure to 'play it safe' by offering established training for which there is a clear market. WYGT has sought to overcome these problems by prioritising the delivery of bespoke, one-to-one training for specific employers. However, it is clear that cost will exclude many smaller employers from taking up such services. Similar 'critical mass' issues, and the limited funding available to smaller employers to buy in external training, were also identified as barriers to greater FE-employer engagement by our CBCE representative. Meanwhile, the recruitment problems faced by employers of all sizes means that some are concerned to maximise the time spent at work by skilled staff and therefore reluctant to encourage training and development activities. Continuing engagement with employers, with a view to developing appropriately flexible training, therefore remains a priority for FE, HE and private providers.

6.4 CONCLUSIONS AND IMPLICATIONS FOR POLICY

The results of our research with employers providing professional architectural, engineering and related design services to the construction sector must be treated with some caution – we engaged with a limited number of employers operating in a range of different fields (such as architecture, civil engineering and surveying). However, there are a number of themes relating to the issues faced by stakeholders seeking to promote more effective employer-trainer engagement in these 'creative/technical' fields. High-level skills dominate architectural and engineering activities and as a result employers participating in our research demonstrated considerable commitment to skills upgrading – 90% had recently engaged in skills upgrading and were committed to future upgrading activities. However, the rapid growth of the sector, changes in the way that construction projects are managed, and (crucially) the impact of technological change mean that employers are faced with a complex range of skills upgrading needs. Furthermore, there appear to be different drivers of skills upgrading, first linked to compliance with regulation, and second relating to changes in technology that have affected work practices and require more fundamental investments in skills upgrading. Commercial VET services have played a role in responding to both drivers, while FE provision is seen as of greater value in addressing specific technical skills and/or more long-term continuing professional development. In many cases, FE, HE and commercial VET providers have also played a role in facilitating progress towards professional institute-accredited learning and qualifications (although it is notable that employers and individuals also have the option of engaging directly with professional institutes, inherently limiting the role of training providers).

Our case study research highlighted a number of effective measures undertaken by the relevant FE and HE providers to engage with employers. However, there remain barriers to closer engagement.

The main focus of resources remains on delivering structured vocational training targeted at students rather than companies (reflecting the realities of FE and HE funding). There is also an awareness of the problems engaging with SMEs and micro-enterprises, many of which remain reluctant to allow time off to attend external training *unless* there are clearly established business benefits. Indeed, even our commercial VET provider noted that the development of new, innovative provision can be hampered by the absence of a 'critical mass' of employers willing to invest in training. A number of key findings and areas for policy action are apparent from the discussion above:

- Technical, sector-specific skills were most often prioritised by employers planning future skills upgrading (with the use of CAD, 3D imaging and other design technologies often mentioned). However, the majority of employers also identified skills upgrading needs in relation to softer skills around communication, problem-solving, teamworking and especially leadership. There is a need for training providers to demonstrate their capacity to contribute to both soft and technical skill upgrading.
- The majority of employers had used both commercial VET and FE provision during the previous 2-3 years, suggesting that training providers have a strong 'foothold' within the engineering and architectural sectors. As in other sectors, employers who had previously used FE and/or commercial VET for skills upgrading were much more likely to predict using similar services in the future. There are important lessons regarding the value of initiatives to facilitate initial contact between employers and training providers. Such initiatives may lead to sustainable relationships between employers and trainers. Further support for 'Lecturers into Industry'-type initiatives may therefore be justified.
- Employers previously using both FE and commercial VET expressed high levels of satisfaction with services. However, one area of concern related to the limited flexibility of both forms of provision (in terms of the timing and format of provision). FE services in particular were viewed as inflexible by the majority of users. There is a need for providers to ensure that training is offered at times and locations and in formats that are accessible for micro-employers and SMEs, many of whom have limited time available for training during the working day.
- Those not using FE and/or VET raised concerns around a perceived lack of appropriate, specific provision. Some employers also doubted the need for such provision, based on a belief that staff were already adequately skilled in most areas and/or that FE/VET providers would be unable to address any remaining skill gaps. Conversely, the single most important factor defining successful relationships between employers and FE or commercial VET providers was clearly the latter's capacity to deliver specialised, appropriate training. There is a need for further work to improve communication between employers and providers, so that employers are more aware of the strengths and limitations of (for example, FE) services and trainers can articulate how they can add value to internal skills upgrading and/or professional institute-accredited learning. Improved informal or formal networking is also likely to improve

training providers' understanding of employers' skill needs and 'what is possible' in terms of funding and delivering training.

- Skills upgrading within some employers was undermined by a lack of formal planning and budgeting. There may be a need to provide improved managerial skills training to construction employers (particularly SMEs and micro-employers), to enable them to devise longer term and more sustainable strategies for future business and skills development.
- Our case study research (especially with the commercial VET provider) demonstrated that in order to enhance relationship-building with employers it is important that genuine attempts are made to fully understand the real needs and possible constraints in organisations. Making quality time available to fully explore employer needs in terms of training content, timings, and geographical location, through an on-site visit, can help to persuade employers of the real value of training and development for their employees.
- Our case study research also highlighted that both the overall structure of FE/HE funding and the contracts and conditions available to staff do not maximise incentives to engage with employers and respond to workplace skills upgrading needs. While major funding issues fall outside the scope of this study, there is a need for relevant government and other stakeholders to consider how best to incentivise these providers to prioritise employer engagement.
- In conclusion, many employers participating in our research pointed to the strong market in specialist consultancy and training services to support the architectural and civil engineering sectors. This established market, the preference among engineering and architectural consultancies for recruiting highly-skilled graduates, and the prevalence of 'design and build' consortia bringing together a range of specialist skill sets to address a single construction project, have helped employers to address skill needs. However, there remains a need for employers, trainers and other stakeholders to continue to work together to:
  - ensure that recruitment problems are minimised by providing an adequate flow of appropriately qualified people and promoting the retention of skilled staff;
  - promote training provision that is sufficiently flexible so that micros and SMEs are able to cope with allowing time off for training;
  - continue to develop provision that responds to employers' skills upgrading needs in relation to technical and IT skills, as well as softer skill sets;
  - promote 'first contacts' between employers and training providers (for example through 'Lecturers into Industry'-type initiatives);
  - develop a comprehensive, regularly-updated source of information on the availability and specific content of training provision at the local and Northern Ireland-level.

7. THE PRINTING AND PUBLISHING SECTORS IN NORTHERN IRELAND

KEY ISSUES FROM RESEARCH IN PRINTING AND PUBLISHING IN NORTHERN IRELAND

- 30 telephone interviews were undertaken with employers in the printing (16) and publishing (14) sectors. 2 in-depth follow-up interviews were undertaken (1 in each sector) along with 1 case study focusing on an FE provider's work with employers in the printing sector.
- Given how skill sets vary within and between the diverse printing and publishing sectors, employers reported a range of skills and qualifications profiles – in publishing, core/main employee groups such as journalists tended to be qualified to degree level; in printing, core employees such as printers/operatives were more likely to hold NVQ2/3 qualifications.
- The vast majority of employers (87%) suggested that their core/main employee groups had required some form of skills upgrading during the previous 2-3 years.
- 80% of employers identified skills upgrading needs over the next year. Specific technical skills were prioritised by two-fifths of employers, with printing sector companies more likely to require these skills. Technical skills upgrading needs focused on the effective use of new technology/ machinery in printing and the use of publishing and web media software in publishing.
- Leadership skills upgrading needs were most often cited by employers (57%), reflecting an increasing need for staff who are able to take responsibility for a range of work tasks.
- The most commonly used forms of external training provision were assistance from equipment/ software suppliers (used by 63% of all employers; print sector employers were more likely to have used this form of training); and commercial VET (used by 40% of all employers; publishing sector employers were more likely to have used this form of training). FE had been used by one-fifth of all employers, mainly in the print sector.
- The main barriers to further FE/VET use were employers' preference for in-house training and perceptions that the skill sets required were too specific to be delivered by these providers. Case study research confirmed that, despite the highly sophisticated services offered by some FE providers, some employers retain negative and out-dated attitudes about college provision.
- The vast majority of employers intended to carry out most future skills upgrading internally. 27% of employers, mainly in the publishing sector, said that were likely to use commercial VET provision; 17% thought it likely that they would use FE provision.
- Case study research with an FE college working in the print sector identified good practice in this provider's commitment to delivering specialised, practical training *in the workplace* of the type valued by employers. However, the case study also reiterated the need for further support for FE-employer engagement if such approaches are to be transferable; advocacy work to convince employers of the need for skills upgrading and to highlight the potential for FE and other providers to add value; and qualifications frameworks that reflect employers' needs.

7.1 INTRODUCTION

The Inter-Departmental Business Register (IDBR) suggests that there are 365 VAT-registered business in the 'Publishing, printing and reproduction of recorded media' sector in Northern Ireland (Standard Industry Classification group 22). Approximately 6,640 people are employed in the broader 'Manufacture of paper products, publishing and printing' sector. This part of the research initially sought to bring together extensive survey work with employers operating across the publishing and printing sectors. Accordingly, employers were targeted across the printing and publishing field, in line with the relevant area of the UK government's Regional Cultural Development Framework (RCDF) 'creative industries' definition. Interviews were therefore sought with employers involved in: publishing of books (SIC 2211); publishing of newspapers (SIC 2212); publishing of journals (SIC 2213); printing of newspapers (SIC 2221); other printing activities (SIC 2222); and 'pre-print' activities such as composition and plate-making (SIC 2224). Proskills, the print industry SSC, has recently conducted research with Northern Ireland print employers, highlighting a complex range of skill needs for technical staff, with skills upgrading driven by the introduction of new IT systems, and an increasing demand for multi-skilling and for staff to take more responsibility over work processes.[19]

Unfortunately, due to low response rates during the telephone survey phase of the research, only 30 interviews were completed with printing and publishing employers. Recent, highly valuable and extensive research completed by the Proskills SSC in Northern Ireland covered skills issues in some depth and employers in this sector may have been reluctant to participate in further research as a result. This short chapter provides a brief discussion of findings from the research, which divided into 2 employer groups – those involved in newspaper publication (SIC 22.12; 14 telephone interviews); and those involved in print composition and 'other printing activities', which often focused on the provision of other specialist printing services (SIC22.22/22.24; 16 interviews). In-depth follow-up interviews were then undertaken with one employer from each group, followed by case study research with an FE college specialising in the delivery of services for the printing industry. The remaining sections of this chapter report the findings of our research with employers (7.2), and an FE provider (7.3), before discussing conclusions and potential implications for policy (7.4).

7.2 FINDINGS FROM RESEARCH WITH EMPLOYERS

7.2.1 Sample for survey research and selection of in-depth interviews

The figures discussed below report responses from 30 employers interviewed by telephone survey research. Just over one-third of the sample (11 of 30 employers) were micro-employers employing

[19] Proskills, 2006: Sector Skills Agreement, Stage 1 Report: Skills Needs Assessment for Northern Ireland.

less than 10 staff, but most of these were situated in the printing/composition group of employers. A further 11 employed 10<50 staff, and 8 more than 50 staff. The importance of small and micro-employers in the printing/print composition group reflects the dominance of smaller companies within that sector.

