

# Learning Needs Analysis in Selected Employment Sectors

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## **Publication Information**

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Published by CIT Press, Bishopstown, Cork, Ireland. Design by Raven Design

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## Acknowledgements

This document is based on contributions from individuals and organisations. The principal contributors are the members of the Roadmap for Employment–Academic Partnerships (REAP) working group, listed in the Appendix. Many other staff within the partner academic institutions and elsewhere helped to make this work possible.

This document would not have been possible without funding from the Strategic Innovation Fund, Cycle 2, from the Higher Education Authority, under the National Development Plan 2007-2013.



The Roadmap for Employment-Academic Partnerships (REAP) project draws on the outcomes and experiences of the Education in Employment Strategic Innovation Fund Cycle 1 project. It aims, through real engagement, to develop a blueprint for partnership between academia and the workplace. This collaborative project will change the relationship between the education provider, the learner and the workplace by recognising both the needs and contributions of all the parties and the role of the higher education institution as that of a key service provider.

One of the initial steps in understanding the nature of this developing relationship was to undertake a learning needs analysis. This is not an attempt at an exhaustive analysis of the learning needs of all sectors in the different regions but rather a local, strategic, focused engagement by each of the academic partners with an employment sector of regional and strategic importance to their particular institution. It was recognised at the outset that the economic and competitive circumstances in which each organisation operates are fluid and that the

particular learning needs are subject to change more rapidly in some sectors than others. However, this targeted engagement, in seeking to understand and quantify local, organisational and sectoral learning needs through a series of interviews, at a point in time, has had the effect of increasing mutual understanding, growing relationships and opening the door to a variety of partnership opportunities.

Some of the learning gained has already borne fruit through the development of new work-focused courses and research activities. More importantly, the findings will act as a catalyst for developments in the recognition of prior learning, and in work-based and flexible learning which comes through as a recurrent theme regardless of the sector addressed. By sharing the findings throughout the collaborative partnership and beyond, the project team is making a valuable contribution to relevant learning development.

While the project is led by Cork Institute of Technology the working group includes members from Athlone Institute of Technology, Dublin Institute of Technology, Institute of Technology, Sligo, Institute of Technology Tallaght, NUI Galway, University College Cork and Waterford Institute of Technology. On behalf of the project Steering Group I would like to acknowledge the work of the entire working group, that of the contributors to this report and its editor.

Michael Delaney VP for Development

## **Executive Summary**

In today's competitive world, the Irish economy needs more people with higher level skills in the workplace. A reliance on traditional manufacturing and low-skilled services will not be sufficient for developed countries like Ireland to remain at the forefront of economic and technological advancement. Organisations across all sectors have to respond rapidly to the dynamics of their markets, which continually challenge their business models and the level and relevance of their knowledge base. As work-environments increasingly move to knowledge-based environments, with their increasingly dynamic and changing contexts, ongoing up-skilling of employees will play an essential role.

Learning for Life (2000), Ireland's first white paper on adult education, underlined how skill shortages threaten Ireland's economic progress. Relevant stakeholders endorse this view, and also agreed on the high priority status of addressing the skill shortage issue. The white paper, however, reported that "there is less agreement as to how workplace education should be organised and financed "(Department of Education and Science, 2000: 76). Since the publication of the white paper, educators, employers, and politicians have given increased attention to the concept of learning as a lifelong activity and to the concept of organisational learning.

In 2006, the Government introduced a Strategic Innovation Fund for projects in higher education institutions to enhance collaboration in the sector; to improve teaching and learning; to support institutional reform; to promote access and lifelong learning; and to support the development of fourth-level education. Through the Strategic Innovation Fund, the development of new strategic alliances creates new synergies and potentials for higher education systems. Through the range of initiatives it supports, the Strategic Innovation Fund (SIF) provides new impetus to the development of system-wide quality in higher education institutions. SIF is driving reform of structures and systems within and across institutions to cater for growing student numbers at all levels; for greater teaching and learning quality; to ensuring graduates are equipped for a lifetime of innovation and change in the workplace; and to enhance research and innovation capacity.

The Roadmap for Employment–Academic Partnerships (REAP) project is one of the initiatives funded under the second cycle of the Strategic Innovation Fund. The REAP consortium is led by Cork Institute of Technology, which coordinates the work contributed by the other members of the consortium: Athlone Institute of Technology, Dublin Institute of Technology, Institute of Technology Sligo, Institute of Technology Tallaght, National University of Ireland Galway, University College Cork, and Waterford Institute of Technology. The REAP consortium proposes to change the nature of the relationship between the education provider and the workplace, by developing a model of cooperation and partnership that recognises and values the needs and contributions of the worker and identifies the workplace as a centre of learning.

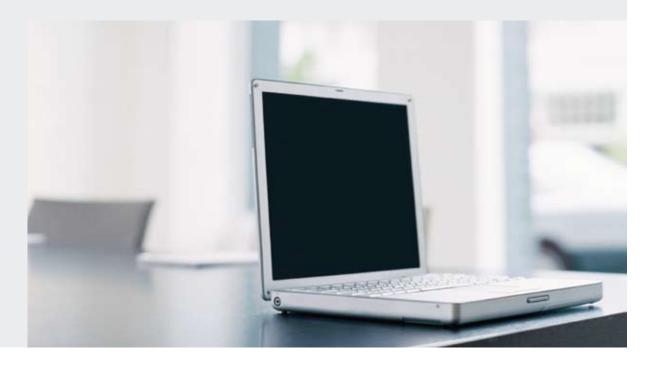
This report is based on the collective output of members of the Research and Investigation strand, one of the two linked sub-strands of the REAP project. Members of the REAP working group conducted a learning needs analysis in various regions of the country with nine different employment sectors: Community and Voluntary; Energy and Sustainability services; Financial services; High Potential Start-up enterprises; Legal, Pharmaceutical; Retail; Small to Medium size enterprises; and Tourism, Hospitality and Leisure. This analysis provides a snapshot of engagement potential as a starting point for negotiating learning in a tripartite arrangement with employers, third-level education providers and learners. These analyses, while not exhaustive, represent real and current opportunities for local development of learning partnerships. The report provides a brief background to each of the nine employment sectors included in the research, identifies current and future learning needs of these sectors, and investigates possibilities for future engagement between third-level institutions and employers.

In order to contextualise learning needs, organisational learning, and the learning organisation for this report, a review of the relevant existing literature in these areas was conducted. These literature findings are summarised and presented in Chapter 2. The literature search underscored that the learning process in organisations requires the broadening of access to new sources of knowledge and experience, as well as the removal of barriers to learning.

The report signals that third-level institutions and employers are aware of the need for closer collaboration to achieve joint goals, such as, high quality graduates with skills that society needs now and in the future. While new knowledge and skills are constantly required, the extent to which organisations support education and training varies considerably in different sectors. Commonly identified needs across all nine sectors included: up-skilling and re-skilling of employees, work-based learning courses, recognition of prior learning, flexibility in course delivery, networking opportunities, work placements, and industry specific courses at low cost.

The report aims to assist employers and third-level education providers by identifying learning needs which, in turn, can lead to the development of successful partnerships to foster workforce development. The experiences outlined give some valuable insights into what makes for effective partnerships with the essential mission of enlarging Ireland's base of higher skills. The practical involvement of employers with higher level educational providers in identifying learning needs and jointly developing courses that successfully address those needs is of major importance — and a central feature of this report.

Facilitating richer communication and understanding between education institutions and industry partners will be a rewarding exercise, leading to more sustainable productivity and ultimately to longer-term prosperity for employers, employees, and society in general.



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## Introduction

## 1.0 Background

Approximately 1.4 million of the current Irish workforce should still be in the labour force in 2020, but changes in technology and business processes will have rendered many of their skills obsolete by then (Forfás, 2007a). Changing employment patterns in the organisation of work practices have impacted on the demand for higher-level skills. Employees are expected to be more flexible, to have a broader range of skills and to be better able to manage their own career development. Graduate-level skills and qualifications are seen as increasingly important in the changing workplace. The Forfás Expert Group on Future Skills Needs proposes a vision of Ireland in 2020 in which a well-educated and highly skilled population contributes optimally to a competitive, innovation-driven, knowledge-based, participative, and inclusive economy. The Expert Group suggests that, if Ireland is to realise this vision of a new knowledge economy which can compete effectively in the global market place, the country requires a resident population with enhanced skills, increased participation in the workforce, and greater third-level participation (Forfás, 2007a).

Progress in integrating lifelong learning into mainstream education and training systems in Ireland, however, has been relatively slow. The Irish participation rate in lifelong learning of 9.7% is well below that of the top ranked state, Sweden, at 34.2% (Forfás 2004). Organisations endeavouring to develop their knowledge base and to engage with higher education institutions face a confusing array of schemes. The existing arrangement of programmes and schemes is not sufficient to deliver the target skills-profile set out by the Expert Group on Future Skills Needs. If that is to be achieved, a number of innovative programmes need to be undertaken which should foster a culture of lifelong learning. The education sector needs to proactively facilitate and simplify the engagement process with industry partners. Developments must be informed by an understanding of needs and opportunities, by region and by sector. The need for workplace innovation and the transformation of the concept of work from the use of previously acquired but quite static skills into continuous and dynamic learning is now widely accepted as essential for the Ireland of the future.

A number of recent reports have identified a gap in understanding and differing priorities between the training providers and potential client organisations and individuals. The Enterprise Strategy Group's report *Ahead of the Curve* (2004), for example, emphasises the need for education providers to engage with employers and to take a proactive role in fostering and supporting industry-based research and development. The report presents challenges necessary for an adaptive and responsive higher education sector, including requirement to:

- be flexible and adaptive to the needs of students and enterprises;
- be creative and innovative in delivery methods;
- facilitate mobility of staff in both directions between academia and enterprise.

Forfás (2005) also outlines an ambitious vision for the Irish workplace of the future and presents a set of recommendations that include:

- A continuous learning and development facility that enables individuals to identify and assimilate knowledge, skills, and abilities acquired in different contexts;
- Detailed regional assessment of changing technology trends and skill requirements as a basis for regional growth to inform and support proactive collaboration between industry and the third-level education sector.

More recently, Forfás (2007a) suggests that:

- Universities and, in particular, institutes of technology will have to deliver flexible, market-driven solutions. This will require these institutions to tap into market trends and to develop improved linkages with potential customers;
- There is a need to develop ways of capturing data on skills needs at a regional and sectoral level and to feed it back to education and training providers;

Several themes emerge from the above reports:

- Lifelong learning is essential for the development of 'human capital', which is inextricably linked to personal, social, and economic development;
- Educational provision for workplaces must be context-sensitive, flexible, innovative, and adaptive;
- Developments must be informed by an understanding of the needs and opportunities, by region and by
- The education sector needs to proactively facilitate and simplify the engagement process;
- Higher education institutions and employers should strive for mature, long-term partnerships that can meet and exceed current needs and anticipate future needs.

There must, therefore, be genuine dialogue between third-level education institutions, training providers, and those seeking learning, reflecting the view expressed by the Industrial Development Authority (2005): "Global competition requires a collaborative, national team effort in which all key stakeholders actively contribute and assume their respective responsibilities to deliver on our shared national vision".