Table 7.1 Employers interviewed by employment sizeband

Sizeband	Printing/composition	Publishing	All
Micro (5<10)	9	2	11
Small (10<50)	3	8	11
Medium (50<250)	4	4	8
Total	16	14	30

In addition to the telephone survey research a series of 2 in-depth, face-to-face interviews was undertaken (with interviews lasting between 45 and 70 minutes). Respondents for in-depth interviews were purposively selected to reflect different locations, employer sizes, skill profiles and areas of manufacturing activity. In-depth interviews which were therefore undertaken with:

- a specialist screen printing/graphics producer; based in Belfast (classified as ‘urban area’, population 277,000); micro-employer (8 staff);
- a newspaper publisher; based in Strabane (‘medium town’, approximately 135km from Belfast, population 13,400); medium-size employer (100 staff).

Findings from these in-depth interviews are reported alongside the telephone survey results below in order to provide more detailed insights into employers’ attitudes and approaches towards upskilling.

7.2.2 Workforce and recruitment issues

Recruitment issues

The majority of employers interviewed for the research did not report much change in workforce numbers, although some had recruited staff in the previous year (see below), in most cases this flowed from staff turnover rather than expansion. 7 of 30 (23%) of employers reported a small increase in workforce numbers during the previous year while the largest single group (57%) reported no change in workforce numbers. These proportions were almost identical in both the newspaper publications and printing categories. 7% of employers reported a large increase in their workforce, while 13% reported reducing staff numbers (most of whom were from the printing sector).

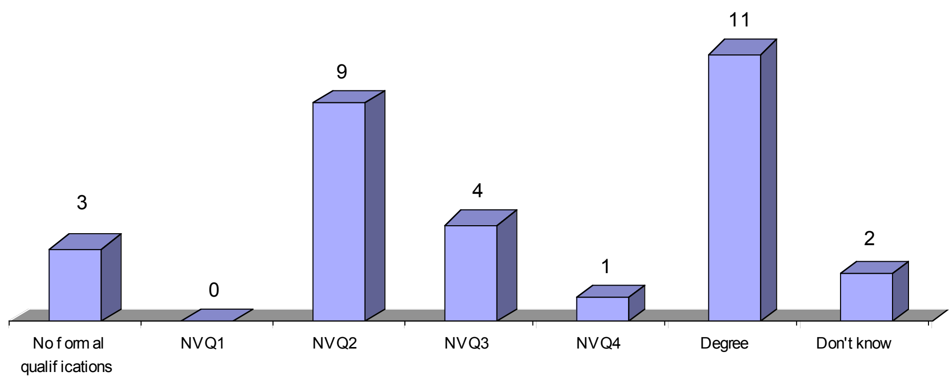
30% of all employers had recruited to their core or main employee group in the previous year from outside of the organisation and 20% had recruited from within the organisation. In general terms, it appears that employers from the newspaper publication industry were more likely to have recruited. For most employers recruitment had not proved difficult, but where recruitment difficulties had been experienced, one newspaper publishing employer indicated that this was due to a lack of applicants. The reasons given by print industry employers were applicants' lack of practical experience, lack of technical knowledge, and lack of commercial understanding. In terms of future workforce development, the majority of employers predicted no change in their total number of employees during the next twelve months (67%); 27% thought there would be a small increase; 7% thought that their workforce would see a *large* increase. Predicted workforce change was similar in both sectors.

7.2.3 Workforce skills and skills upgrading needs

Workforce qualifications

Employers were asked about the qualifications of 'core' employees – those employees central to the effective operation of the business – or (for micro-employers with under 10 staff) the qualifications of their staff in general. The majority of respondents (53%) reported staff holding qualifications at or above NVQ level 4. 37% of employers reported that workers were qualified to degree level and 10% employers reported no formal qualifications (all printing specialists). There was a perhaps predictable split between the publishing and printing sectors – the majority of publishing employers reported degree-qualified core/main employee groups, compared to only a small minority of printers.

Figure 7.1 Level of qualification of core or main employee group (n = 30)



Occupational skills

In terms of occupational skill sets, the 19 employers with more than 10 staff described a range of skilled and semi-skilled positions that made up their *core* employee groups. Among the 12 publishing companies describing core employees' skills, the dominant professional-level skill sets were associated with journalism; business/sales management; and advertising. Only 7 print companies had more than 10 staff, with core employees mainly working in printing/production; design; and sales and supervisory positions.

Skills upgrading needs

The vast majority of employers (26 of 30; 87%) suggested that their workforces or core employee groups had required upskilling during the previous 2-3 years, with the introduction of new technology (70%), the development of new products (73%), and new work practices (40%), the main drivers. The majority of employers (80%) also suggested that their core employee group would require some form of skills upgrading during the next year. The introduction of new technology (53% of all employers) was the main driver alongside new product development (43%). Drivers of skills upgrading were similar in both publishing and printing sectors. Our in-depth interviews similarly focused strongly on the introduction of publishing and new software technologies as drivers of skills upgrading.

> *IT is at the forefront of all the* [skill] *changes in the printing industry. It has made the job that much more professional.*
> Newspaper printer/publisher, medium-size employer, Strabane [in-depth interview]

Soft skills required

In terms of the content of future skills upgrading needs, soft skills were prioritised by a number of employers. Leadership skills were most often cited (57%), reflecting employers' increasing need for staff who are able to self-manage and take responsibility for a range of work tasks. Overall, there was relatively little variation between publishers and printers in terms of soft skill needs, although 'problem solving' skills were much more often prioritised by publishing companies than printers.

Technical skills required

Employers generally put less emphasis on sector-specific or occupational-specific technical and professional IT skills. However, there was a much clearer split between the sectors here. Less than one-third of publishing employers prioritised technical skills upgrading, compared to half of printers. The content of technical skills upgrading needs in printing focused only on 'use of new machinery' and programming new software. In publishing skill needs focused on the use of new and existing publishing software (such as QuarkExpress and other packages) and web media technology.

Table 7.2 Employers reporting future skills upgrading needs

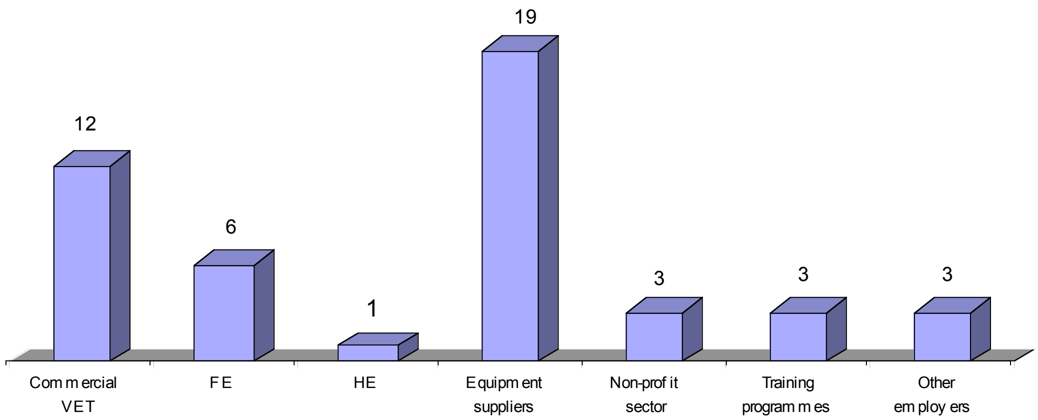
Type of skills upgrading	Number of employers
Leadership skills	17 (57%)
Teamwork skills	15 (50%)
‘General’ IT skills	15 (50%)
Communication skills	13 (43%)
Customer handling skills	13 (43%)
Sector-specific technical/professional IT skills	12 (40%)
Problem-solving skills	10 (33%)
Language skills	4 (13%)
Literacy skills	4 (13%)
Numeracy skills	1 (3%)

N = 30

7.2.4 Previous skills upgrading and use of FE/VET provision

Recent skills upgrading services delivered by external providers had been used by 77% of employers. 40% had used commercial VET providers to upskill staff during the previous 2-3 years; while only 20% had used FE providers. Training undertaken by equipment producers/suppliers was the most prevalent among respondents with 63% of employers training their staff in this way.

Figure 7.2 Number of employers previously using training provision (n = 30)



However, there were clear differences between the sub-sectors, with publishing employers more than twice as likely as printers to have used commercial VET services, while printers were more likely to have used FE providers. Printers were also slightly more likely to receive training from equipment suppliers, and an in-depth interview with one printing firm highlighted the potential benefits of close working relationships with such suppliers.

> *When you buy new equipment and the company sends over people to demonstrate the product that can be very good. We were a test site for a new piece of equipment and that was a great learning experience, learning about that new equipment and tailoring it for our needs.*
> Specialist printer, micro-employer, Belfast [in-depth interview]

Employers' assessment of FE/VET services

The assessment of those employers using commercial VET and FE services was generally positive.

- 92% of employers previously using commercial VET and 83% of those using FE found training to be relevant.
- 67% of employers using commercial VET provision considered it a cost-effective option, compared to 50% of FE users.
- 83% previously using commercial VET and FE found services to be 'very' or 'quite' flexible.
- 92% of commercial VET users and 67% of FE users found services to be 'very' or 'quite' effective overall.

Reasons for using or not using FE and VET services

When we asked employers who had not used FE or VET provision to explain their reasons they cited a familiar combination of: a perceived lack of need and a preference for in-house training (especially among those not using commercial VET services); the perceived lack of general training of relevance to skill needs; and the belief that skills upgrading needs were too complex and specific to be addressed by these providers (most regularly mentioned in relation to FE). Both telephone and in-depth interviews also confirmed that many employers view the pace of change, and complex skill sets, within their business as precluding the use of FE/VET provision.

> *The machinery that we use is extremely specialised and changes too quickly to rely on commercial training providers.*
> Printer, medium-size employer, Antrim [telephone interview]

> *We have looked at our local college and we have found no courses really relevant to us. We previously sent staff to a* ['photoshop' design] *course running there but the level of skill that it was aimed at was not relevant to us – it was for home use not for professionals*.
> Newspaper printer/publisher, medium-size employer, Strabane [in-depth interview]

Where positive relationships were reported with FE and VET by both printing and publishing employers, the expertise of providers and the specific appropriateness of provision were the critical success factors. Telephone and in-depth interviews reiterated the view that highly specialised, tailored training was the foundation of effective employer-trainer relationships.