## 1.1 Strategic Innovation Fund Aims and Objectives

The Strategic Innovation Fund (SIF) is provided by the Department of Education and Science and is administered by the Higher Education Authority (HEA). SIF is a competitively-driven resource stream to implement organisational transformation. The fund is multi-annual, amounting to €510 million over the period 2006-2013. SIF aims to support innovation, and to foster collaboration between institutions competing for funding to:

- Incentivise and reward internal restructuring and reform efforts;
- Promote teaching and learning reforms, including enhanced teaching methods, programme restructuring at third and fourth level, modularisation and e-learning;
- Support quality improvement initiatives aimed at excellence;
- Promote access, transfer, and progression, and incentivise stronger inter-institutional collaboration in the development and delivery of programmes;
- Provide for improved performance management systems and meet staff-training and support requirements associated with the reform of structures and the implementation of new processes;
- Implement improved management information systems.

Through the collaborative nature of the projects, new strategic alliances have been developed and supported, providing new impetus for enhanced quality and effectiveness. The OECD Review of Higher Education in Ireland made a compelling case for reform of third- and fourth-level education in Ireland (OECD, 2004). While the sector is acknowledged as an engine for economic development, higher education institutions need to rise to the challenges of increasing their relevance, for example, through promoting access and participation by those already in the workforce. SIF is an important element in the investment in and reform of higher education institutions to enable them to meet challenges presented by changing social and economic realities while building on their existing strengths. In this way, the projects funded through the Strategic Innovation Fund should improve the learning experience for a diverse range of learners at all levels.

Two of the projects funded through the Strategic Innovation Fund, and led by Cork Institute of Technology, focus on the 'non-traditional' student. Recent growth in non-traditional student numbers and demands for up-skilling and upgrading qualifications is increasing the pressure on third-level institutions to provide efficient user-friendly routes to qualifications. These two projects emphasise the importance of lifelong learning and place significant emphasis on continuing professional development and up-skilling the workforce.

The CIT-led *Education in Employment* project, funded under the Strategic Innovation Fund Cycle 1, is a consortium comprising Athlone Institute of Technology, Dublin Institute of Technology, Dundalk Institute of Technology, Galway–Mayo Institute of Technology, Institute of Technology, Sligo, Letterkenny Institute of Technology, National University of Ireland Galway, and University College Cork. The *Education in Employment* consortium is promoting a model of education development, delivery, support, and assessment - based on a number of underlying principles:

- Learning (as a process rather than an event) is at the centre of the provision;
- Learning (formal, non-formal and informal) must be assessed and accredited;
- The workplace can constitute a rich learning environment, and work-based learning should be integrated into learning programmes;
- A sustainable partnership between education and the workplace is necessary for the development, delivery, support, and assessment of 'education in employment'.

The *Education in Employment* project, therefore, began to investigate work-place education partnerships in each of the collaborating third-level institutions. The results of the research illustrated that the existing partnerships were perceived as *informal*. As a result of the research, members of the *Education in Employment* consortium were requested to either (i) establish a new partnership, or (ii) build on the goodwill with an existing partner, and in turn establish the partnership on a more formal level. The *Education in Employment* project, therefore, began the initial work on higher education and industry partnerships which became the main focus of the CIT-led Strategic Innovation Fund Cycle 2 project.

### 1.2 Roadmap for Employment–Academic Partnerships (REAP)

REAP is a Cork Institute of Technology-led collaborative project, involving eight higher educational institutional partners, which is funded through the Strategic Innovation Fund, Cycle 2. The REAP consortium comprises: Athlone Institute of Technology, Dublin Institute of Technology, Institute of Technology Sligo, Institute of Technology Tallaght, National University of Ireland Galway, University College Cork, and Waterford Institute of Technology.

The REAP project is a logical extension of the *Education in Employment* project which will further engage the higher education institution, the employer, and the learner in a broader partnership for mutual benefit. Members of the REAP consortium aim to research the development and validation of higher education—employment partnerships. As a starting point for this activity, members of the REAP project identified learning needs in workplaces which should help to draw up a comprehensive plan for partnership between employers and higher education institutions. For the purpose of this report, staff from the participating third-level institutions focused on identifying and analysing learning needs of selected employment sectors of regional importance, in order to utilise their experience and expertise in filling these learning gaps.

The REAP consortium proposes to improve the nature of the relationship between the education provider and the workplace, by developing a model of cooperation that recognises and values the needs and contributions of the worker, and acknowledges the workplace as a centre of learning, and the higher education institutions as key service providers. In line with the Strategic Innovation Fund objectives, the REAP project will bring about a new definition and scope for the term education to include and embrace workplace learning, including learning through and at work.

## 1.3 Structure of the Report

This report is divided into four distinct chapters. The first chapter serves as a general introduction and provides a background to the report. Chapter 1 also highlights the aims and objectives of the Strategic Innovation Fund (SIF). Finally, the chapter provides a brief background to the Roadmap for Employer -Academic Partnerships (REAP), one of the SIF projects.

Chapter 2 introduces the learning organisation and organisational learning, exploring definitions of these concepts from the relevant literature. The chapter also investigates the basis for analysing learning needs in organisations and explores the manner in which the analysis of learning needs facilitates organisational learning.

Chapter 3 presents the findings of the empirical research conducted in each of the third-level partner institutions to identify learning needs of various sectors in their respective regions. Members of the REAP working group devised an interview guide to conduct in-depth interviews with each of the identified nine sectors included in this research.

Chapter 4 analyses the learning needs identified by the nine sectors addressed in this research. The analysis should aid further collaboration between third-level institutions and industry sectors and should address identified learning gaps. The chapter also summarises some of the current initiatives which have been developed in response to the learning needs analysis. A conclusion to the report is also included.

## Organisations, Learning, and Learning Needs

## 2.0 Organisational Learning and the Learning Organisation

Organisational learning and the learning organisation are concepts which are frequently used interchangeably. 'Organisational learning' is often used to describe learning activities that occur in organisations, whereas the 'learning organisation' is proposed as a particular *type* of organisation (Garavan *et al.*, 2009).

Yeo (2005) suggests that organisational learning is a process that seeks to answer the question of how learning occurs in organisations. Organisational learning is a dynamic organic process. Probst and Büchel (1997) describe organisational learning as a process by which an organisation's knowledge and value base actively changes, leading to improved problem-solving ability and capacity for action. Organisational learning is unique to any institution, and is both quantitatively and qualitatively distinct from the sum of the learning processes of individuals, and is a product of the newer approach being adopted by managers, whereby collective thinking, open discussions, active negotiation of views, transparency, and integration of diversity is spread to all within an organisation.

The term 'learning organisation' represents a collective entity that seeks to identify the particular characteristics of organisations which enable them to learn. Murray (2002) suggests that the learning organisation focuses on the process of gaining, sharing, and using knowledge. The learning organisation seeks to explain how individuals in organisations transfer knowledge to facilitate the achievement of organisational goals. Garavan *et al.* (2009) postulate that effective learning organisations are able to tap both the commitment and capacity to learn at all levels in the organisation. From the many definitions of the learning organisation in the extant literature, theorists agree that the learning organisation is predominantly viewed as an outcome. Organisational performance is an outcome which is highly valued. The learning organisation has been defined as:

An organisation that facilitates the learning of all its members *and* continuously transforms itself (Pedler *et al.*, 1991).

Senge (1990) defines learning organisations as those:

Where people continually expand their capacity to create the results they truly desire, where new expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together.

Mumford (2000) offers an alternative view of the learning organisation, focusing on behaviour and practices:

Creating an environment where the behaviours and practices involved in continuous development are actively encouraged.

Various authors agree that the concept of the learning organisation draws on the organisational learning concept to explain its rationale. Three longstanding themes are brought together in the concept of the learning organisation: how to structure organisations to enhance performance; how to facilitate individual learning and development in a corporate setting; and how to ensure that organisations adapt quickly to changes in their external environment (Coopey, 1996).

Probst and Büchel (1997) contend that survival of organisations in an increasingly competitive environment will depend on the capacity of organisations to learn, and that successful organisational learning must be ongoing.

Similarly, Kolb (1996) recommends that learning should be an explicit objective that is pursued as consciously and deliberately as profit or productivity. Probst and Büchel further assert that an organisational or collectively constructed view of reality can develop only if individuals are prepared to discuss and negotiate their individual views and by sharing these experiences across an organisation. The learning process in organisations requires the creative destruction of barriers to learning and the broadening of access to new sources of knowledge and experience. In many organisations this requires a new culture of learning.

Kolb (1996) believes that, like individuals, organisations learn and develop distinctive learning styles. Organisations do so through their transactions with the environment and through their choice of how to relate to that environment. Kolb also believes that successful organisations are not distinguished by any single set of knowledge or skills but by the ability to learn. Continuing success in a changing world requires an ability to explore new opportunities and learn from past successes and failures. The prevailing view of learning organisations places an emphasis on increased adaptability.

More recently, Stewart (2001) proposed that organisational learning is a type of collective cognition. He envisaged that individuals are constantly seeking to understand their environment and to negotiate each other's learning experience. Learning occurs at multiple levels and is integrated into everything people do. Stewart further suggests that organisational learning is a central component of the work that leaders perform and not an 'add-on' or deliberate process.

Garavan *et al.* (2009) draw some clear distinctions between organisational learning and the learning organisation. They suggest that organisational learning is descriptive, whereas the learning organisation is prescriptive. Organisational learning is concerned with identifying gaps in learning capacity and with structures that generate new information, whereas learning organisations expand their capability to learn and ensure a continuous capacity to transform themselves. From this brief analysis of the extant relevant literature, it is clear that learning needs analysis is one of the key components of organisational learning.



## 2.1 Facilitating Organisational Learning

A number of authors have identified the pivotal role that organisational leaders or senior managers play in identifying learning needs which subsequently facilitate organisational learning. Senge (1990) advocated that leaders in learning organisations must be skilled at disseminating knowledge, at encouraging staff to share their specialised talents, and at facilitating knowledge transfer. Argyris and Schön (1996) indicated that learning that results from organisational inquiry must be embedded in the images of organisational members, its artefacts, and the organisational environment. It requires a leadership vision and commitment to organisational learning systems.

Garavan et al. (2009) emphasise that the hiring of a key leader is one of the most important factors in facilitating organisational learning. Leaders play a major role in helping individuals to realise what they have learned, and they facilitate employees in setting the context in which learning can be meaningful.

According to Mumford (2000), managers sometimes tend to think of managerial activities and problems first, and recognise a learning need only as a secondary requirement. Mumford suggests that managers should be encouraged to consider opportunities for learning because little is likely to happen unless managers themselves are engaged in the process. Mumford also believes that managers have to lead the development of a learning organisation not just for their own personal development, but also because without their leadership a learning organisation will not be created. Mumford (2000: 16) suggests that an organisation can be said to encourage learning when:

- it encourages managers to identify their own learning needs;
- it provides a regular review of performance and learning for the individual;
- it encourages managers to set challenging learning goals for themselves;
- it provides feedback at the time on both performance and achieved learning;
- it reviews the performance of managers in helping to develop others;
- it assists managers to see learning opportunities on the job;
- it seeks to provide new experiences from which managers can learn;
- it provides or facilitates the use of training on the job;
- it tolerates some mistakes, provided managers try to learn from them;
- it encourages manages to review, conclude, and plan learning activities;
- it encourages managers to challenge the traditional ways of doing things.

Overall, organisational theorists summarise that patterns which facilitate organisational learning include: development and continuous education; continuous improvement initiatives; commitment to learning by leaders; strong levels of organisational trust; an ability to pick up new ideas; a willingness to experiment; benchmarking; and customer input (Garavan *et al.* 2009; Hardy and Dougherty, 1997; Easterby-Smith, 1997).

### 2.2 The Basis of Learning Needs Analysis

Learning needs analyses are undertaken in industry and business to determine the gap between the existing skills, knowledge, and abilities of staff and those that are needed for the organisation to function at the desired level. Once this gap is determined, decisions can be taken on the type of training required (if this is the preferred action) and the form of delivery. Effective training needs analysis is particularly important in the current rapidly changing workplace as new technologies and flexible work practices are becoming widespread, leading to corresponding changes in the skills and abilities needed. If training needs are identified systematically, it will provide valuable information on who needs training and what trainees need to learn.

Armstrong (2003) suggests that learning needs should be analysed, first for the organisation as a whole (corporate needs). Organisational analysis will focus on both the external and internal context. A primary focus of organisational analysis is with determining the appropriateness of training, given the organisation's business strategy. Organisational analysis also considers the resources available for the training and the levels of support available. Second, learning needs will focus on departments, teams, functions, or occupations within the organisation (group needs). Garavan et al. (2003) suggest that it is important to specifically isolate the team level as an important dimension, given the increased use of teams as an organisational strategy and because teams sometimes fail. Third, learning needs for individual employees (individual needs). Person level analysis involves determining whether performance deficiencies result specifically from a lack of knowledge, skill, or ability, or whether they arise from motivational issues. The analysis at this level may also focus on the readiness of the employee for training. These three areas are interconnected as the analysis of corporate needs will lead to the identification of learning needs in different departments or occupations, which in turn will indicate what individual employees will need to learn.

Learning or training needs analysis is sometimes assumed to be concerned only with defining the gap between what is happening and what should be happening. Training, therefore, is viewed at closing this gap: identifying the difference in what people know and can do, and what they should know and be able to do. Armstrong cautions against adopting the 'deficiency model' approach, which implies that training is only about putting things right which have gone wrong. Learning, is however, much more positive than that, as it is concerned with identifying and satisfying developmental needs, encouraging people to take on additional responsibilities, increasing all-round competence, and preparing people to take on higher levels of responsibility in the future.

## 2.3 Why Conduct a Learning Needs Analysis?

One goal in conducting a learning needs analysis is to determine if a learning need exists. Key stakeholders within organisations will have information and perspectives on the learning needs of organisations or an industry sector. Garavan et al. (2003) identified four levels of stakeholders in organisations who could help to identify the learning needs of their organisations. These are: senior level management, middle level management, trainers, and subject matter experts.

Senior level management generally views the needs assessment process from the broader organisational perspective. Instead of focusing on specific jobs, they are involved in determining if learning and training are related to the organisation's business strategy; and, if so, what type of learning or training is appropriate. Senior level management is also involved in identifying what business functions or units need training (person analysis), and in determining if the company has the necessary knowledge, skills and abilities in the workforce to meet its strategy and be competitive in the marketplace.

Middle management is more concerned with understanding how training and learning may affect the attainment of financial goals for the units they supervise. For middle-level managers, therefore, organisational analysis should focus on identifying:

- How much of their budgets they want to devote to training and learning;
- The types of employees who should receive training and enrolment on learning programmes;
- Jobs where training and learning can make a difference in terms of improving products or customer service.

Trainers need to consider if training is aligned with business strategy. Trainers, however, are primarily interested in needs assessment in order to provide them with the information to administer, develop, and support training and learning programmes, including determining if training should be purchased or developed in-house; identifying the tasks that need to be trained; and determining top and middle-level managers' interest and support for training and learning.

Subject matter experts are employees, managers, technical experts, trainers, and even customers or suppliers, who are knowledgeable in relation to:

- Training issues, including tasks to be performed;
- Knowledge, skills, and abilities required for successful task performance;
- Necessary equipment;
- Conditions under which the tasks have to be performed.

Garavan *et al.* conclude that there is no rule regarding how many types of employees should be represented in the group conducting the learning needs assessment.

In summary, therefore, learning needs analysis will help to:

- Identify what skills and knowledge individuals already have;
- Highlight skills/knowledge/competencies that need developing;
- Outline and define expectations and goals;
- Determine what can realistically be achieved, given the available resources;
- Identify any obstacles or difficulties which may arise;
- Increase the sense of ownership and involvement of individuals;
- Outline what results can be expected and if/how these can be measured;
- Determine whether to purchase training from an external supplier or to develop training by using internal resources.

The learning needs analysis conducted for this report focuses on various sectors of industries rather than on individual organisations. The sectors were identified by working group members of the REAP project and are intended to give a snapshot of industry sectors in various regions throughout the country. The identified learning needs are analysed and presented in the next chapter.

## Regional and Sectoral Learning Needs

### 3.0 REAP and Sectoral Learning Needs Analysis

The objective of this particular strand of the REAP project is to establish the learning needs of employment sectors in a variety of organisational sizes and types. Members of the consortium focused on identifying learning needs of strategically important employment sector(s) in their region. Some of the sectors listed below were analysed separately by more than one of the partner higher education institutions. These separate analyses were amalgamated for the purpose of this report. A series of interviews were conducted by members of the higher educational institutions in the partnership with senior executives representing the employment sectors identified below. The main sectoral areas included in this research include:

- Community and voluntary sector;
- Energy and sustainability services sector;
- Financial services sector;
- High potential start-up (HPSU) enterprises;
- Legal sector;
- Pharmaceuticals sector;
- Retail sector;
- Small and medium size enterprises;
- Tourism, Hospitality and Leisure sector.

A brief background to each of the above areas is presented below in order to contextualise the particular sector. Existing and future learning needs of these sectors were explored to identify if there is potential for further partnership development between these sectors and higher educational institutions. This chapter presents the findings from the research conducted with key stakeholders of the above nine selected sectors. Direct quotations from in-depth interviews are presented under three main themes:

- Identified learning needs in each of the above sectors;
- Accreditation of learning;
- Future forms of engagement between third-level institutions and the sectors under investigation.

Analysis of the findings will be discussed further in Chapter 4.

## 3.1 Community and Voluntary Sector

#### Brief background to the sector

Irish society is characterised by a wide range of active and energetic community, voluntary and 'third sector' organisations providing vital services to communities and citizens on a nationwide basis. There are over 19,000 community and voluntary organisations in Ireland, each playing an important role in the creation of a more inclusive society and making a significant contribution to the economy (*The Wheel*, 2007). It is estimated that the community and voluntary sector contributes €2.5 billion each year to the economy while employing approximately 40,000 full-time staff and 23,000 part-time staff with a further 31,000 volunteer staff (Centre for Nonprofit Management, 2006). Many of these organisations occupy what is known as the 'third sector' or 'social economy' – as they occupy the space between the statutory sector and the market economy. Over the past fifteen years Ireland has witnessed some fundamental changes in the organisation of community and voluntary sector activities. Some of these changes are reflected in the changing nature of: the relationship

between the state and the community and voluntary sector; the significance of new models of partnership; a renewed focus on community development; and an emerging interest in the contribution of community and voluntary organisations to the development of the social economy.

While much progress has been made in this area, one of the primary issues facing community and voluntary organisations is the capacity and ability of the sector to continue to fulfil increasing demands for regulation and accountability. This can be compounded by the absence of infrastructural support in the form of training, mentoring, leadership, management, strategic planning, financial supports and human resources.

#### Identifying Learning Needs in the Community and Voluntary Sector

Five semi-structured interviews were conducted with representative organisations in this sector with employees across management and organisational levels. The research incorporated a cross-sectoral comparison to include community organisations at local, regional and national levels. The interviews explored the possibilities of forming better relationships between third-level institutions and community sectors. Community organisations welcomed the research and they viewed the research positively as an important route to enhancing collaboration and future networking.

Interviewees pointed to multiple and overlapping complexities in unstable environments and the need to focus on alternatives to an over-reliance on government funding. Some of the issues specifically addressed included the provision of skills, knowledge and expertise, management skills, research needs, collaboration and networking, and identifying gaps in development practice. Many of these issues were identified as major problems across organisations while some organisations identified needs that were specific to their own organisation. The specific learning needs common to all organisations in this sector included:

- Fund Raising Strategies;
- Training and Development;
- Research Needs/Collaboration;
- Business, Finance, and Strategic Planning/Marketing and Management;
- Policy Training;
- Sustainability and Social Enterprise Initiatives.

#### Fund Raising Strategies

Some organisations prioritised the importance of learning needs associated with fund raising. Interviewees believed that fundraising is a specific learning need that is required by all organisations in this sector. The following quotation represents the views of the participants in this research:

Fundraising is critical. Our crucial task over the next few years will be fundraising. For students who are studying business the whole area of fundraising could prove beneficial in making links with voluntary organisations. These students could help voluntary organisations to put together plans and strategies and carry out very practical pieces of work. This is one area where there is a huge need for expertise in community organisations (Director, Community Organisation).

Interviewees also suggested that third-level institutions would be in a position to lend expertise in the areas of drafting funding proposals and applications for funding opportunities. It was also perceived that third-level institutions are in a position to assist the community and voluntary organisations to develop corporate links in their local regions.

#### Training and Development

The participants in this research viewed training as fundamental to the success of their organisations in terms of advancement and of their ability to adapt to change and as a vital investment in human capital. An additional difficulty for organisations in this sector relates to the training and development needs of volunteers.

Many interviewees identified the need for a tailored programme to aid the professional development of their staff and volunteers. Specific training needs identified included: leadership skills, professional supervision, programme planning, developing new and alternative models of practice, and advocacy. Interviewees believed that these were areas where better engagement with third-level institutions would have relevance. Interviewees identified a further learning need to train representatives from community and voluntary organisations who sit on county and national boards. One interviewee suggested:

There is a gap in terms of public administration, for example, equipping people with skills to ensure that they have a stronger voice when sitting on boards with professionals (Board Member, Community and Voluntary Sector).

Two interviewees argued for stronger links between the sector and third-level institutions in order that community and voluntary staff may benefit from the training expertise provided by third-level institutions, to help them to progress in their careers. The interviewees acknowledged that training is being provided in some areas, but that organisation-specific training is lacking.

#### Research Needs and Collaboration

All interviewees recognised the importance of developing research initiatives through enhanced collaboration with third-level institutions. One interviewee, for example, highlighted the need for a longitudinal study to track the progress of those who avail of their services. Expertise in longitudinal studies was identified as an area where there is learning need. This interviewee believed that:

There is a real need for expertise in relation to tracking mechanisms over a three- to five-year period. This expertise is absent at present and would give a good insight into what services work and what services do not. It could also inform changing practices that may be required within our organisation (Assistant Director, Community Organisation).

Another interviewee pointed out that greater collaboration with third-level institutions would have multiple benefits. She pointed to a need for engagement around critical evaluation of the work of her organisation. She believed such engagement might take place through external assessment by the third-level institution:

It would be really useful if you could have external people assess the work of our organisation. There could be a role for a report which could be compiled by third-level staff. The assessment could investigate and evaluate many different areas of the work we do. It would be good for managers in this sector to have networks with people from outside the organisation and build a relationship with people who have an interest in what we do but are not caught up with the everyday running of the organisation (Project Coordinator, Community Organisation).