> *We have no option but to use* [VET provider] – *their training is very relevant. It's specialist training we need, and they are specialist trainers.*
> Newspaper publisher, small employer, Enniskillen [telephone interview]

> *We have used the college because they are specialists. Their specialist trainers have helped with the new machinery that we buy.*
> Specialist printer, micro-employer, Belfast [in-depth interview]

7.2.5 Future skills upgrading and use of FE/VET provision

As noted above, the vast majority (80%) of employers acknowledged that their core or main employee groups would require skills upgrading over the next year. Commercial VET provision was seen as playing a role in future skills upgrading by only 27% of employers. Slightly more employers, 33%, thought it likely that they would use equipment suppliers. Employers expressed less intention to use the services of FE colleges in the next year (17%). In contrast, employers continued to express a strong preference for internal training – 70% thought that they would be likely to provide their own training for their core or main employee group during the next year (with a strong preference for on-the-job training). 93% said that *most* of their immediate training needs would be addressed internally.

Table 7.3 Number of employers 'likely' to use forms of training provision

Type of training	Number of employers
In-house, on-the-job	20 (67%)
Equipment suppliers	10 (33%)
Non-profit organisations	10 (33%)
In-house, off-the-job	8 (27%)
Commercial VET providers	8 (27%)
Other employers	7 (23%)
FE providers	5 (17%)
Training initiatives	5 (17%)
Universities	3 (10%)

N = 30

Finally, in terms of priorities identified by employers, the need for highly specialised and appropriate *practical* training was again reiterated. Printing employers located outside the Belfast area also linked this to gaps in local provision.

> *We need providers who can deliver shorter, practical but still as comprehensive courses, so as not to put employees off with learning that is too formal. Also we need more local training provision – we are 70 miles from Belfast, which is where most of the useful training providers are…*
> Printer, medium-size employer, Limavady [telephone interview]

7.3 FINDINGS FROM THE CASE STUDY RESEARCH

7.3.1 Introduction to case study research

The aim of the case study phase of the research was to discuss challenges and opportunities around FE providers' engagement with printing and publishing employers. Given the limited sample for the employer phase of the research, only one case study was carried out, focusing on the 'Northern Ireland School of Printing' (NISP) at Castlereagh College, an FE provider located in Belfast.

7.3.2 Key services and responding to sector skill needs

NISP is based at the Centre for Art, Design and Printing, Castlereagh College. The Centre specialises in courses in graphic communication, art and design, printing as well as calligraphy and sign making. Courses are offered from NVQ2 to Foundation Degree level. As well as providing structured, full-time provision to learners (mostly young people), NISP has established strong commercial relationships with printing employers in Northern Ireland and Great Britain, both through the delivery of part-time NVQ learning and by offering bespoke training in a range of production areas. Flexible, peripatetic training provision is a defining feature of the NISP approach. Responding to our research with employers, staff fully accepted that, given the specialised and sophisticated machinery operated by many print employers, there is a need to deliver training on-site and in a specific format designed to meet employers' needs. The Centre's head emphasised the importance of a culture of flexibility within the organisation.

> *We had a lecturer delivering training at 2am this morning to print workers on a night shift … I don't know if you would get that in many other fields and I think that illustrates our attitude to being as flexible as we can to both employers' and students' needs.*
> Head of the Centre for Art, Design and Printing

NISP has proactively sought to engage with large printers in Northern Ireland and Great Britain as well as SMEs and micro-enterprises in the local economy. Work placement activities for full-time and part-time students are a key element of the School's broader approach to delivering vocational learning. A case management approach has been developed to ensure that placements are useful for both the learner and the company involved – NISP is aware that such placements can also form an important mechanism for building relationships with employers. The case management approach (with each member of academic staff being dedicated to a 'caseload' of companies and placement students) allows NISP staff to build detailed knowledge of the specific skills and training requirements of the company, the key technologies they use and, perhaps most importantly, the culture of each organisation at ground level.

Finally, NISP works with employers' associations and other key stakeholders to build relationships and diversify the reach of its services. For example, as all training needs in the area of graphic communication fall within the broader Centre for Art, Design and Printing's remit, there have been attempts to innovate and diversify services into what are viewed as 'kindred' to the printing industry such as packaging and sign-making. As a result, NISP has worked in collaboration with the British Signs and Graphics Association (BSGA) to deliver accredited training to sign making companies.

The importance of technological change as a driver of skills upgrading (a key theme from our interviews with employers) was acknowledged by managers at NISP, but it was suggested that the School was well placed to lead the development of interventions in Northern Ireland (although resources will define the extent of future employer engagement activities). Perceived barriers to employer engagement included the image of the FE sector itself, and the "lack of esteem with which some employers view FE provision". It was suggested that, despite the extensive work that NISP has carried out with the print sector, and its success in establishing a range of initiatives, there is still a damaging perception among some employers that it is 'only an FE college' that deals primarily with basic technical skills.

It was also suggested that some employers have negative perceptions of the content and value of NVQ provision, *despite* the extensive industry consultation that goes into the design of NVQ programmes. Finally, it was also acknowledged that training providers and other key stakeholders have a major task in continually 'selling' the benefits of skills upgrading to employers. There remains a culture among some employers that doubts the essential need for continuing staff development and assumes that spending on training will be wasted when staff leave the company. Challenging these cultures remains a priority for NISP. At a more practical level, it was acknowledged that many SMEs and micro-employers struggle to find the time and resources to train staff.

7.4 CONCLUSIONS AND IMPLICATIONS FOR POLICY

Given the limited sample sizes for our research, and the attempt to cover issues around the diverse range of skill sets across the related but distinct printing and publishing sectors, any discussion of implications for policy must be tentative. However, a number of themes emerged from the research.

- Given the varying skill sets within and between the printing and publishing sectors, employers reported a diverse range of skills and qualifications profiles. In publishing, core/main employee groups were more likely to be degree-qualified, while print sector employers were more likely to report employees such as machine operations qualified to NVQ2. Promoting the progression of staff towards higher qualifications will remain a priority for stakeholders in the print sector.
- Changes in technology in both printing and publishing, along with new work practices, were the main drivers of skills upgrading. Technical skills were prioritised by 40% of all employers, with printing employers more likely to value these skills. In-depth interviews and case study research also confirmed that practical, highly specialised training in new print technologies was a priority for employers in the printing sector. Leadership skills were prioritised by 57% of employers, with publishing employers more likely to value these skills.
- In terms of approaches to skills upgrading, FE and to a lesser extent commercial VET providers are likely to have a limited role (especially in the publishing sector). In-house training and support from equipment/software suppliers are likely to provide most skills required. There is a need for FE/VET providers and other stakeholders to work with employers in both sectors to help identify where external providers can add value to existing training arrangements.
- The main barriers to the use of FE/VET related to employers' preference for in-house training and the perception that skill needs were too specific to be addressed by external providers. In-depth interviews with employers and case study research confirmed that there remains work to do to improve communication between employers in both printing and publishing and training providers, and to address negative attitudes towards the FE sector in particular.
- Our (limited) case study research in the printing sector highlighted how one FE provider has been supported in developing highly effective employer engagement strategies. Successful engagement with employers has been based around: the development of expertise in a range of relevant practices and technologies among staff; a strong focus on *practical*, work-focused training; a holistic approach to responding to employers' and employees' skill needs; and above all flexible delivery in the workplace. As in other sectors, there are lessons to be learned from this example of good practice, but their transferability will depend on capacity within the FE sector and demand among employers. Funders and key stakeholders should consider how lessons from successful examples of employer engagement can best inform future strategies.

8. SYNTHESIS, IMPLICATIONS FOR POLICY AND RESPONSES OF KEY STAKEHOLDERS

8.1 INTRODUCTION

The research reported in this document sought to focus not merely on employers' current day-to-day skills issues, but rather to address the drivers of, and responses to, future skills upgrading needs, with particular reference to the current and potential role of FE and commercial VET services. In all of the sectors discussed, there is a need for employers to engage in skills upgrading in order to retain, renew and further develop workforce skill sets that are crucial to business performance; as a route to increased productivity in a global marketplace where high quality is the key selling point of UK products and services; and as a response to rapidly changing technology, markets and regulatory environments.

The Leitch Review, like other UK and devolved government policy documents, reiterates the need for FE and other training provision to be calibrated so as to produce people with the skills that employers' need.[20] This final synthesis and conclusions chapter considers whether FE and VET services can also do more to address the skills upgrading needs of those people already in the workplace. The chapter next discusses issues emerging from the preceding discussion of different sectors (8.2). These findings are then discussed with reference to other recent research undertaken in England and Wales (8.3) before reviewing implications for policy and the responses of key stakeholders (8.4) and offering remarks in conclusion (8.5). The chapter – reflecting a key aim of this research – seeks to identify common themes across sectors and nations, and to discuss policy implications at the sectoral, national (Scotland/Northern Ireland) and UK levels.

8.2 COMPARING KEY ISSUES FROM ACROSS THE SECTORS

8.2.1 Drivers and responses in skills upgrading

In each of the diverse sectors discussed above, employers face pressures to shift their products and services 'higher up the value chain'. This is partly in response to low cost global competition, and the intensification of high quality competition from both the developing world and 'traditional' competitors, requiring continuous productivity gains through both cost reduction and higher value added product development. In the manufacturing sectors discussed in both Scotland and Northern Ireland, employers are required to respond to customers' demands for increasingly complex and high quality

[20] HM Treasury, 2006: Prosperity for all in the global economy – world class skills, Final Report.

products. There is an awareness among employers in, for example, the Scottish textiles sector that future growth depends on high levels of efficiency and productivity to produce high value added design and products. There is also an acceptance that this will require the reduction of current skill gaps and future skills upgrading in the use of existing and new machinery and IT systems. The effective use of new technology, along with compliance with regulation requiring the demonstration of competency, is also likely to remain a driver of skills upgrading in high-end service sectors such as financial services and architectural and engineering consultancy. Our work in the financial services sector highlighted a range of drivers of skills upgrading, including an increasingly demanding and competitive environment for contact centre services, where customers expect a greater depth of product knowledge and employers want staff to combine processing and customer service skills with more proactive sales roles (partly in response to the threat of lower wage, off-shore contact centres). In the same sector in Scotland, where there is a concentration (unique outside London) of employers delivering high-end investment management services, there will be a continuing requirement for advanced skills upgrading to reflect the increasing complexity of products and markets.

It is also worth noting that, in all cases, employers are required to source and retain staff in a currently buoyant economy and relatively tight labour market (indeed, what was described by one Northern Ireland metal manufacturing employer as “a zero unemployment labour market”). Although recruitment problems were not a primary focus of our study, it is important to note that a substantial proportion of recruiting employers in all sectors had encountered some difficulties in filling vacancies during the preceding year. In many cases, employers cited a lack of appropriate technical skills and knowledge among applicants as problematic. It is therefore important that employers are able to retain their existing skilled staff and that training provision is in place to respond to any internal skill gaps. This is particularly of concern in sectors such as textiles, where employers raised concerns over the ageing of skilled employee groups.