Two of the community organisations included in this research developed links in recent years with two local third-level institutions and these organisations have benefited from these partnerships. These two organisations currently have staff members from third-level institutions on their boards of directors, and this was seen as helpful in terms of advocating on behalf of the community organisations. Developing research initiatives around particular issues in the community was seen as a further benefit:

Having someone on your board from a third-level institution lends a huge amount of credibility to the organisation (Project Coordinator, Community Organisation).

A number of interviewees believed that collaboration in terms of conferences linking with third-level institutions and other organisations could be used as a way of enhancing shared learning. One interviewee also identified a need for mechanisms to be put in place to allow joint initiatives in areas of business and policy development, research, publications, and raising public awareness.

#### Business, Finance, and Strategic Planning/Marketing and Management

Learning needs in relation to business were a concern across all organisations to ensure competitive positioning. The need for skilful leadership and management was viewed as particularly relevant in the current economic climate. Business needs analysis and cost-effective planning for community organisations were also identified as key skills for this sector. All interviewees agreed that increasing regulatory control on community and voluntary organisations and demands for greater accountability present significant challenges. The interviewees believed that there is scope for third-level institutional involvement in their organisations for developing business plans and business needs analysis. Other learning needs identified related to training in strategic planning and organisation development. A number of interviewees suggested that the training provided should be customised to adapt to the specific needs of community and voluntary organisations. As one respondent noted:

If someone was to come in and provide training in marketing skills it would be great. The approach, however, needs to be different from a purely commercial organisation. There are differences in our sector and we need to be aware of these differences. There is also a need for strategic management within community development organisations. We would welcome specific training which can combine community development with a business orientation (Coordinator, Community Organisation).

Interviewees would welcome more involvement with third-level institutions and have identified areas which they believe would strengthen such partnerships. The quotations presented are representative of a variety of identified business issues:

There is a gap in the provision of resources for the business needs of community and voluntary organisations. At the moment, we have someone working with our administration staff on accounting matters and that is very helpful. If there were people available from third-level institutions who could facilitate this type of training then it would save us a lot of money because buying in expertise at the moment is proving very expensive. Also, if students could do this type of work as part of their placement or if they were just interested in getting involved at community level then that would be beneficial all round (Director, Community Organisation).

There is a need for management training and also a need for training for new board members. If third-level staff with expertise in these areas could come in and do this type of training it would be beneficial to the organisation as a whole (Assistant Director, Community Organisation).

If third-level institution staff would agree to provide training in financial management that would benefit our organisation greatly. If this training could be provided within the community in the form of workshops it could make the difference in leading people on to access third-level courses also (Coordinator, Community Organisation).

#### **Policy Training**

Policy training was identified as a significant learning need in terms of advancing the scope of organisations to respond to the communities they serve. Interviewees highlighted the need to explore the policy aspect of community work at local and national levels. There was widespread consensus that knowledge on policy issues was lacking and that there is a much greater need to engage in policy progress and outcomes. The following quotations represent the views of all respondents:

There is a huge need for sectoral debate around where we are going, given the sense of despair at community level with regard to the political sector. It is difficult to assess the level of difficulties because of the lack of resources to mobilise inter-sectoral discussion. There is a need to bring sectors together and engage in high level discourse in relation to where community and voluntary organisations are going. If there was some way where we could join up all of our knowledge by bringing third-level institutions together with the voluntary sector and also include the city councillors it would ensure that we are more informed collectively (Director, Community Organisation).

The above quotations illustrate a significant deficiency in existing policy training for community and voluntary sector employees and volunteers. It was suggested that a collective forum in relation to policy for community and voluntary organisations could be organised as a method of raising awareness. Some interviewees cautioned that it is important to take into account the diverse needs around policy training and the available resources to address these needs.

#### Sustainability and Social Enterprise Initiatives

The issue of sustainability was more significant for some organisations than others because of their funding positions. All interviewees recognised the need to develop projects that are more innovative and enterpriseorientated in order to be sustainable. Interviewees identified the need for social enterprise initiatives to be further developed, but, emphasised the importance of getting the correct balance between projects that are socially motivating and the emphasis on economic management. All interviewees stressed the need for increased awareness on the long-term challenges of sustainability and social enterprise and the importance of generating new ideas and business-orientated goals.

Overall, it is clear from the research findings that there is a growing need for business expertise in the community and voluntary sector. An urgent need was also identified to move some existing initiatives to their next stage of development as such initiatives have the potential to create employment and to generate revenue at local level. All interviewees agreed that there is a substantial barrier for community and voluntary organisations for accessing these supports. Finally, the interviewees again pointed to a general shortfall in the provision of business and enterprise supports and believed that third-level institutions should have a strong role in meeting such needs.

### 3.2 Energy and Sustainability Services Sector

#### **Brief Background to the Sector**

Over the last ten years there has been an increasing recognition and acceptance of a need to re-examine the usage, management, and development of resources in the context of challenges presented by climate change, environmental degradation, and shrinking carbon fuel resources. Within the overarching framework of the Kyoto Protocol, agreed in 1997, Ireland initiated a number of key measures to drive the development of a more sustainable future, including *The National Change Strategy 2000*, and a recent white paper, *Delivering a Sustainable Energy Future for Ireland*. This commitment is further reflected by the provision of an approximate investment of €101.5 million in environmental services by the Irish Government through the National Development Plan, 2007-2013 (Ireland, 2007).

With this ongoing shift in national policy towards a more sustainable approach, underpinned by EU directives and regulations, Ireland has witnessed the growth of a strong environmental service sector. The sector is estimated to be valued at €2.1 billion and is demonstrating significant and steady growth, driven by various factors, including: rising energy costs, the introduction of EU directives and regulations, increased investment in energy and environment-related research and development, and increases in public investment in environmental services and infrastructure (Forfás and InterTrade Ireland, 2008). Energy management constitutes a significant element of this sector.

The quest for energy efficiency has become a defining challenge for Ireland as a society, not only within a national context but also globally. In recent years, the need for energy sustainability and efficiency has become a major focus of government and industry. Ireland's limited fuel supplies, its peripheral position on the edge of Europe, and an increasing appetite for energy have served to draw attention to the need for Ireland to seriously address issues concerning energy generation, integration, and management. With buildings currently using approximately 40% of all energy consumed in Ireland, this issue is a major part of the overall focus of attention at both national and European level.

#### Identifying Learning Needs in the Energy and Sustainability Services Sector

As this sector is extremely broad-ranging, involving different professions and disciplines, the sector was subdivided for this research study into a number of subcategories. A series of interviews was conducted with representative bodies in each chosen area to determine learning needs within the sectors. The interviews were conducted with the Continuing Professional Managers and/or Education Directors. With one exception, all interviewees were from professional representative bodies which, overall, represented almost 29,500 professionals. All interviews were face-to-face and were conducted at the premises of the interviewees. In addition, a detailed online questionnaire was developed which was circulated to approximately 1,500 stakeholders, during April 2009. The following table illustrates the representative groups which participated in this research:

Sub-sector	Interview Group	Membership Represented
Architects	Royal Institute of Architects of Ireland	3,000
Engineers	Engineers Ireland	24,317
Estate Agents	Irish Auctioneers and Valuers Institute	1,800
Construction Professionals	P.J. Hegarty & Son  Construction Industry Federation	560 3,000
Energy Assessors	BER Assessors Association of Ireland	250
Environmental Professionals	Enviroskillnet	(54 organisations)

**Table 1:** Interview Sample of Representative Groups

For the purpose of this research, and as outlined in Table 1 above, there are six different occupational categories represented in the Energy and Sustainability Services Sector. The findings from the research identified sector-wide learning needs applicable to all six categories in addition to category-specific learning needs.

#### Training and Continuing Professional Development (CPD)

Training and, in particular CPD, was viewed as important by all six sectoral categories participating in this research. All interviewees indicated that their representative organisations source training from a variety of service providers, including public organisations, private consultants, largely on the basis of recommendations from the members they represent. Interviewees outlined that training is sourced both internally and externally depending on specific requirements. All interviewees agreed that trainers are typically sourced whenever managers in organisations identified skill gaps in their employees. Interviewees observed that "training varies with the organisation". Interviewees also suggested that methods of training delivery vary as appropriate to the regional needs of members. Interviewees, however, still favour some of the more traditional methods of delivery:

An increase in web-based delivery has been observed, but, we believe that face-to-face member interaction is very important (Interviewee, Irish Auctioneers and Valuers Institute).

The preferred options are either in-house in the individual companies or here in the institution. Online delivery is the least favoured (Interviewee, Construction Industry Federation).

Our preference is for traditional, institute-based delivery (Interviewee, BER Assessors Association of Ireland).

The traditional classroom delivery method and blended learning approaches are favoured. With regard to attending training courses, we would favour block release or evening delivery (Interviewee, Enviroskillnet).

In relation to CPD, all six interviewees articulated varying degrees of requirements for up-skilling of their members:

The Royal Institute of Architects of Ireland has produced a list of competencies required for practice. The Institute has a defined CPD policy requiring 20 hours structured activity and 20 hours unstructured activity per annum. The Institute operates a CPD network focusing on information offered by suppliers and manufacturers. An online directory is also being developed to ensure members have exposure to as broad a range of approved external CPD events as possible. It should also be noted that the Institute now has a statutory function for the registration of architects since last year (Interviewee, Royal Institute of Architects of Ireland).

Engineers Ireland has a CPD programme and, although it is not yet mandatory, we would like to see it become so in the future. The recommended time allocation for CPD is five days per member per annum, with CPD credits allocated per hour per day of delivery. Engineers Ireland accredits its own CPD offerings as well as many external CPD programmes (Interviewee, Engineers Ireland).

The Irish Auctioneers and Valuers Institute has a very strong commitment to CPD and education. It has a defined CPD policy requiring 60 hours CPD in any three-year period. This has been a mandatory requirement since 2004 and continues until members reach the age of 65. CPD records are subject to sample inspection. CPD credits are awarded by category as per the Institute policy (Interviewee, Irish Auctioneers and Valuers Institute).

From an individual company perspective, some have training policies where CPD is incorporated at performance meetings. CPD typically constitutes both external and in-house training, external seminars or workshops, in-house seminars, and attendance at exhibitions and events. One company has set a target of five days CPD per year. The Construction Industry Federation, however, does not have any formal CPD policy or requirement, with the exception of programmes relating to health and safety (Interviewee, Construction Industry Federation).

In relation to energy assessors, CPD is an emerging field and the BER Energy Assessors Association has no formal recommendations on CPD for its members yet, but, we wish to change this in time (Interviewee, BER Assessors Association of Ireland).

Overall, in relation to training and CPD, it is evident that all the categories represented affirm the importance of training and CPD, albeit to varying degrees. It is clear that each profession places a different emphasis on CPD, and there is no common CPD which fits all sectors.

#### Accreditation of Learning

A report by the National Competitiveness Council (2009) highlighted that, in the current economic downturn, building a culture of up-skilling is equally important for jobseekers and for the continuous development of skills among those already in employment. The Competitiveness Council also recommended active promotion of work-based training which should ideally be fitted around working hours. Specifically, the strategy proposes that 48% of the labour force should have qualifications at Levels 6 to 10 (Third-level certificate and above) on the National Framework of Qualifications (NFQ). In order to achieve this objective, an additional 500,000 individuals within the workforce will be required to progress by at least one NFQ level. Additionally, the progression rate to third-level education will need to increase from 55% to 72%.