Table 8.1 Employers’ experiencing problems recruiting to core/main employee group[21]

Sector	Any recruitment difficulties	Due to lack of technical skills	Due to lack of qualifications
Textiles (S)	52%	23%	6%
Financial services (S)	38%	14%	11%
Metal/machine manufacturing (NI)	45%	20%	11%
Architectural and engineering/related (NI)	42%	7%	15%
Printing and publishing (NI)	13%	3%	–

[21] All percentages in this chapter refer to respondents to telephone interviews conducted as part of this research. Figures in Table 8.1 are expressed as percentage of all surveyed employers, rather than employers who had recently recruited.

Employers need to be aware of the potential value of providing opportunities for skills upgrading as a means of attracting and retaining staff. Forced to compete for staff in tight labour markets, there may be value in employers in sectors such as metal/machine manufacturing in Northern Ireland and textiles in Scotland placing greater emphasis on progression and development for staff, as a means of promoting these sectors as a 'first choice destination' for job seekers. It is notable that even in Scotland's highly successful financial services sector similar issues emerged. Some employers reported problems recruiting, while it was acknowledged that a lack of formalised training and progression may be one reason behind retention problems among entry-level staff, with contact centre operatives failing to see their jobs as the first step in a financial services career.

Accordingly, improving access to accredited training emerged as a priority issue from our research. There is no value in 'qualifications for their own sake', but in some sectors (textiles in Scotland stands out) the lack of accredited training provision may feed into negative perceptions of the industry and problems delivering skills upgrading. Certainly, core/main employee groups working for textiles employers participating in our research were much less likely to be highly qualified – less than one-fifth of textiles employers reported employees qualified to SVQ3, despite the often highly complex skill sets of these workers. We have also argued above that there may be benefits from action to encourage the formalisation and accreditation of the in-house training that dominates in sectors such as textiles and metal/machine manufacturing (often through 'cascading' knowledge through levels and generations of the organisation). Progress towards formalisation of skills upgrading activities has the potential to deliver benefits in terms of: encouraging participation in skills development; improving recruitment and retention by providing clear progression and development routes; 'locking in' good practice and ensuring the consistency of training; and guarding against the potential danger of errors being transferred and 'mainstreamed' through inadequate informal skills cascading.

Table 8.2 Employers with core/main employees qualified to at least S/NVQ3 or equivalent

Sector	Employers (%)
Textiles (S)	19%
Financial services (S)	77%
Metal/machine manufacturing (NI)	36%
Architectural and engineering/related (NI)	87%
Printing and publishing (NI)	53%

This is not to suggest that an increased role for FE or VET providers is always necessary. Some employers described robust and sophisticated internal training procedures. Employers are best placed to respond immediately to pressing skills upgrading needs and often have highly skilled staff in place who are able to impart the required task-specific or occupation-specific knowledge to colleagues. Nevertheless, the benefits discussed above may still accrue from the formalisation of effective internal training. There should be a role for Sector Skills Councils, qualifications authorities and other key stakeholders in assisting employers in the relevant sectors to consider how best to make progress towards the formalisation of planned skills upgrading. In some cases there is also a case to be made for an expanded role for FE/VET providers. This need not imply employers' long-term dependency on 'bought in' services, but there may be benefits for employers in working more closely with both equipment suppliers and other providers, who are well placed to advise on how to maximise the effectiveness of internal training. As skilled educators, FE and VET professionals may also be able to add value by 'training the trainers' – helping employers to develop their internal training skills and capacity. Such external assistance is likely to be most welcome among smaller employers. In all the participating sectors a recurring theme related to the limited resources among smaller employers to fund training/time off for staff, and the resulting problems encountered by training providers in developing services for, and relationships with, these employers.

In terms of what employers' want, in all sectors the majority highlighted one or more soft skills areas that will require upgrading among core/main employee groups in the immediate term, with teamwork and leadership skills most regularly mentioned. However, in some cases employers emphasised that 'off the shelf', generic soft skills training will be inadequate to address these needs. Finance employers noted the link between effective sales and communication skills and more fundamental product knowledge and a deeper understanding of the principles of financial services. Similarly, in the textiles sector, a number of employers noted the need for commercialisation and communication skills for technicians and designers, but again argued that specialist skills upgrading will be required: to assist these workers to more fully consider the commercial and cost implications of their work; to communicate and market their ideas to customers within a business setting; and to 'listen effectively' by taking on board feedback from customers as to required products and services.

Table 8.3 Key predicted future skills upgrading needs

Sector	Technical skills	Teamwork skills	Leadership skills	Problem-solving
Textiles (S)	50%	47%	42%	32%
Financial services (S)	56%	69%	67%	67%
Metal/machine manufacturing (NI)	64%	70%	45%	23%
Architectural and engineering/related (NI)	67%	57%	63%	57%
Printing and publishing (NI)	40%	50%	57%	33%

However, it is also important to note that sector/occupation-specific technical skills upgrading was emphasised by many employers across all sectors. In our manufacturing sectors, the need for technical skills upgrading often focused on the more effective use of new or existing machinery. In these and other sectors, the introduction of new design technologies was also a crucial driver of skills upgrading plans. The effective use of IT systems was similarly a skills upgrading issue in service industries such as financial services, but here a deeper knowledge of increasingly complex products was even more important. It is again important to emphasise that we sought to focus our discussions with employers on *future skills upgrading*, rather than training to refresh existing skills or induct new recruits – these employers had identified the need for skills upgrading as a response to changing markets and to deliver improved productivity.

8.2.2 How can FE and commercial VET provision add value?

The extent to which employers had used, or planned to use, FE and commercial VET providers for skills upgrading was affected by a range of factors, including area of work activity and size of establishment (in sectors such as metals/machine manufacturing and textiles, SMEs and micro-employers have clearly struggled to find the resources and time off for ‘bought in’ staff training). Other barriers to increased engagement with FE and VET related to the extensive use of in-house training. As noted above, in many cases this approach is justified by the specificity of the training required (for example, in company-specific products, practices and systems within the financial services sector). However, there may be further opportunities for external providers to add value to existing in-house training – the involvement of trainers with expertise in both sector-specific skills and delivering learning may offer benefits in terms of ‘locking in’ that good practice and eliminating the danger of ‘mainstreaming error’ through informal skills cascading.

Table 8.4 Predicted ‘likely’ use of FE, commercial VET and in-house training

Sector	FE	VET	In-house
Textiles (S)	21%	24%	81%
Financial services (S)	26%	42%	96%
Metal/machine manufacturing (NI)	43%	53%	87%
Architectural and engineering/related (NI)	57%	60%	88%
Printing and publishing (NI)	17%	27%	70%

The FE and VET providers featured in our case study research were often able to demonstrate considerable expertise in highly specialised technical skill sets (expertise that some employers doubted or were unaware of), suggesting that there may be scope for such providers to play a greater role in more formalised skills upgrading. It is also notable that in all sectors where FE and VET providers had previously provided services, levels of satisfaction were generally high among employers, who were then significantly more likely to predict using such services again in the future. Measures to raise awareness of FE and VET services (through sectoral 'advocates' or employer engagement officers), and to encourage mutual learning (such as through the 'Lecturers into Industry' initiative currently enjoying success in Northern Ireland) would appear to have the potential to help build productive relationships.

There is a continuing need to incentivise training providers to respond to employers' skills upgrading needs. There are good practice lessons from our case study research in relation to how FE and commercial providers have built relationships with employers by:

- developing and demonstrating credibility and specific expertise in skill sets of immediate, *practical* value to employers;
- responding to employers' needs by offering provision that is bespoke (i.e. tailored to specific skill needs and organisational settings), flexible (in terms of format, timing and duration), and (in some cases) peripatetic and delivered in the workplace.

However, there remain considerable barriers to overcome. The funding of FE provision in both Scotland and Northern Ireland encourages the recruitment of full-time students to undertake highly structured learning activities – by comparison, there are relatively limited incentives for FE providers to seek to engage with employers. As a result, FE providers in particular can struggle to develop the flexible formats (for example, day release, evening or e-learning) and bespoke provision that can facilitate work-based learning. Even among employers participating in our research who had used FE services, the limited flexibility of such provision was a particular problem – in the architectural/ engineering sector in Northern Ireland and financial services sector in Scotland the *majority* of FE users expressed dissatisfaction with the flexibility of services. There is a need for a commitment among both FE institutions and funders to develop more flexible forms of provision *if* such providers are to play a greater role in meeting future skills upgrading needs.

For both FE and commercial VET providers, ensuring the viability of new services by identifying a 'critical mass' of training customers also remained a problem. This was particularly the case in sectors such as textiles, metal/machine manufacturing and architectural/engineering design, where the majority of employers are SMEs and micro-enterprises with limited resources for external training. Indeed, the impact of resource constraints cannot be over-stated. SMEs and micro-enterprises often have limited resources to buy in external provision and struggle to allow core employees time off for training. Accordingly, even where there are examples of good practice in trainer-employer engagement (such as Northern Ireland's Centres of Excellence in the metal/machine manufacturing sector) there are considerable challenges to mainstreaming benefits given the resource constraints affecting both providers and employers. It is important that training funding does not fall victim to deadweight effects by subsidising skills provision that can and should be the responsibility of employers. But this research has flagged up the very real barriers faced by smaller employers in supporting the skills upgrading that they themselves have identified as necessary – policy makers and funders need to consider how best to incentivise both employers and training providers so that core employees receive the training that they need.

Our research has demonstrated that if FE and VET are to build on existing positive relationships with employers, there needs to be a concerted effort among providers to define a clear role for themselves within specific sector skills agendas. In sectors such as metal/machine manufacturing, printing and textiles, providers need to develop services that clearly add value to the basic training provided by equipment and software providers and complement, improve and formalise internal skills cascading. In sectors such as financial services and architectural/engineering design highly qualified staff often undertake learning towards professional institute-accredited examinations. In these types of sectors, there is scope for the further development of FE/VET services to support and tutor learners undertaking professional institute courses. (Indeed some finance employers' would clearly welcome services that provide employees with a broader-based knowledge of the principles, practice and theory of financial services, adding value to professional institute learning that strongly focuses on 'passing the exam'.) Employers in the same sectors have also identified skills upgrading needs in relation to context-specific soft skills (such as leadership and teamworking) and continuing professional development – FE and VET providers need to work with employers and other stakeholders to define their potential role in taking forward these agendas. In short, FE and VET providers need to be able to demonstrate that they can provide flexible, tailored services that will help employers take their training provision to a higher level, by offering expertise in both sector-specific skills and the effective delivery of learning; complementing and improving on existing internal training; and developing intensive, holistic, high value added interventions.

Finally, across all sectors, there needs to be increased advocacy in favour of formalised (internal or external) skills provision and improved lines of communication between FE/VET and employers. Many employers continued to rely upon informal, *ad hoc* skills upgrading arrangements, not linked to an agreed training plan or dedicated budget. Across sectors, many employers were also unaware of the services available from FE and VET providers, (sometimes wrongly) considered their employees' skill sets to be too specific to be addressed by certain types of providers and/or saw no need for the type of training offered by (especially FE) providers. Yet our case study research was able to identify strong examples of good practice where FE/VET providers had effectively responded to employers' specific needs, although we acknowledge that the transferability of such good practice will always rely on demand from employers and the capacity of institutions to deliver. What is clear is that there is a role for Sector Skill Councils and other key stakeholders in helping employers to consider the full range of strategies and partners for skills upgrading, and to promote an improved understanding of employers' skills upgrading needs among a more visible and responsive FE/VET sector.

8.3 PLACING THE FINDINGS IN CONTEXT: RESEARCH IN ENGLAND AND WALES

To some extent these findings echo previous studies in England and Wales. There are particularly strong parallels with the findings of research with textiles employers in England.[22] Like those participating in our research, the majority of English employers identified a range of skills upgrading needs, with the introduction of new machinery and the use of CAD/CAM systems similarly prioritised. Scottish textiles employers participating in our research were much more likely to predict using FE and VET providers to address skill needs. This may be due to the concentration and availability of services in Scotland's main areas of textiles manufacturing activity, but may also be a result of the concern among SMEs and micro-employers in Scotland to promote multi-skilling (so that many employers thought that they would use a mix of internal, VET and other forms of training to address the full range of commercial, generic and technical skills upgrading required by staff). The same research in England also focused on employers in mechanical engineering, and there are parallels with our research with Northern Ireland metals/machine manufacturers. Just as we found among manufacturing employers in Northern Ireland, English engineering employers' cited skills upgrading linked to the increasing use of electronics and IT-based production. Likely use of FE provision was slightly higher in Northern Ireland, but our interviewees were twice as likely to predict using commercial VET services (probably reflecting the necessity of construction skills qualifications for many employees in the Northern Ireland metals sector).

However, perhaps the clearest overlap with previously undertaken research in both England and Wales relates to the problems faced by FE/VET providers in engaging with employers. As in both Scotland and Northern Ireland, there were examples of good practice, but also significant gaps related to the absence of tailored, short-term provision targeted at employers. FE providers again pointed to funding structures that necessitate the prioritisation of long-term, broad-based learning directed towards full-time learners, especially young people. They identified the same problems engaging a sufficient number of employers (especially SMEs) to make sector-specific, work-focused learning viable. They expressed the same concerns regarding the resources required to engage especially smaller employers, with no guarantee of a successful outcome, acknowledging a "reluctance to invest time in developing relationships with SMEs".[23] All of these issues are familiar from our research in Scotland and Northern Ireland, and represent a continuing, fundamental challenge for funders and training providers seeking to respond to employers skills upgrading needs. Clearly, there is a shared need to continue to encourage and support FE providers in particular to

[22] NIESR, 2005: Raising Sector Skills Levels – How Responsive is Local Training Supply?.
[23] ibid., p.5.

communicate more effectively with employers. As noted below, further support for employers (especially micro-enterprises and SMEs) to undertake strategically important skills upgrading would also be welcome in all nations.

Our research, like previous studies in England and Wales, has also identified the need for FE and other providers to ensure that their services are 'fit for purpose' in responding to employers' skill needs. Research in Wales has demonstrated that – across a range of sectors – there is a need for FE providers to convince employers and learners of the quality of their services and that their training provision is of immediate practical value in the workplace.[24] Employers in a number of English sectors and regions doubted the capacity of FE to respond to specific skills upgrading needs, and many FE and VET providers appeared to share the view that they were not well placed to meet employers' requirements. As with our research in Scotland, providers pointed to funding mechanisms that do not incentivise the development of bespoke training targeted at employers. Training organisations participating in our own case study research were more likely to be confident of their abilities and expertise in responding to employers' needs (if resourced to do so) but this may reflect the selection of providers that employers had identified as examples of good practice. Previous research in a number of English regions has suggested that developing sector-specific provision within FE institutions is likely to require investment in staff retraining and facilities development.[25] Accordingly, a recurring theme across all nations appears to be that – where there is demand for skills upgrading – FE and other providers need to work with employers to ensure that their provision is credible and relevant, so that employer engagement activities produce practical benefits.[26] Centres of Vocational Excellence (CoVEs) in England and Centres of Excellence in Northern Ireland have been charged with improving the responsiveness of FE/VET provision in key sectors, and there may be more general lessons for the funding and organisation of FE and other services from these centres. Further research on spreading good practice from these models, and what actions are required to promote the more flexible, demand-led services pioneered by CoVEs and Centres for Excellence, should be a priority for Sector Skills Councils and partners.

At the same time, there is a need to make processes of accreditation more flexible and user-friendly. Our research found low levels of accredited learning in some sectors (with Scottish textiles a clear example) while elsewhere employers were reluctant to engage with major accreditation structures linked to SVQ/NVQ awards or Modern Apprenticeships. Research from elsewhere in the UK has similarly found that NVQ/Modern Apprenticeship routes can be *perceived* as costly and bureaucratic

[24] York Consulting, 2005: ELWa Creative Industries Sector Skills Study; Cardiff Business School, 2005: Review of the Learning Network and Audit of Post-16 Learning Provision for the AV Industries in Wales.
[25] NIESR, 2005: Raising Sector Skills Levels – How Responsive is Local Training Supply?.
[26] York Consulting, 2005: ELWa Creative Industries Sector Skills Study; NIESR, 2005: Raising Sector Skills Levels – How Responsive is Local Training Supply?.

in some sectors.[27] There is a need for a continuing sector-based review process (with Sector Skills Councils playing an important role) to re-assess the role, organisation and validity of existing qualifications structures, and to consider any reforms required to make qualifications more relevant and accessible (especially for SMEs and micro-employers with limited administrative capacities).

Finally, from employers' perspectives, research in both England and Wales has highlighted the problems faced by micro-employers and SMEs in funding the 'buying in' of training or allowing time off for staff.[28] Similar problems informed many smaller employers' reliance on internal training in Scotland and Northern Ireland. Early evaluation evidence on the *Train to Gain* programme in England appears to suggest that financial and organisational support, targeted at 'hard-to-reach' employers, can have positive impacts in encouraging training activities.[29] There may be lessons here for devolved administrations in Scotland and Northern Ireland regarding the need for carefully targeted financial incentives to encourage employers to invest in skills upgrading – the message from many smaller employers across sectors and nations would appear to be that without additional resources necessary skills upgrading activities will not be affordable.

8.4 IMPLICATIONS FOR POLICY AND RESPONSES OF KEY STAKEHOLDERS

8.4.1 Reviewing implications for policy

A number of specific policy implications emerged from our research in each sector, which are briefly summarised below, followed by an attempt to identify more general policy messages that are common across all sectors.

In the **textiles** sector in Scotland:

- there is a need for an intermediary/advocacy role promoting improved collaboration between FE/VET providers and textiles employers;
- additional resources for employer-trainer exchange initiatives (in line with 'Lecturers into Industry' elsewhere) are required to allow FE and other trainers to demonstrate their expertise within a workplace context, and learn about employers' skills upgrading needs;
- there is a need to assist those with limited resources (especially micro-employers and SMEs) to formalise and accredit their skills upgrading activities, possibly by linking internal training to the Scottish Credit and Qualifications Framework and/or through 'training the trainers' initiatives that promote good practice in the cascading of in-house training;

[27] Futureskills Wales, 2007: Report from the Care Council for Wales and ELWa.
[28] NIESR, 2005: Raising Sector Skills Levels – How Responsive is Local Training Supply?; Futureskills Wales, 2007: Report from the Care Council for Wales and ELWa.
[29] IES, 2006: Employer Training Pilots: Final Report.

- there is a need for FE and VET providers to consider how best to develop provision that addresses the needs articulated by employers, in terms of bespoke content (which needs to increasingly focus on specific uses for production machinery and design technologies), and format (with a strong focus on flexible, workplace-based and peripatetic training solutions);
- there is a need to promote and develop Modern Apprenticeships across the sector;
- there is a need for providers to consider how to respond to the apparent need for tailored commercial skills training to enable technicians and designers to understand the business context for their work and effectively communicate their ideas within a commercial setting, especially to those outside the organisation;
- given the challenges faced by smaller employers in finding ‘time off’ for staff training, there is a need to consider providing further incentives, which should, crucially, be linked to employers being able to evidence long-term business benefits (the *Training in the Workplace* model described in Chapter 3 may provide a useful starting point for any additional services).

In the **financial services** sector in Scotland:

- while many employers expressed satisfaction with a combination of in-house and specialist external training, there is a need for key stakeholders to continue to support the sector’s planning of training and to work with providers to ensure that there is adequate, relevant provision as the sector in Scotland seeks to develop services ‘higher up the value chain’;
- there is a need for research on the potential role of external providers in assisting employers to develop accredited in-house training and stronger progression routes for entry-level staff;
- there is a need to investigate opportunities to more closely integrate professional institute learning and qualifications with the broader-based financial services learning currently provided by some FE/HE institutions;
- there is a need for relevant stakeholders to continue to work together to ensure that SVQ, Modern Apprenticeship and other forms of vocational provision accurately reflect the needs of employers, and are increasingly integrated with professional institute learning;
- there is a need for training providers (and FE colleges in particular) to consider how they can best add value to professional institute learning materials by offering bespoke, flexible, high quality support for learners, broadening the learning and skills developed beyond that required to pass regulation-driven examinations;
- there is a need for FE and other providers to consider how best to respond to employers’ need for *sector-specific* teamworking, customer service and leadership skills;
- there is a need to ensure that SMEs and micro-employers are aware of, and have access to, appropriate formal skills upgrading provision;
- there is a need for FE and VET providers, and other key stakeholders, to work with employers to identify potential opportunities for training providers to facilitate more effective, flexible ‘continuing professional development’ activities.

In the **metal/machine manufacturing** sector in Northern Ireland:

- there is a need for VET and especially FE providers to continue to develop services that can deliver specialised, *practical* training to address core skills upgrading needs, including bespoke training relating to production machinery, multi-skilling provision based around specialised skill sets, and training on cutting edge manufacturing and design technologies;
- there is a need to encourage 'first contacts' and improved communication between employers and training providers (building on the 'Lecturers into Industry' model);
- there is a need to learn from and support the Centres of Excellence model (which has seen FE institutions supported to engage employers; and develop specialised, flexible and bespoke training provision in response to individual employers' needs);
- there is a need to consider the potential benefits of a programme of temporary, short-term and targeted incentives for SMEs and micro-employers, enabling these smaller employers to cope with the impacts of allowing staff time off for training.

In relation to **architectural, engineering and related design activities** in Northern Ireland:

- there is a need to ensure that FE and VET providers are able to respond to the technical, sector-specific skills upgrading needs prioritised by employers (especially in relation to the use of new design technologies) through tailored and bespoke training solutions;
- there is a need to further support 'Lecturers into Industry', 'Constructing Excellence' and other initiatives designed to promote collaboration between FE/HE and employers;
- there is a need to encourage FE providers in particular to develop more flexible forms of provision (especially in part-time, day release and evening formats) enabling SMEs and micro-employers to better cope with the need to allow core employees time off for training;
- there is a need to encourage employers to undertake more formalised planning and budgeting for training;
- there is a need to develop a comprehensive, regularly-updated source of information on the availability and content of sector-specific training provision at the local/Northern Ireland-level.