The Competitiveness Council identifies particular challenges for the construction sector. The Council believes there is a need for a proactive up-skilling plan for the 20,000 construction sector workers who lack formal qualifications, those that have had their apprenticeship terminated mid-programme and the many relatively low-skilled workers who are now unemployed.

Reflecting on these significant challenges, interviewees were asked if they believed that accreditation of learning was important. The following quotations summarise their responses:

Up to now, accreditation was not specially sought in relation to training. Most training tended to be reactive, that is, it developed in direct response to an immediate regulatory, economic, or social need. Given the changing environment, however, this is being reconsidered (Interviewee, Royal Institute of Architects of Ireland).

Accreditation is important to Engineers Ireland (Interviewee, Engineers Ireland).

At present, course accreditation is not deemed a critical requirement for external CPD training. Appropriate qualifications, competencies and experience of providers, however, are all essential elements of accreditation. The question of CPD course accreditation is currently under consideration. In relation to core professional training currently accredited by third-level institutions, institute brand and quality procedures are of critical importance and value (Interviewee, Irish Auctioneers and Valuers Institute).

Accreditation is becoming increasingly important. In particular, an institutional brand appears to be very relevant (Interviewee, Construction Industry Federation).

The Assessors Association values accreditation (Interviewee, BER Assessors Association of Ireland).

We would deem accreditation of learning to be important or very important for all our members. Given the very high dependence on professional bodies and private training providers, the definition of accreditation may be different from that traditionally understood within the third-level sector (Interviewee, Enviroskillnet).

From the above responses, it is evident that accreditation of learning has become more relevant. The interviewees argued that the accreditation of learning facilitates continuous improvement and new opportunities for all employees. Since the launch of the NFQ in 2003, employers, employer bodies, employees, and third-level institutions now have a single-structure mechanism for recognising all education and training in Ireland. The National Qualifications Authority of Ireland has also put policies in place for the awards of professional bodies to be recognised through the NFQ.

The findings from this research resonate with the proposal of the National Competitiveness Council (2009), which suggests that new training opportunities at NFQ Level 7 and Level 8 may be required to enable recently unemployed construction workers to take advantage of opportunities in other sectors, such as environment and energy-related goods and services, and information and communication technologies (ICT). The NFQ, therefore, is perceived as an important mechanism for having all formal and informal learning accredited at comparable levels, not only in Ireland but also in Europe through the European Framework of Qualifications.

#### Future Forms of Engagement and Commitment between Third-level Institutions and the Energy and Sustainability Services Sector

It has been established through the REAP project that many and varied partnerships exist for a multitude of reasons. One of the main objectives of the REAP project is to identify how these partnerships can be maintained and strengthened. Interviewees partaking in this research were asked to identify future possible forms of engagement. The following quotations summarise the replies:

The Royal Institute of Architects of Ireland has a strong tradition of collaboration with third-level institutions as evidenced by the position of Education Director within our institute. Our engagement and involvement takes the form of accreditation of undergraduate programmes, the provision of CPD by staff in third-level institutions, and various other academic involvements with our institute and vice versa. We are always willing to engage with third-level institutions and hope to continue to build on our strong existing links with academia. This is evidenced, in particular, by our strong commitment to CPD. We are open to further collaboration with third-level institutions (Interviewee, Royal Institute of Architects of Ireland).

There are a number of ways for engaging with third-level institutions, for example, we would be hoping to invite more third-level staff as guest lecturers and guest speakers to our conferences and workshops. We would also like to increase our student numbers and will continue to encourage students to become members of our body. We will also continue to look towards third-level institutions to provide CPD to our members and to provide Engineers Ireland accreditation at Levels 7 and 8 (Interviewee, Engineers Ireland).

The Irish Auctioneers and Valuers Institute proactively engages with third-level institutions on its core professional programmes. Our current collaboration includes accreditation of our programmes, providing lecturers and venues to host our programmes, and providing advice on programme development. We have identified benefits of such collaboration, including: access to a pool of expertise, and access to learning developments and best practice in areas such as work-based learning and the recognition of prior learning. We also value third-party accreditation. As an Institute, we have a strong commitment to education and CPD (Interviewee, Irish Auctioneers and Valuers Institute).

Examples of existing collaboration include: the provision of training for our members, graduate recruitment, and the accreditation of programmes. In maintaining this collaboration, we recognise that there are many benefits for us as a federation. The partnership provides a win-win situation for both parties. The collaboration also promotes education, develops professionalism, and provides for the up-skilling of staff. The partnership also facilitates constructive dialogue between third-level institutions and companies (Interviewee, Construction Industry Federation).

We hope to engage more with third-level institutions by using staff expertise in those institutions to provide further training for our members. We would also like to give opportunities to third-level staff to act as consultants for us (BER Assessors Association of Ireland).

We would be hoping to utilise third-level staff to provide training in the future. We are also involved in supporting programmes at primary and master degree level and we are interested in keeping up this engagement (Interviewee, Enviroskillnet).

In addition to the specific learning needs outlined above, interviewees also identified future (medium-term) learning needs, including:

- Human Resource Management issues;
- ICT (information and communication technologies) training;
- Data Management.

While all the organisations, in this research, representing the energy and sustainability services sector engage in some form of training needs analysis, it is not necessarily through formal training surveys. Frequently, training needs are identified as part of ongoing communications between professional bodies and individual organisations, or through membership surveys or performance appraisals. All interviewees included in the energy and sustainability services sector in this research reported that they invest considerable time with the partnerships they have developed with third-level institutions. This is evidenced by the appointment of CPD managers and Education Directors within their professional bodies. The collaboration and partnerships which have been developed are highly valued and, accordingly, a strong commitment to maintaining and strengthening such links is evident



#### 3.3 Financial Services Sector

#### Brief background to the sector

Ireland has a broad international financial services industry with a wide range of financial institutions. It is estimated that approximately 45,000 people are directly employed in over 10,000 firms in this sector. Financial Services Ireland is the sectoral association within the Irish Business and Employers Confederation (IBEC) and is responsible for promoting the interests of financial services providers. Financial Services Ireland is the only industry association which represent financial services providers on a sector-wide basis. According to IBEC, Financial Services Ireland has achieved significant success. The contribution to the Irish economy by financial services has reached over €9 billion in corporation tax from Irish Financial Services Companies and over €350 million in further tax revenue in the form of PAYE and PRSI.

Within the past twenty years, twenty-five of the top fifty international banks have established operations in Ireland, including Citigroup, JP Morgan, BNP Paribas, Depfa, and Merrill Lynch. The sector is currently facing some major challenges, including the current global economic crisis.

Ireland cannot be complacent about its past successes in attracting international financial services institutions to locate here. According to Banking Ireland (2008), continued success will require the ability to adapt and innovate, and to critically move up the financial services value chain. Kjell Nyborg, Academic Director of the Global Finance Academy, advises that it is necessary to create a more sophisticated financial workforce to further develop the international financial services industry in Ireland in activities such as funds management, securitisation, and investment banking. Nyborg added that, in turn, this requires advancements in finance education at both third-level and continuing education level.

The Expert Group on Future Skills Needs of the International Financial Services Industry (2007) identified four main issues as priorities for the sector. First, the shortage of particular skill sets, particularly in relation to certain high-skilled occupations, needs to be addressed. Second, problems relating to staff retention in many subsectors engaged in routine, yet, critical back-office functions need to be addressed. Third, there is a need to develop a research agenda for the international financial services sector. Fourth, the manner in which education and training programmes are developed, coordinated, and implemented between providers and industry needs to be improved.

#### Identifying Learning Needs in the Financial Services Sector

From the research conducted for this report, it was evident that across the financial services sector a high percentage of staff has a third-level qualification, but not specifically in financial services. The sector is very aware of the courses on offer in universities and institutes of technology and the level of such courses on the National Framework of Qualifications. The sector also uses a large number of private professional organisations and online providers to deliver short courses to up-skill their staff.

As many organisations have their headquarters outside Ireland, training and development demands are often dictated from outside the country. This is another factor influencing the identification of the learning needs of this sector. To address the learning needs of this sector, a new networks programme, *Finuas*, has recently been developed. The Finuas programme is dedicated to specialised training in the international financial services sector and is jointly funded by companies within the sector and by the government. Finuas is intended to run for up to five years, with €1 million allocated from the National Training Fund during 2009. Managed by Skillnets Ltd on behalf of the Department of Enterprise, Trade and Employment, Finuas aims to support the sector in maintaining Ireland's position as a top international financial services centre through investment in the specialist

skills and expertise of its workforce. Finuas is organising networks which develop and deliver new training in the areas of banking and capital markets, investment management, insurance, and specialist professional services to the sector.

In addition to the learning needs identified above, the Expert Group on Future Skills Needs identified a further deficit of skills within the sector that also need to be addressed. The Expert Group on Future Skills Needs predicts that there will be a demand for graduates with maths, economics, quantitative modelling, accountancy with fund experience, risk management, quantitative financial analysis and credit analysis, and business analysis with information technology skills. It is envisaged that programmes including modules on the above topics would be offered at degree level. A need for certificate and short courses on business development and business skills for middle managers in the sector was also identified.

Finally, in evaluating the future learning needs of the sector, the Financial Services Association (FSI) suggested that regulation and compliance will remain a priority and this means additional training for the sector, for example, for qualified financial advisors. FSI also believes that the informal approach to learning from a boss would be replaced by a more focused formal approach. The Association also suggests that it will be looking at outside expertise and outsourcing training to further reduce costs in the future.

#### Accreditation of Learning

In relation to accreditation of learning for the financial services sector, interviewee responses from this research suggested:

Accreditation is seen as important, but not critical. Sector employers favourably view the idea of gaining credits for individual modules and accumulating credits to ultimately gain an award. Recognition of prior learning would also motivate staff to up-skill if they thought the number of modules they would need to gain an award might be reduced (Interviewee, Financial Services Sector).

Interview findings showed that, in the current economic climate, employers are less likely to give time off to employees during normal working hours to attend training courses or to undertake additional learning, as this is equated with loss of productivity. If employers are less likely to give employees time off to up-skill, it is, therefore, necessary to establish what delivery mechanisms are most suited to the financial services sector. The following quotation represents the views of this sector:

There needs to be a flexible system in place for course delivery and, preferably, with some elements of e-learning involved. Some employers already use e-learning as part of their own internal training. Depending on the module content, however, traditional delivery might be more appropriate to ensure that learning outcomes are being met through class interaction and discussion. Sometimes delivery over one or two days works well, but it depends on the modules being delivered (Interviewee, Financial Services Sector).

This interviewee also reported that feedback from employers regarding further training and learning is very important, and suggested that:

Employers are willing to support courses provided by higher education institutions but are limited by their training budgets. Employers agreed that work-based learning would add value to their organisations. Employers are also interested in the recognition of prior learning but are unsure of the process involved (Interviewee, Financial Services Sector).