In the **printing and publishing** sectors in Northern Ireland:

- there is a need for VET and FE providers to continue to develop services that respond to employers' skills upgrading needs around the effective use of desk-top publishing, web-media and other forms of publications-related ICT, and the use of new design and production machinery in printing;
- given many employers' reliance on cascading skills initially delivered by equipment and software manufacturers, FE and VET providers need to continue to demonstrate how they can add value to this provision so that efficiencies in the use of machinery and IT are maximised;

- given many employers' reliance on internal, on-the-job training, there is a need for key stakeholders to work with employers to encourage more formalised planning and budgeting for skills upgrading.

8.4.2 Key themes for policy intervention

Employers and training providers participating in our research often referred to issues in terms of the specific needs of their sector of interest. But there are clear cross-sectoral and cross-national themes that should inform broader lessons for skills policy. For example, across all sectors it is clear that the funding and planning of future vocational training provision must be informed by a commitment to delivering services that are demand-responsive and highly specialised/bespoke in nature (and, if necessary, delivered through peripatetic and/or workplace-based approaches). Turning such an aspiration into a reality may require considerable investment to ensure that (especially FE) provision is 'fit for purpose', in terms of the content of programmes, the quality of training facilities and the expertise of staff. The resources and expertise brought to bear to develop Centres of Excellence in Northern Ireland may provide a model of good practice. There is potentially a vital role for Sector Skills Councils to play in working with the national and devolved governments and funding agencies to assess the need for additional training interventions, the scope and limitations of any greater role for FE/VET, and the return on investment likely to be associated with any funding to support the development of new service centres. It is also important that the geographical focus of any additional resources maximises service accessibility, but also reflects the presence of a 'critical mass' of employers likely to take up training offered. One way to encourage the development of new training services may involve Sector Skills Councils working with employers and other stakeholders to identify shared skills upgrading needs *across* sectors, enabling training providers to identify viable markets for training across different but linked industry groupings.

If FE/VET is to play a greater role (where considered appropriate) it is clear that incentives need to be in place to encourage providers to engage with employers. Training providers across all the sectors discussed above – like those participating in previous studies in England and Wales – often lacked the resources to develop specialised provision required, struggled to find the time to establish long-term relationships with employers, and encountered problems in identifying a 'critical mass' of employers with sufficient training budgets to make the establishment of demand-responsive services viable. If employers' identified skills upgrading needs are to be addressed, governments in Scotland and Northern Ireland may need to revisit issues around providing targeted funding incentives for SMEs in particular, while also considering how to most effectively support FE providers' attempts to develop long-term strategies to respond to employers' needs.

The importance of internal training was another recurring theme from our research that also reflects the key messages of previous studies undertaken elsewhere in the UK. As noted above, internal training may be appropriate for many employers and staff, but there may also be benefits in Sector Skills Councils, qualifications authorities (which operate at the national level in Scotland and Northern Ireland) and other stakeholders developing strategies to promote greater accreditation and formalisation of training. More generally, qualifications authorities need to ensure that SVQ/NVQ and Modern Apprenticeship routes provide a framework for training that is accessible, credible and regularly used by employers. Concerns raised by employers and providers participating in this and other research projects suggest that potentially valuable vocational training routes such as Modern Apprenticeships are consistently reviewed, to ensure that they are sufficiently flexible and relevant to respond to the needs of employers.

Finally, at a most basic level, in areas where there is scope for FE/VET to add value to employers' skills upgrading activities, there is a need for improved communication between employers and trainers. Partly responsibility for this lies with training providers – it is essential that trainers make the effort to directly engage with employers, in order to communicate the benefits associated with their services, build trust and confidence, and learn about what employers want. However, in many sectors there is also a case for an independent intermediary/advocacy role, providing a link between employers and FE/VET providers. The role of such a professional/group should not be to 'sell' FE or commercial VET services – as noted above there are areas where internal training works best for employers. But independent intermediaries – possibly based within Sector Skills Councils or other sector-focused agencies at the national level in Scotland and Northern Ireland – may have a valuable role to play in helping employers to consider if and how external providers can add value to their training. Across all the sectors participating in our research, many employers reported little contact with FE/VET providers and had limited knowledge of the range and content of services available. Employers need accurate, up-to-date information about what training providers can offer if they are to make informed judgements about the best combination of in-house and external training to meet their skills upgrading needs.

8.4.3 Responses of key stakeholders

Interviews with and feedback from key stakeholders involved in each of the sectors and the broader skills agenda in Scotland and Northern Ireland highlighted the progress being made in identifying and addressing some of the issues discussed above.

The emerging policy context in Scotland

The Scottish Executive's lifelong learning strategy has already articulated the need for action to encourage employers to formalise and improve their planning on skills, and suggests that FE and other providers may have a greater role to play in strengthening occupational training.[30] Interviews with sector specialists dealing with manufacturing and financial services within the Executive confirmed a continuing commitment to developing a clear evidence base on employers' skill needs and promoting the development of a responsive training infrastructure – key intermediaries such as the Scottish Enterprise network were seen as having a vital role to play in facilitating these processes. In both Scottish sectors, the Executive has played a leading role in working with industry and stakeholders to develop strategic frameworks for action. The 'Strategy for the Financial Services Industry' is discussed above and a National Textiles Forum and linked 'Strategy for the Textiles Industry' has sought to "help co-ordinate and articulate the industry view" in this sector.

From the perspective of the FE sector, representatives of the Scottish Funding Council noted that the recent establishment of a special Skills Committee marked a new attempt by the Council and partners to investigate the actions required to strengthen links between FE and key sectors within the Scottish economy (both textiles and financial services are priority sectors for the new Committee). The Scottish Funding Council emphasised the autonomy enjoyed by the FE sector, with individual colleges relatively free to identify and pursue market opportunities. It was suggested that, for example, FE colleges are free to pursue employer engagement strategies in key sectors (the need for a strengthening of such approaches was a key policy implication emerging from our research). However, it was also acknowledged that current funding arrangements particularly incentivise colleges to develop structured, full-time provision, more so than engaging employers to provide workplace learning. The need for additional resources for "strategic development" work with employers was highlighted by representatives of the Scottish Further Education Unit (SFEU), the key development agency for Scotland's colleges.

The SFEU pointed to recent partnership working between the Unit, colleges and Sector Skills Councils and to the establishment of a colleges' Work-based Learning Network – both moves designed to generate new thinking on responding to employers' skill needs. It was suggested that such initiatives were required to challenge FE providers and professionals to "become more aware of the commercial environment" and "seek more short-term, dynamic forms of engagement" with employers. There was also an acknowledgement that some colleges will need to see substantial investments in the renewal of facilities and upgrading of staff skills if more commercially viable training provision is to be developed within the FE sector. Nevertheless, the SFEU suggested that, in some cases, concerns regarding the perceived inflexibility of FE (a recurring theme in our research with employers) were misplaced, and pointed to the substantial progress made by a number of colleges in developing Knowledge Transfer Partnerships with employers.

[30] Scottish Executive, 2003: Life Through Learning, Learning Through Life: the Lifelong Learning Strategy for Scotland.

A representative of Skillfast-UK noted that many of the issues raised by our research in the **textiles sector** in Scotland were familiar to key stakeholders. The relevant Sector Skills Agreement for Scotland[31] highlights a number of current and planned measures that have the capacity to impact positively on skills provision. The proposed 'Skills HQ' initiative (arguing for blended learning within specialist centres and workplaces and using both peripatetic and in-house trainers) may help to address some of the barriers raised by employers in relation to the responsiveness, flexibility and specificity of training. Skillfast-UK is also committed to improving in-house training, by supporting the development of skills upgrading infrastructures and 'key workers' promoting skills within organisations. The proposed 'Cascade' initiative reflects the concerns raised by our research regarding the need for help for micro-employers and SMEs to "build in-house instructional capacity"; Skillfast-UK is also prioritising measures to promote the accreditation (and therefore formalisation) of in-house training arrangements within the Scottish Credit and Qualifications Framework.[32] These measures, if successful, have the potential to begin to address many of the weaknesses in internal training provision delivered by some textiles employers.

However, there is a need to move beyond planning and make rapid progress towards funding and implementing these initiatives – a point made by both Skillfast-UK and Scottish Enterprise's textiles specialists (at 'Scottish Textiles'). Scottish Textiles will continue to play a leading role in promoting innovation and leadership across the sector. Recent, current and planned initiatives have an important skills element – for example, the 'Leadership in Textiles' programme offers direct funding for managers to develop their leadership skills, while the recent 'Textiles Lab' initiative has encouraged organisational learning by linking companies with external designers. Technical textiles workshops have also been established to address major issues such as market opportunities, innovation, new product development, research and development, and building links with the HE sector.[33] The development of other interventions based around the Scottish Textiles 'Business Development Programme' model – supporting marketing, branding and other business development skills among company leaders – is also a priority. Skillfast-UK also plans to contribute to this agenda by promoting business skills development activities "contextualised to the specific needs of the industry", an idea that has resonance with the need for context- and sector-specific commercialisation skills identified by our research.

Key stakeholders in the Scottish **financial services sector** emphasised the need to build on the strengths of current skills provision and to promote an emerging, more integrated and flexible, approach to accredited training. For the Financial Services Skill Council (FSSC), a key priority is to work with the Financial Services Authority and other partners to ensure that professional learning in

31 Skillfast-UK, 2006: The Big Push on Skills.
32 ibid.
33 http://www.scottish-enterprise.com/sedotcom_home/sig/textiles.htm

the sector is not only 'approved' but 'appropriate'. An FSSC representative noted that there are already numerous qualifications serving the sector and argued for further progress on aligning and integrating professional and vocational qualifications (an approach which the findings of our research supports). Representatives of the FSSC and financial services experts at Scottish Enterprise highlighted recent progress in the development of qualifications. The establishment of a Professional Development Award, in partnership with the Securities and Investment Institute (SII), to be delivered by FE and other providers (see also Chapter 4 of this report) was cited as an example of good practice – within a broader framework of financial services learning (pitched at SVQ3 level) the award will offer progress towards the SII's professional Investment Administration Qualification. Promoting similar measures to integrate national vocational and sector-specific professional qualifications was seen as a priority by stakeholders.

The FSSC and Scottish Enterprise's financial services team also highlighted the need to address recruitment problems linked to skill shortages (an issue frequently raised by employers participating in our research) and acknowledged the need for a formalisation of training and progression for entry-level staff. Scottish Enterprise noted the concern raised by some employers that young people working in entry-level positions were reluctant to commit to financial services careers. It was again hoped that moves towards the accreditation of internal training would have an impact here – the Scottish Qualifications Authority is working with a consortium of 4 FE providers to roll out a National Progression Award that will provide an entry-level qualification for staff (for example, operatives in contact centres) while also providing credit towards appropriate professional institute qualifications. For the Scottish Executive, ensuring a 'strong and extensive supplier infrastructure' (including in the areas of personnel and skills) is a priority for the national 'Strategy for the Financial Services Industry'. A Financial Services Implementation Group (FiSIG), with representatives from government, employers, trade unions and other stakeholders, has recently been appointed to take forward the work of the Strategy. A Scottish Executive representative emphasised the likely importance for FiSIG of improving links between the industry and the FE and HE sectors – there was an acknowledgement of the need to increase awareness among financial services employers of what these sectors can offer, and to encourage the industry to feed into the development of FE/HE provision. However, both the FSSC and the Scottish Funding Council (which supports FE provision in Scotland) accepted that financial services employers' commitment to internal training and strong relationships with specialist VET providers meant that there would remain limitations on the future role of FE in skills upgrading. Nevertheless, it was suggested that opportunities to deliver targeted soft skills provision and support continuing professional development (currently being investigated by some FE institutions) may help to build relationships between the FE sector and financial services employers.

The emerging policy context in Northern Ireland

In Northern Ireland, a DELNI representative interviewed for this research pointed to the progress being made under the 'FE Means Business' strategy, which reflects the Department's and the FE sector's acknowledgement of the important role of colleges in responding to emerging skills upgrading needs. Under the strategy FE providers have been encouraged to engage with employers, and there are increasingly frequent examples of employer-driven skills provision delivered both at colleges and in the workplace. There was an acceptance of the need to challenge the negative perceptions of some employers regarding the FE sector. The Centres of Excellence model that has been successful in promoting relationships between FE and employers offers lessons relating to the expertise required of trainers and the need for specialisation in the design and delivery of services. DELNI and partners hope to help the FE sector to learn and spread good practice lessons from the Centres of Excellence approach.

DELNI will also seek to encourage further FE-employer engagement by supporting and developing the work of Business Development Units within new, merged FE establishments. Indeed, the rationalisation of Northern Ireland's FE sector, which will see the establishment of 6 'super colleges', is seen as having positive benefits for employer engagement. Each new establishment will have a regional Workforce Development Forum, with a remit to promote communication and collaboration between the FE institutions and industry. In more general terms, the new, larger institutions may find it easier to establish a critical mass of expertise in specific subject areas, enabling improved tailoring of services to meet employers' needs. This approach was supported by Invest Northern Ireland, the government agency charged with providing support for business. A representative of Invest Northern Ireland suggested that improved, *direct* engagement between FE and employers was required if negative perceptions of the sector were to be challenged.

Specific initiatives such as Lecturers into Industry (which facilitates exchange visits and work placements for FE and HE professionals in key sectors) have also had a positive impact. A representative of the Learning and Skills Development Agency (which is responsible from promoting good practice in learning and skills provision in Northern Ireland) similarly highlighted the benefits of Lecturers into Industry – the initiative has enabled FE and HE staff to gain experience in the workplace, learn about employers' needs and identify practical challenges around the delivery of training; and it has allowed the same trainers to demonstrate their knowledge and expertise, and establish credibility and trust with employers (there are a number of examples of productive commercial relationships between FE/HE and employers emerging from placements). However, there was an acknowledgement from DELNI that micro-employers and SMEs have been difficult for training providers to engage through this and other initiatives. Allowing time off for training continues to be seen as a risk by many smaller employers, and there remains work to do to demonstrate the long-term business benefits associated with skills upgrading. DELNI and partners remain committed to working with employers to encourage investment in training, and to demonstrate how FE and other providers can add value to skills upgrading activities.

SEMTA and the Engineering Training Council (ETC) are leading action on skills upgrading in the **metal/machine manufacturing sectors** in Northern Ireland. Among priorities agreed by these partners are the need for further action to promote skills upgrading among skilled machine operators (NVQ2 to NVQ3 level) and increasing participation in the Modern Apprenticeship programme. A strengthening of Modern Apprenticeships is seen as important to addressing supply problems “due to the demography and attractiveness of the sector” – familiar issues raised by employers during our research. In more general terms, improving the supply of skilled technicians within the sector is a priority, and there is an acknowledgement that this may require new training frameworks and funding mechanisms. Such improvements are seen as key to the process of formalising progression for people working in the sector – itself a vital step in promoting retention and productivity. The *relatively* limited engagement with formal training structures reported by employers participating in our research would appear to support the case for such measures. An ETC representative interviewed for this research was positive about the potential role of FE in future skills upgrading activities – pointing to the Centres of Excellence model as an example of good practice – but also reported that some employers remained sceptical regarding the expertise of FE educators and their capacity to deliver the flexible, bespoke services required. It was suggested that the onus remained on FE providers, first to directly engage with employers to ‘sell’ their expertise; and second to ensure that staff have the expertise and facilities to deliver ‘cutting edge’ provision.

In seeking to address the needs of employers in **architectural, engineering and related activities** in Northern Ireland, the Construction Industry Council (CIC) and partners within ConstructionSkills are in the process of developing a range of responses. The issues raised by our research in relation to technical and IT design-related skills upgrading needs have also emerged from more extensive, UK-wide consultations with employers (as did employers’ concerns over recruitment difficulties due to the limited qualifications and skills of applicants).[34] Current actions at the UK level include pilot programmes seeking to more effectively integrate professional institute learning with Construction Skills Certification Scheme training (i.e. Construction Skills Register provision in Northern Ireland). More generally, ConstructionSkills has identified a number of priorities for the wider sector in Northern Ireland, including a renewed emphasis on management skills and the promotion of more flexible, “modular training… directly linked to increased productivity”.[35] Proskills, the Sector Skills Council responsible for the **printing sector**, is similarly in the process of developing responses to its own extensive research with employers in the sector. The Sector Skills Council’s work with employers in Northern Ireland and elsewhere has highlighted the complex and varied skill needs

[34] Construction Industry Council, 2004: Built Environment Professional Services Skill Survey.
[35] Constructionskills, 2005: Sector Skills Agreement Stages 1-3 for the Construction Industry in Northern Ireland.

across a diverse sector, but has particularly flagged up the importance of new technologies in driving skills upgrading (also highlighted by our research). Research conducted by Proskills in Northern Ireland saw some employers raise concerns regarding the availability of relevant training provision, although it was also noted that take up of Modern Apprenticeships among Northern Ireland print employers has been reasonably healthy.[36]

8.5 CONCLUSIONS

The recent Leitch Review has called for a "demand-led skills system" for the UK, where a strong employer voice in the content of skills provision is matched by a qualifications framework that reflects "economically valuable skills", and funding support for "hard to reach" employers.[37] Leitch sees these as essential components of a necessary, "radical step change" in participation in skills upgrading to "embed a culture of learning" within the UK workforce. It is a challenge that is reflected in the existing strategies and policies of the devolved governments of Scotland and Northern Ireland. Government departments and agencies and other key stakeholders remain committed to the development of training provision that responds to employers' current and future skills upgrading needs.

Much of the emphasis on the role of FE and VET providers in particular has focused on the need to develop curricula that reflect sector skills needs and prepare learners (often young people) for the world of work. However, there has perhaps been less discussion of the role of these providers in addressing immediate and pressing skills upgrading needs. It is hoped that this report adds value by focusing on these issues. What our research shows is that many employers have identified the need for urgent action to improve the skills of people already in work. Despite the diverse industries studied under this research, there were common themes around the need for employers in all sectors to promote skills upgrading in response to rapidly changing and more demanding markets, increasingly complex products and services, and the drive for efficiency and productivity through the most effective use of technologies. Skills are crucial to this – but the ability to plan, capacity to deliver and resources to support necessary skills upgrading are limited and varied.

A key priority for the Skills for Business Network and other stakeholders (including FE/VET funders and providers) needs to involve a commitment to promoting skills upgrading as a route to productivity and efficiency, and as a means of delivering the high quality, high value added products and services that must be the cornerstone of UK business in the global economy. This will need support for the creation of a greater learning culture among employers and employees. It will need the reform of current systems that offers relatively few opportunities for individual employees to formally upgrade their skills in a non-work setting while they still are employed full-time. This limits their ability to

[36] Proskills, 2006: Sector Skills Agreement, Stage 2 Report: An Assessment of Current Provision.
[37] HM Treasury, 2006: Prosperity for all in the global economy – world class skills, Final Report.

change job or career, perhaps within the same organisation or elsewhere, while still maintaining their current income.

In conclusion, and in addition to the sector-specific implications for policy discussed in section 8.4 above, there are a number of conclusions and lessons for policy across all sectors.

1) Raising awareness of the need for skills upgrading to 'shift up the value chain'

UK employers cannot compete on a least cost basis, but rather need to offer high quality, high value added goods and services. This requires an appropriately skilled workforce. A first priority for all key stakeholders involved in the sector skills agenda must be to reinforce the case for the benefits of skills upgrading among employers. Not all employers participating in our research saw skills upgrading as a priority – across all sectors between one-third and three-fifths saw no technical skills upgrading needs for the near future. There is therefore a constant need to assist employers to identify business development opportunities and implications for skills, and to demonstrate the business benefits associated with skills upgrading. The many employers who were aware of the need to take action should be helped to identify and articulate specific skills upgrading activities that will enable them to shift their business 'higher up the value chain'. Clearly, there is a role for Sector Skills Councils (working in partnership with other key stakeholders) in encouraging the consideration of these issues, and in making the business case for skills investment to employers.

2) Helping employers to take forward the skills upgrading agenda

The majority of employers across all sectors predicted addressing future skills upgrading needs primarily through internal training mechanisms. In many cases internal provision will be appropriate, but there may be benefits in further action to help employers to make an informed decision on training provision having considered all the potential external and internal mechanisms available. We have suggested above that some sectors would benefit from an 'FE/VET advocate' or intermediary to raise awareness among employers, many of whom had little knowledge of FE/other VET provision, of what training providers have to offer. The role of such an intermediary should not be seen as 'selling' the services of any one type of provider, but merely as informing employers and assisting them to plan the most effective combination of training interventions. Sector Skills Councils may be best placed to take forward such an intermediary/advocacy role, working in partnership with sector specialists within devolved administrations and their executive agencies.

3) Trainers' commitment to employer engagement is essential

The case study research across all sectors demonstrated the value of FE and VET providers having the time and resources to build relationships of trust with employers and learn about their skills upgrading needs. The ability to *directly* engage with employers has considerable benefits for training providers, who can listen to and fully understand what employers need (in terms of format and content of provision); while 'selling' their services and demonstrating how their expertise can add value to existing training arrangements. There needs to be a concerted effort to encourage and incentivise training providers (especially in the FE sector) to undertake employer engagement. Encouraging such providers to set aside time and resources to build relationships with employers should be retained as a key feature of the Centres of Excellence model in Northern Ireland and of any future initiatives by devolved administrations to develop 'hubs' of expertise in the FE sector (see point 8 below). In the more immediate term, there is a need to build upon and integrate the work of the Sector Skills Councils, Training Councils and Workforce Development Forums in Northern Ireland, and Local Enterprise Companies in Scotland in more effectively linking employers with training providers.