This finding indicates that there are many opportunities for further strengthening partnerships between third-level institutions and the financial services sector, particularly in the area of work-based learning and the recognition of prior learning. As work environments such as the financial services sector increasingly move to knowledge-based environments, with increasingly dynamic and changing contexts, ongoing up-skilling of employees will be required. Work-based training and education is ideally suited to serve this need. Further opportunities will be required for third-level institutions to continually engage with changing work environments, where newly created contexts continually demand educators to respond quickly to new and ever-changing circumstances. Finally, in the current depressed economic climate, the recognition of prior learning is becoming increasingly important for jobseekers and for those in employment who wish to up-skill and to re-skill.

**Future Forms of Engagement between Third-level Institutions and the Financial Services Sector**The research findings illustrate that the Financial Services sector envisages future forms of engagement between the sector and third-level institutions:

Our sector would offer strong support for guest lectures and career workshops which could be provided by third-level institution staff. We would also welcome the opportunity to support the establishment of local networks so that ideas between the financial services sector and the third-level institution can be shared, and knowledge can be transferred in both directions. Some of our employers would also like to be involved in new course design for the sector. The sector would also welcome broadly designed courses to encapsulate the full sector, rather than some courses which are geared towards one narrow segment of the sector.

The provision of more work-based learning courses and the accreditation of prior experiential learning are two areas which lend themselves to future forms of engagement. Work-based learning, unlike other forms of learning, tends to be directly related to the needs of employers and/or the employment needs of those in work. It is important, therefore, to recognise that growing, understanding, building and sustaining long-term relationships between higher education institutions and the workplace has to underpin development in the area of work-based learning. Third-level institutions and the financial services sector, however, should focus on the use of work-based courses as a process for recognising, creating, and applying knowledge through and for work rather than simply at work. A work-based learning course not only has to satisfy academic scrutiny by the third-level education institution but it must also embrace fully the complexity of the specific context of the work environment. The work-based learning course has to demonstrate 'fitness for purpose' at the level of the individual, the sectoral level, and in some instances the wider professional community.

Closely related to the provision of work-based learning courses is the accreditation of prior experiential learning. A major objective of the National Framework of Qualifications is the formal recognition of *all* learning achievements including prior learning. The National Framework of Qualifications provides a means by which prior learning is formally identified, assessed, and acknowledged. This makes it possible for an individual to build on achieved learning and to be formally rewarded for it. The National Framework of Qualifications forms the basis of a new, more flexible and better integrated system of qualifications. The current research illustrated that some sectoral areas, including the financial services sector, are unsure about the process of having the prior learning of their employees formally recognised. The recognition of prior learning ideally lends itself to strengthening the existing forms of engagements between the financial services sector and higher education institutions.

### 3.4 High Potential Start-up (HPSU) Enterprises

#### Brief Background to the Sector

In order to provide a context for this sector, it is important to differentiate between a High Potential Start-up enterprise and a Micro start-up enterprise. A high potential start-up (HPSU) enterprise is characterised by a core product or service offering that is technology driven. Its sales targets and company valuation are high and each high potential start-up enterprise has to demonstrate a commitment to export and to rapid growth. These enterprises usually develop leading edge technology products or services in their particular sector. HPSUs have the potential to create a 'new' worldwide offering, and typically invest significantly in research and development. HPSUs can, therefore, have long lead-in times before revenue is generated. Once revenue is generated, however, targets are significantly higher than for micro start-up companies.

Enterprise Ireland defined a high potential start-up enterprise as a business that is:

- Manufacturing an export-focused product, or offering an internationally tradable service;
- Based on a technical advantage or a pioneering or innovative idea;
- Likely to realise annual sales of €1 million and employ ten or more people within three years;
- Headquartered or controlled in Ireland.

The management capacity of a High Potential Start-up enterprise is central to its success. While High Potential Start-up enterprises experience rapid growth, operational capacity and systems can, however, become overworked. Ensuring that HPSU management and operational staff are adequately trained in company-relevant aspects will contribute to better management and operational capacity within this sector.

In 2008, the Government, through Enterprise Ireland, supported the establishment of 71 new high potential start-up enterprises. These young companies were expected to create close to one thousand jobs over the following three years, to bring their total employment to over 1,370 personnel. Total sales over the same period were expected to reach €615 million, with exports accounting for almost 75% of this figure (Ireland, 2009).

#### Identifying Learning Needs in the High Potential Start-up Enterprises

All interviewees were aware of the existing education and training opportunities currently available for their sector. The high potential start-up interviewees identified a number of networks and support agencies that provide assistance, support, and training across the range of learning needs of HPSUs, including:

- Enterprise Ireland's EnterpriseSTART 2 programme;
- ULearning Skillnet Network:
- HPSU Skillnet;
- BESTNet (Biomedical Engineering and Science Training Network);
- Údarás na Gaeltachta.

In addition to availing of the learning and training provided by these agencies or programmes, interviewees identified specific future medium-term learning and skills needs for this sector:

Our sector would welcome additional courses in business strategy. Ideally, such courses would contain information on understanding financial statements, the commercialisation process, managing company growth, growing the business in a timely and successful manner, and achieving an effective management structure (Interviewee, HPSU enterprise).

Courses on sales and marketing are needed in our sector. It would be useful to have a greater understanding of managing the competitive edge, managing the international market, and using the Web for effective marketing. We would also welcome additional information in areas such as making an effective sales pitch, pricing, converting customer needs into sales opportunities, and being more effective in communicating (Interviewee, HPSU enterprise).

We have identified a need for project management programmes. It would be useful to have more information on managing project timelines, identifying tasks, and the delivery of quality projects on time and within budget (Interviewee, HPSU enterprise).

The legal side of the business is very important and an area which needs specialised knowledge. It would be useful if we could have short programmes containing information on what one needs to know when starting up a business, intellectual property, the application process for patents, licensing, developing joint ventures and partnerships, and knowing the general regulatory requirements for business (Interviewee, HPSU enterprise).

Team building is an area which we have identified as important for our sector. A short course on team building would be beneficial. It would be useful to have more of an understanding, for example, of effectively managing teams and getting the most from teams, identifying roles and responsibilities of team members, and overall team building and managing culture within teams (Interviewee, HPSU enterprise).

As outlined above, the interviewees identified many learning needs for their sector. Interviewees were then asked which delivery mechanisms they believed would best fulfil those needs. Interviewees were unanimous in their replies, stating that short modules of one day or two half-days, delivered in-house or through online distance learning, would be their most preferred options. The interviewees also stated that it is important that the training should be very focused, industry-specific, and should specifically address their own needs and those of their employees.

#### Accreditation of Learning

The interviewees in this research representing high potential start-up enterprises stated that accreditation is "not of immense importance" to their sector. They believed that effective training which will empower them to continue to run their businesses effectively was more important. Interviewees also expressed some concern over the cost of training courses and considered the pricing of courses to be a core issue.

Some interviewees suggested that, occasionally, once-off training could satisfy their needs. The following response is representative of the sentiments of the interviewees in this sector:

Information, rather than qualifications, is crucial at the start-up stage of business. As the high potential start-up company moves into the SME sector, employees will then have more time to build up their skills and expertise, and then could consider accreditation (Interviewee, HPSU Enterprise).

Other interviewees, however, stated that if they decided to participate in longer training programmes they would have an interest in the accreditation of modules, but, this would be at a later stage of their business development. The overall responses in relation to the accreditation of learning for this sector can be summarised by the response, "For the moment, at high potential start-up status, information is key rather than credits and qualifications".

# Future Forms of Engagement between Third-Level Institutions and High Potential Start-up Enterprises

Interviewees believed that there are opportunities for future forms of engagement between the academic and HPSU enterprise sectors. In some higher education institutions, excellent examples of practice in enterprise support programmes and incubation centres have been successfully established. Interviewees believed that links between industry and academia could be strengthened in a variety of ways:

Staff from third-level colleges could provide business mentoring for us. We would welcome ongoing mentoring from an expert in the field whom we can trust. Such an individual could help the entrepreneur to build their business and gain market share. We could learn from one-to-one mentoring where we would be given an opportunity to talk about our specific issues and concerns (Interviewee, HPSU enterprise).

We would be interested in having short one-day modules delivered. These modules should be very focused and very targeted to our specific needs. These modules could be delivered by third-level staff (Interviewee, HPSU enterprise).

Exposure to research in the higher education institutions is of immense value to high potential start-up companies. It would be good to have more technical training from people with good expertise in an area for example such as laser technology (Interviewee, HPSU enterprise).

Overall, interviewees underscored the relevance and importance of developing further engagement with the third-level education sector. Interviewees did acknowledge, however, that industry timelines and delivery urgency are not always in line with semesters in academia. Interviewees stated that they would welcome academics coming into their enterprises, believing that this provides more balanced views of what is needed for enterprise. Further close engagement should build on the existing relationships which have been developed to date.



### 3.5 Legal Sector

#### Brief Background to the Sector

In Ireland, the legal sector encompasses approximately 28,000 employees, including those employed as legal professionals, judges, barristers and advocates, solicitors, legal associate professionals, and legal secretaries (FÁS, 2009). As very many posts within the sector require third-level qualifications, the level of education attained by those working in the field is relatively high: 99% of solicitors, 100% of judges, barristers and advocates, and 85% of those working in the legal service and related occupations have a third-level qualification (FÁS, 2009). The post of legal secretary has the lowest third-level attainment (26%) and in this post 74% have obtained an upper secondary or further education and training qualification.

Since 2007, the legal sector is experiencing difficulty as a result of the economic downturn. Over the previous decade property conveyancing encompassed a large part of the work of the legal sector in Ireland and proved quite lucrative for many firms. In particular, the downturn in the property market has meant that demand for work in this area has decreased. As a result, many firms had to diversify into other areas of practise such as insolvency, debt-collection, environmental, and planning law. There have also been a number of redundancies in this sector, as firms attempt to reorganise and to remain effective during the current economic downturn. The FÁS National Skills Bulletin (2009) confirmed that unemployment within the legal sector is now 'below average'. Newly qualified graduates are particularly vulnerable in the new climate since apprenticeships are becoming more difficult to acquire. Law graduates are now encouraged to engage in additional training in specialist areas, through postgraduate diplomas, masters, etc., or to engage in legal work on a voluntary basis, in order to increase their competitiveness in this delicate labour market.

#### Identifying Learning Needs in the Legal Sector

In order to ascertain the views of stakeholders in the legal sector on educational needs in law, a number of key individuals were identified and interviewed. The participants who represented the legal sector in this research comprised:

- a programme coordinator in the Incorporated Law Society of Ireland Law School;
- the President of the Southern Law Society;
- a barrister;
- a continuing professional development (CPD) coordinator (a law faculty member in a third-level institution);
- a solicitor.

All interviewees agreed that a formal academic law degree, covering core legal subjects, remains highly valued in industry. Through the many undergraduate and postgraduate courses offered, the various faculties of law seek to equip graduates with the skills necessary for success in any professional legal career. As well as providing specially designed legal skills modules (legal writing, legal skills and analysis, moot court, etc.), third-level institutions provide tutorial support in core modules to facilitate the development of students' skills of analysis and application. In addition to the Student Vacation Placement Programme, some third-level institutions offer students the opportunity in a more formal structure to experience the law in practice through the Clinical BCL and Irish BCL. These opportunities provide students with a greater awareness of what is involved in the practice of law. In this research, the five interviewees from the legal sector shared similar views on the learning needs of their profession. The following comments typify these views:

Graduates are expected to be familiar with core legal principles and must display an ability to apply these principles to factual situations, which may present in practice. When recruiting, practitioners seek out candidates with drive and the ability to problem-solve and to think laterally. Skills competency is also a determinant in recruitment. Graduates are expected to have a solid grasp of skills such as legal writing, legal research (hardcopy and online), and presentation (Interviewee, Legal Sector).

The skills required for the legal profession include the ability to synthesise complex arguments, to propose solutions to difficult problems, and to persuasively present ideas in oral and written form (Interviewee, Legal Sector).

The Law Society of Ireland, which provides solicitor training, does not provide skills training apart from legal drafting. Consequently, it is imperative that law graduates have mastered skills such as legal writing, research, and analysis. It would be hugely beneficial to graduates if third-level institutions could provide a greater level of training in legal drafting to prepare them for more in-depth training in the Law School. Currently, undergraduates are introduced to some basic legal drafting principles, but this, however, should be intensified (Interviewee, Legal Sector).

The interviewees also believed that ongoing collaboration between the Incorporated Law Society of Ireland and third-level institutions should clarify learning needs in the sector. Interviewees suggested that this ongoing collaboration should help to deliver short-term and longer-term courses to meet the needs of updating and reskilling. One of the interviewees suggested that an online survey might usefully be carried out among members of the Law Society to further identify learning needs within the sector. This interviewee also perceived that focusgroup interviewees, involving a wider grouping to include judges, legal executives, and lawyers in the public sector, should also be a valuable means for obtaining such information.

On identifying the training and learning needs of the sector, interviewees were then asked which delivery mechanisms were most suited to their profession. From the responses received, there was no consensus in relation to preferred modes of delivery. It was apparent that a range of offerings would have to be provided to meet varying needs, for example:

- online delivery;
- traditional lecture format;
- workshops;
- block delivery;
- short courses.

Participants, however, indicated that there is considerable interest in workshop-style or more problem-based CPD events to supplement traditional lectures and seminars. One interviewee observed:

Workshops adopt a narrow focus and aim to deliver a more intense analysis of particular legal issues and problems than would be possible in a lecture or seminar format. In relation to specific workshops, for example, IT skills, it is important to pitch such workshops at varying levels of ability/knowledge, e.g. introductory, advanced, etc. (Interviewee, Legal Sector)

Overall, interviewees showed a considerable interest in workshops dealing with online legal databases. The interviewees also observed that, as practitioners are so varied in their areas of practice, the issues which would

need to be covered in these workshops would be very wide. Because of the myriad of different issues which need to be covered, it was suggested that workshops focusing on particular niche areas would be most beneficial.

## Accreditation of Learning

All interviewees in the legal sector agreed that it is very important for graduates to hold a qualification recognised by the relevant professional bodies, as a formal acknowledgement of quality. Interviewees believed that, in the legal community, third-level institutions who offer law degrees have very strong reputations and are highly respected among practitioners both in their localities and nationally. Interviewees also observed that the depressed economic climate is having and will continue to have a negative effect on recruitment to the legal profession. Graduates of law will continue to find the recruitment process to be very competitive. The following quotations summarise the sentiments of the interviewees in relation to accredited learning:

Candidates who have accredited learning together with learning which is unaccredited, such as practice or work experience, will stand out when it comes to recruitment, as practitioners will have more confidence in individuals who have already engaged to some extent in the practice of law rather than merely in the study of law in books (Interviewee, Legal Sector).

Practitioners place a premium on the combination of a strong academic grounding, which would be the accredited learning, and also on practice-based learning, for example, the ability to problem-solve. Work experience and clinical placements are viewed as invaluable. To maximise the employability of graduates, student placements should be introduced as a standard feature in undergraduate programmes. At present, the BCL Clinical and the Summer Vacation Placement Programme cater for this to a limited extent (Interviewee, Legal Sector).

The primary accredited form of learning offered by most law faculties is the three-year BCL degree. According to the findings of this research, the BCL degree remains well received in the sector and is recognised as providing a strong academic grounding in the core areas of law. A number of other innovative programmes such as the BCL Clinical are offered by some law faculties. The BCL Clinical is a four-year degree programme, with the third year spent on placement with a legal firm or organisation. One interviewee observed:

There is a consensus from those in the sector that a programme such as the BCL Clinical provides a considerable advantage to graduates and is particularly attractive from the point of view of recruitment. This degree provides students with the opportunity to experience and to be involved in the law in practice. Through experiential learning, students develop a working knowledge of the law and also develop skills such as interpersonal, organisational, communication, etc., which they would not otherwise have the opportunity of accruing in traditional undergraduate programmes (Interviewee, Legal Sector).

All five interviewees from the legal sector believed that practitioners are very positively disposed towards accredited and experiential learning. The interviewees observed that law programmes which offer an additional dimension such as languages are of extra value to graduates. In terms of postgraduate programmes, the Master of Laws (LLM) is also very attractive to practitioners.

## Future Forms of Engagement between Third-Level Institutes and the Legal Sector

All interviewees agree that the already established relationship between law faculties in third-level institutions and the professional bodies represented in this research should be maintained and even strengthened. In terms of existing engagement, staff in third-level institutions provide support to the Law School in its delivery of the Professional Practice Courses for trainee solicitors and also engage in the delivery of CPD courses for practitioners. All interviewees acknowledged that the role currently played by third-level staff is highly valued by those in practice. The interviewees also value the informal engagement between their profession and third-level institutions:

The informal contact with the professions currently works very well. Strong relations with the professions both nationally and locally are critical to underpin initiatives such as CPD programmes, student placement programmes, careers seminars and related events (Interviewee, Legal Sector).

Interviewees cited particular instances where forms of engagement between the legal sector and third-level institutions have been established over many years, for example:

The faculty of law in our local institution enjoys excellent relations with the judiciary both locally and nationally. Practitioners and members of the judiciary are regular contributors to CPD events and conferences organised by the faculty of law (Interviewee, Legal Sector).

The law faculty academic staff member interviewed for this research noted that the faculty always endeavoured to monitor and address the changing needs of the sector. This interviewee, however, acknowledged that the responses from the practising legal professionals interviewed for this research indicated ways in which the faculty could improve in terms of addressing emerging learning needs in the sector:

Over the years, the law faculty has engaged in the continuing professional development of practitioners. Unfortunately, and more recently, the absence of administrative support has resulted in a reduced CPD offering from the faculty. In this regard, the faculty could, if resourced, return to previous levels of CPD involvement, particularly in light of the demand for IT skills training and the perceived desire to diversify among practitioners (Interviewee, Legal Sector).

Interviewees identified the LLM programme (Practitioner Master's programme) as a mechanism for future engagement between third-level institutions and the legal sector. Interviewees believed that the LLM, to be most successful, requires a blend of online learning, workshops, off-site delivery, and practitioner involvement in collaborative modules focusing on the interface of law and practice. The interviewees also view the LLM as a means of redirecting or re-orienting legal professionals' areas of practice to adapt to changing circumstances. All interviewees agree that the LLM provides much scope for building on and for strengthening existing links between the two sectors.

Interviewees observed that the recent economic downturn has led a decline in the more traditional areas of legal practice. Practitioners, consequently, have acknowledged the necessity to restructure and diversify their practices to overcome new and difficult circumstances. Practice in areas such as personal injury and property are now declining. Interviewees suggested that third-level institutions could offer modules in alternative dispute resolution (ADR), mediation, and collaborative law as an alternative way forward for practice. Feedback from interviewees suggested that a demand in areas not reliant on the economy, such as environmental, insolvency, intellectual property law, and IT will persist. All interviewees perceived that the current economic climate provides

an opportunity for both academics and legal practitioners to collaborate on developing new modules to address new learning needs within the sector:

The ability to adapt and diversify is the key in difficult economic times. Practitioners would also have a strong interest in up-skilling and developing knowledge in newer areas of legal practice, such as, human rights law, medical law etc. This is particularly the case with practitioners who qualified more than ten or fifteen years ago (Interviewee, Legal Sector).

Interviewees were unanimous in their views regarding the importance of IT skills for the legal sector. The provision of these skills was identified as a means of further strengthening existing links:

There is a strong interest among legal practitioners to develop their knowledge of, and ability to navigate, the many online legal databases e.g. LexisNexis, BAILLII, IRLII, etc. We would welcome a series of workshops focusing on these specialised areas (Interviewee, Legal Sector).

In response to the above request, the academic interviewee reported that:

The faculty of law has responded to the demand for providing workshops and we have delivered a series of IT workshops, general introductory workshops, and more specialised workshops focusing on discrete areas such as European Union law. Feedback to date has been very positive and this is an area that the law faculty is in a strong position to develop further, however, administrative support would have to be in place to underpin any such initiative (Interviewee, Legal Sector).

Finally, all interviewees again re-stated that the Practitioner Master's (LLM) offers many possibilities for new forms of engagement as this degree enables practitioners to branch out into new areas of law and to further develop additional skills. The interviewees believed that the LLM represents a significant commitment to addressing the ongoing learning needs in the profession and to strengthening the engagement between academia and the legal sector.



## 3.6 Pharmaceutical Sector

## Brief Background to the Sector

The pharmaceutical manufacturing sector is a critical element of the Irish economy. The Irish pharmaceutical sector is the fourth largest global exporter of pharmaceuticals with current exports of \$40 billion. The total pharmaceutical sector in Ireland employs over 19,000 people. Thirteen of the top fifteen pharmaceutical companies in the world have a manufacturing base in Ireland, thus "establishing Ireland as a world-leading centre of excellence for the manufacture of pharmaceutical and fine chemical products" (Enterprise Ireland, 2009). Ireland is the foremost location in Europe for international pharmaceutical investment, and six of the ten world's top-selling drugs are now produced in Ireland. There is also a substantial indigenous industry of over one hundred companies engaged in pharmaceutical/chemical-related activities. Enterprise Ireland has identified biopharma activities, such as early-stage drug discovery and drug delivery, as representing one of the key growth opportunities in this sector over the next five years.

Three trends are evident from recent developments in the Irish pharmaceutical industry. First, new foreign direct investment has been allocated to the biopharma sector, where the manufacturing route is biological in agueous media, with little or no use of organic solvents. A second trend has been the increasing emphasis on a process development role as well as on primary manufacturing on existing sites. These sites are increasingly involved in the manufacture of initial batches for clinical trials, and the optimisation of manufacturing operations for subsequent transfer to other sites. It is also worth noting that competition exists between different manufacturing sites within the one corporation for the manufacture of products as well as competition in the end market between different products. Factors such as proven expertise, equipment capability, and the cost of manufacture enter into overall decision-making. Irish plants have proven expertise, including the ability to ensure compliance with the needs of product regulatory bodies, and this is considered a major competitive asset.

The third, critical trend is the sectoral economic downturn. Cost of manufacture was considered of less significance in the past, but impending changes in pharmaceutical production implies that many products that are currently protected by patent will lose their protection in the next few years. When this occurs, generic manufacturers will be allowed to manufacture the same substance, and typically sell at a lower price. Losing patent protection on a product can represent a drop in annual sales of 10% from previous values. In contrast to the positive compliance reputation of Ireland, the cost of manufacture, particularly staff costs, are considered much higher than in competing locations. Manufacturing efficiency, therefore, becomes ever more important. This priority has been compounded by the amalgamation of previously separate companies. Manufacture is now seen as less of a core business activity, and, instead, as a function that may be outsourced.