4) The value of promoting 'first contacts' and deepening relationships

In all the sectors studied employers regularly expressed satisfaction with both FE and other forms of VET provision, and FE/VET users were much more likely to consider using the same type of services for future skills upgrading. There is therefore a case to be made for initiatives that establish 'first contacts' and then deepen relationships between training providers and industry, which may take the form of learning exchanges or short pilot training initiatives. Northern Ireland's 'Lecturers into Industry' initiative provides a useful example of good practice. There may be scope for Sector Skills Councils to work with training providers and relevant key stakeholders (such as the Learning and Skills Development Agency in Northern Ireland and Association of Northern Ireland Colleges; and the Association of Scotland's Colleges and Scottish Further Education Unit) to facilitate such initiatives.

5) Improving communication lines

In a number of sectors there appears to remain a need to provide regular and consistent information to employers about the availability of local FE, HE and VET provision. In sectors where a database of such information is readily available, employers need to be made aware of this resource. Employers value accessibility in local services, but are also likely to consider providers based further afield in order to access the training that they need. Accordingly, information portals should retain a local focus, while linking to UK-wide information of available provision. The development of improved information facilities is therefore likely to require partnership-working between local, national and UK-wide stakeholders (including devolved and UK government agencies).

6) Responding to specialist technical skill needs and context-specific soft skill needs

Our research with employers demonstrated that successful relationships with trainers are based on the latter providing highly specialised, detailed, technical training of immediate practical value. Even when softer skills were discussed, it is notable that some employers wanted to access training that delivered commercial or communication skills within a sector-specific context. It is essential that the offer of such specific training, based on strong consultation processes with industry, is a key part of attempts to engage with employers. Sector Skills Councils need to work with employers to more clearly define and articulate the specialist skills provision required within each sector, and to work with funders and providers on ways to make that provision available. Sector Skills Agreements are one vehicle to achieve this. There may also be scope for joint-working between Sector Skills Councils to identify shared/similar skill needs across industries, to help inform the development of FE/VET provision that can be easily adapted to the specific needs of a number of different sectors and organisational contexts.

7) Spreading good practice from 'entrepreneurial' FE/VET providers

Our case study research identified a number of examples of good practice where FE and commercial VET providers have been able to develop bespoke, highly specific and expert training of value to employers. The same examples of good practice were often marked by a commitment to delivering training in the flexible formats required by employers, in terms of location, duration, timing and method (including e-learning and peripatetic workplace-based services). Yet training providers and key stakeholders involved in this research and previous studies have acknowledged that the FE sector is not always able to demonstrate the flexibility and expertise demanded by employers. Strategic leaders within the FE sector in the devolved nations (and indeed in England) need to continue to challenge FE institutions and professionals to demonstrate their capacity to deliver high-quality, practical, relevant services. It is important that training providers and key stakeholders learn from cases of good practice, but it should also be remembered that their transferability is likely to be limited by the capacity of institutions to provide the necessary level of expertise and to commit staff and resources to employer engagement. Even successful FE and VET providers faced problems in identifying a 'critical mass' of employers willing to commit to new training (especially in sectors dominated by smaller establishments with limited time and resources for skills upgrading). One way to establish a 'critical mass' among smaller employers may be to develop cross-sectoral training initiatives, based on the shared skill needs of employers in different sectors (for example, CAD skills were required by employers participating in our research in a number of different design and manufacture industries). There may be an important role for joint-working between Sector Skills Councils in facilitating such co-operation between sectors.

8) Promoting excellence in FE/VET provision

Many of the priorities discussed above – promoting trainer-employer engagement; developing sector-specific and context-specific training content; and encouraging an entrepreneurial ethos among FE providers – may be most effectively accomplished through an increasing emphasis on 'hubs' of expertise and specialist facilities. By concentrating sector-specific expertise and resources in a single institution or closely linked consortium of providers there may be opportunities for synergy and capacity building. Such an approach implies further work to strengthen, learn from and build upon the Centres of Excellence approach in Northern Ireland, CoVEs in England and Networks of Excellence in Wales. Policy makers and funders in Scotland should consider lessons from these initiatives in planning future investment in FE provision. In all cases, there is a need to carefully assess the likely return on investment in supporting the development of such hubs. Careful consideration is also required regarding the location of any hub activities – services need to be strategically located to maximise accessibility, while still acknowledging that peripatetic, outreach and workplace-based provision is likely to remain important in responding to employers' needs.

9) Promoting the formalisation, not just the accreditation, of in-house learning

All the sectors discussed above were marked by a reliance on internal training. In manufacturing sectors such training often involved *ad hoc* learning on-the-job or the informal cascading of skills initially delivered by equipment or software suppliers. There is a need for Sector Skills Councils and partners to promote the formalisation and accreditation of in-house learning, and our stakeholder interviews identified this as a key strategy in some sectors. We should guard against promoting 'qualifications for their own sake', but formalising and accrediting training arrangements can help to 'lock in' good practice and eliminate cascading errors. The establishment of accredited training and linked progression routes may also help to address recruitment and retention problems. Progress towards the formalisation and accreditation of training need not always involve heavy input from training providers, but FE and VET professionals may have the capacity to add value through their expertise in both the relevant subject area and in effectively delivering learning. To this end, there may be a role for FE/VET providers in helping to formalise in-house provision, and encourage training development, through 'training the trainers' initiatives. It is also essential that Sector Skills Councils work with trainers and qualifications authorities to arrive at a framework for vocational qualifications that is flexible, credible and relevant to employers' needs.

10) Supporting smaller employers to undertake crucial skills upgrading

In some sectors there was evidence that micro-employers and SMEs had identified pressing skills upgrading needs, but struggled to resource training or to allow core employees time off. As noted above, it is difficult to make the case for large-scale training subsidies that may be subject to considerable deadweight effects. Nevertheless, there may be scope for carefully targeted additional funds to provide incentives to both employers and trainers, only where smaller employers are able to clearly demonstrate the planned benefits that would accrue from urgently needed short-term support. A key issue is, however, how to move up from useful pilots to fundamental improvements on the ground across whole sectors. There is evidence that the *Train to Gain* initiative in England (which offers employers support to access external provision and compensates time off for training) has enjoyed some success in targeting 'hard to reach' employers who have low-qualified staff and would not otherwise be likely to undertake formalised, accredited training.[38] Funders in Scotland and Northern Ireland should consider the transferability of this model.

11) Towards a continuing process of in-depth employer consultation and research

It is hoped that the research reported in this document adds value to existing sector-based studies and national skills surveys. The research has deployed a range of quantitative and qualitative research tools to compare issues across sectors, reporting the perspectives of employers, training providers and strategic stakeholders. Comparing across sectors is valuable in identifying areas for policy action associated with the broader skills infrastructure, while also highlighting specific issues affecting individual and multiple sectors. Similar methodologies may be usefully deployed to identify common areas for policy intervention in other sectoral, national and regional contexts. However, variable response rates achieved during the telephone interview phase of the research suggest that future studies should be careful to use existing sectoral and national employer survey data where possible. Future cross-sectoral research may add most value by developing more detailed, qualitative insights into the specific issues faced by key groupings of employers and investigating the opportunities and barriers associated with the emergence of demand-responsive skills provision.

12) Reflecting on the role of FE/VET in responding to employers' skills upgrading needs

As noted above, the Leitch Review has called for a "demand-led skills system" to deliver a "radical step change" in participation in skills upgrading. Policy makers and other stakeholders agree that FE and VET provision should be guided by the needs of industry if we are to achieve this necessary step change. FE providers are committed to skilling their students for the world of work. But the same providers tend to have less of a role in addressing the urgent skills upgrading needs identified by employers seeking to maximise the potential of their *current workforce*. This is understandable given that funding arrangements incentivise FE providers to deliver highly structured, long-term, full-time learning rather than the flexible provision demanded by employers. While it is not the role of publicly funded organisations to act as employers' private training providers, there needs to be a broader debate about the role, resources and responsiveness of FE (and even HE) institutions in facilitating skills upgrading. The funding, targets and content of FE provision in all UK nations need to be reviewed within this context, with Sector Skills Councils and other key stakeholders playing an active role in considering the way forward. Many employers are aware of the urgent need to develop their

[38] IES, 2006: Employer Training Pilots: Final Report.

staff so that they can compete 'higher up the value chain', but are unsure of the extent to which external providers can assist in this process. The time has come for devolved administrations, UK government agencies, and funders and providers involved in the sector skills agenda to fundamentally re-consider the role of vocational education and training institutors in "embedding a culture of learning" in the workplaces of Scotland, Northern Ireland and beyond.

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Appendices

Appendices including the discussion guides and questionnaires used in the research can be found at www.ssda.org.uk

List of previous SSDA Publications
Please note all publications can be downloaded from out website www.ssda.org.uk

Research Report 1
Skills for Business 1000

Research Report 2
Evaluation of the Trailblazer Phase of the Sector Skills Council Network

Research Report 3
Skills for Business Network – Phase I Evaluation

Research Report 4
Skills for Business 2003 – Survey of Employers

Research Report 5
Skills Pay: The Contribution of Skills to Business Success

Research Report 6
The UK Skills and Productivity Agenda: The Evidence Base for the SSDA's Strategic Plan 2005-2008

Research Report 7
The UK Workforce: Realising our Potential

Research Report 8
Sectoral Management Priorities: Management Skills and Capacities

Research Report 9
Raising Sector Skills Levels – How Responsive is Local Training Supply?

Research Report 10
Skills for Business Network: Phase 2 Evaluation Main Report

Research Report 11
Skills for Business 2004: Survey of Employers

Research Report 12
Skills for Business Network: Phase 2 Evaluation Case Studies

Research Report 13
Sectoral Productivity Differences Across the UK

Research Report 14
Sectors Matter: An International Study of Sector Skills and Productivity

Research Report 15
Evaluation of Pathfinder Sector Skills Agreement Process

Research Report 16
Skills Abroad: A Comparative Assessment of International Policy Approaches to Skills Leading to the Development of Policy Recommendations for the UK

Research Report 17
The Comparative Capability of UK Managers

Research Report 18
Skills for Business Network 2005: Survey of Employers

Research Report 19
Skills for Business Network: Phase 3 Evaluation Main Report

Research Report 20
Training and Establishment Survival

Research Report 21
The Distribution and Returns to Qualifications in the Sector Skills Councils

Research Report 22
Training, Job Satisfaction and Establishment Performance

Research Report 23
Cross-Country Analysis of Productivity and Skills at Sector Level

Research Report 24
Sector Skills Agreements Implementation Progress Report

Research Report 25
Job Matching in the UK and Europe

Working Futures 2: National Report 2004-2014

The Sector Skills Almanac for the UK, 2007

This report is a summary of a research report carried out by the Employment Research Institute, Napier University Edinburgh, Policy research Institute, Leeds Metropolitan University, Business and Management Research Institute, University of Ulster on behalf of the Sector Skills Development Agency.

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