## Identifying Learning Needs in the Pharmaceutical Sector

The interviewees representing the pharmaceutical sector in this research believed that learning needs were dictated by advances in research and technology, which are difficult to predict. The interviewees also believed that the shift in production process to biopharmaceutical manufacturing and increasing concerns about costs have implications for the learning needs of the sector. All interviewees agreed that up-skilling to adapt to biopharmaceutical manufacturing seems to have priority over up-skilling to achieve greater efficiency in existing chemical manufacturing.

The role of NIBRT (National Institute for Bioprocessing Research and Training – a partnership between DCU, IT Sligo, UCD, and TCD) and FÁS with existing links in other third-level colleges – was cited as important in providing training for all levels of the sector.

One of the interviewees explained:

At operator level, the learning needs would largely be met by equipment providers, but this is an expensive method of training. NIBRT is a good resource for some of the sector's training needs (Interviewee, Pharmaceutical Sector).

A recurring theme in the current economic context was the need for third-level institutions to keep newly redundant operators close to the workforce through training and hands-on experience with laboratories and equipment. Interviewees observed that recruitment into the chemical synthesis element of the sector is, nevertheless, very pessimistic. In contrast, recruitment into the biopharmaceutical side is more optimistic. A number of interviewees, ranging from the smallest indigenous company to the largest multinational company, emphasised the necessity of good personal skills for working in the industry:

It is important that employees have the appropriate soft skills, such as teamwork, flexibility, and a willingness to learn to work in this sector. Our company has turned down first class honours applicants on the basis of a lack of team skills. We believe that those coming directly with PhDs were less likely to have these skill sets than graduates who have industry experience (Interviewee, Pharmaceutical Sector).

We have identified a need for soft skills to be developed. We see a need for improved business management skills among recent technical graduates. This would include business awareness, human resource management, and finance, leadership, negotiation, influencing, and presentation skills (Interviewee, Pharmaceutical Sector).

Areas of interest for future training and learning would include lean manufacturing, supply chain management, front-line maintenance (electronic and mechanical), and innovation and development of a design space in defining the range of process operation prior to regulatory filing (Interviewee, Pharmaceutical Sector).

Interviewees observed that, in recent times, multi-skilling and an avoidance of demarcation is a growing objective within the sector. They also believed that cost efficient provision of training is now receiving more attention:

Training must be specific and immediately relevant. Staff are expected to be willing to contribute personal time to their own development. Internal staff will be more likely to provide training than in the past in order to keep training costs down. Flexible delivery of training is preferred in order to avoid excessive demands on staff company time. This may be exhibited by technology-enhanced media such as e-learning from prepared standardised software packages which can be delivered on-site to avoid staff travel time (Interviewee, Pharmaceutical Sector).

Generally, there was a high level of postgraduate employment in companies represented in this research. Development for technical staff in this sector was reported to be based on a mixture of on-the-job training and on external courses provided by a range of different bodies, including FÁS, institutes of technology, universities, and equipment providers. Interviewees believed that future learning needs for this cohort should include expanding the capabilities of existing staff, for example, from production to maintenance and vice versa. In this way, basic tasks could be undertaken by regular production personnel, without recourse to qualified craftspersons, thus contributing to cost saving. Training for research and development staff was reported to be largely from third-level institutions and from industry conferences, with an emphasis on applied outcomes and results-oriented research.

Interviewees agreed that, while the average level of education is generally higher than in previous decades. Operator-level entrants are expected to be equipped for the task in hand, with a narrow expertise. In contrast, higher level staff are more likely to be drawn from postgraduate science backgrounds. Hence, lower level staff training is expected to be highly focused.

## Accreditation of Learning

Interviewees from the pharmaceutical sector emphasised a common desire for formal accreditation for relevant experiential learning:

Accreditation in this industry is about knowing that an employee or a potential employee has both knowledge and hands-on experience of a particular activity. Whether the accreditation comes from an institute of technology, a university, or other third party is not the key issue. What is important, however, is the reputation and track record of the awarding party (Interviewee, Pharmaceutical Sector).

## Another interviewee suggested:

The achievement of a certificate or an award is a defined target and a recognised accomplishment. Certification provides personal satisfaction, confidence, and a visible measure of success. Staff have to be competent in this sector, where products are critically regulated by external bodies, such as US-FDA and IRL-IMB. Recognition can be achieved through academic qualification, experience and/or training. Another feature of having an accredited qualification is that it can generally short-cut discussions with regulators. The significance of accredited qualifications, however, can vary from highly important to not important (Interviewee, Pharmaceutical Sector).

Interviewees from larger companies reported widespread recognition and support for modular learning that builds into a qualification. They were attracted to the concept of the accreditation of workplace learning as a positive target to be worked towards. Similarly, interviews with academics who specialise in working in the biopharmaceutical industry also emphasised the importance of building up modules and the accreditation of workplace learning for future requirements in the sector. In smaller companies, a focus on company requirements rather than on the accreditation of learning for employees was evident. The difference in emphasis between the large and small companies in relation to accreditation might reflect varying levels of resources and the levels of urgency for small companies to build up their general competencies, including sales and client relationships.

Overall, interviewees agreed that modular programmes and accreditation for learning in the workplace were considered as ideal models for personal and corporate advancement in the pharmaceutical sector. Accreditation of hands-on experiential learning was viewed as particularly appropriate and valuable within the sector.

Further Forms of Engagement between Third-Level Institutions and the Pharmaceutical Sector Interviewees expressed an interest in further engagement between third-level institutions and the pharmaceutical sector:

The biopharma sector has two clear types of interaction with third-level academic institutions: one at the technical/operator level, and the second at a research/development level. Industry's needs and expectations differ for each of these levels of interaction and are often spearheaded by different departments with different agendas. Academic institutions need to recognise and respond to these differences and to develop relationships and specialities that fit into these industry channels (Interviewee, Pharmaceutical Sector).

Some of the interviewees from the pharmaceutical sector in this research expressed varying levels of frustration while working with third-level institutions. Differing approaches to deadlines and timescales, restrictions on and attitudes towards intellectual property ownership, and an apparent excessive amount of time asked of the industry partner to manage industry/academia research projects were all cited as problematic.

There is an expectation, however, in some areas within this sector, for the availability of off-the-shelf tailored courses for companies to engage with immediately. As one of the academic interviewees who liaises with this sector observed, "course development appears to be underestimated by employers". Another interviewee commented:

Interaction with third-level institutions is welcome, provided it is action-focused. The desired form of interaction varies from company to company. I believe interaction with academia should be ongoing, with standing liaison groups, continuity of contact, and a primary communication channel, complemented by direct interaction with functions. This, however, can depend on the availability of staff time for such contact (Interviewee, Pharmaceutical Sector).

All interviewees spoke of the current economic downturn and the impact it might have on future interaction between the third-level education sector and the pharmaceutical sector, for example:

While biopharma has to some extent escaped the ravages of the current economic downturn, there is nevertheless a caution amongst Irish biopharma companies in terms of research, recruitment, and training. Keeping costs down is just as important to this sector as in any of the more damaged sectors. For this reason, company-funded research, payment for student placements, and sponsorship of third-level activity may all be threatened and should be reviewed to provide the most cost-effective solution possible to industry (Interviewee, Pharmaceutical Sector).

A number of interviewees observed that the biopharmaceutical sector recruits an above average number of employees who hold postgraduate qualifications, either at Master's or PhD level, particularly in the area of research. Interviewees, however, emphasised the need for these graduates to become a productive part of a team, after they have typically spent a number of years on individual research projects while studying.

Finally, in relation to future forms of engagement between third-level institutions and, in particular, the biopharmaceutical sector, interviewees observed that, because of the major role that multinational organisations play in this sector, decisions are often made outside of Ireland, particularly in regard to important research and development projects. Irish subsidiaries of these multinational organisations now seek to establish themselves as research centres in their own right. Irish third-level institutions have a role to play in helping those subsidiaries to achieve these goals in order to fully embed a number of multinational organisations into Ireland. Up to now, Irish biopharmaceutical research groups have found that it is often necessary to go directly to the head office (usually in the United States) to accomplish this goal.

## 3.7 Retail Sector

## Brief Background to the Sector

In 2003, approximately 4.7% of the 223,000 employees in the wholesale and retail sector engaged in some manner of formal education. This compared with an average of 6.7% of employees across all economic sectors. Historically, employment in the retail sector has been dominated by lesser educated people. In 2006, there were 127,000 persons employed as sales assistants, of which 33% had completed their education at lower secondary level, and a further 54% by higher secondary or FETAC (Further Education and Training Awards Council) level. According to FÁS (2007), however, the sector was characterised by a labour shortage rather than a skills shortage at the time.

More recently, the retail market is experiencing a significant decline in employment numbers. The Quarterly National Household Survey estimates that 293,000 people were employed in the wholesale and retail trades during September-November 2008. This fell from 311,000 during the same period in 2007. Retail sales (all businesses) in December 2008 also fell by 7.4% when compared with December 2007, and this decline continues. Retailers supplying the construction and new homes sectors (white goods and furniture), along with the motor industry, have been the most exposed to the economic downturn and are experiencing significant falls in sales relative to food retailers who appear to be more insulated from the vagaries of consumer expenditure. Despite this, the grocery sector is also experiencing difficulties with redundancies at all levels including shop management level (Mulligan, 2009). Redundancies among retail training staff are evident and this situation is made worse by the suspension of graduate programmes.

Currently, there is a range of courses primarily targeted at NFQ Levels 4 to 6. These courses tend to focus on product knowledge, competitor analysis, and selling skills. Some of these courses have been accredited by the Institute of Leadership and Management and by the City and Guilds. Companies, including Tesco Ireland, are currently participating in a FÁS-approved Certificate in Retail and Advanced Certificate in Retail.

Current economic pressures and staff redundancies make it more difficult for employers to release staff for development activities. Participants in this study believed that retail businesses in the future are going to be leaner and more efficient:

Those working in the sector will have to be more flexible in terms of the activities they are required to do and how they do it. This will place new challenges on management skills, but the development of these skill sets is being set aside for the moment. Also, in recent years funding provided via Skillnets and FÁS encouraged participation in learning activities, with funding levels ranging from 30% to 70%. The prospects for future funding are unclear in the current environment and this will have major consequences for training uptake (Interviewee, Retail Sector).

All interviewees from the retail sector partaking in this research indicated that training and staff development was not a priority at present. The current focus is on cost reductions and much of the excess built up over the past number of years is being removed.

## Identifying Learning Needs in the Retail Sector

Over the past decade, the general retail sector suffered both a labour shortage and a skills deficiency. The interviewees in this research believed that skills deficiency arose from five main factors:

- Difficulty in attracting talent to the sector;
- The need to manage larger businesses due to consolidation of the sector and growth in individual retail outlets or in groups of retail outlets;
- Increased sophistication in retail operating procedures evolving from new technologies;
- The emergence of new and more responsive distribution channels, including Web-based retailing;
- Challenges presented by greater product variety and complexity.

The current economic downturn, however, has reversed the situation of labour shortages. All interviewees commented on the improved quality and numbers of applicants for the limited number of available positions at all education levels, but most notably at graduate level.

A common theme emerging from the interviews was the recognition that the current response to the economic downturn, including redundancies among trainees, and the suspensions of graduate programmes, will have a negative impact on the future of management. Interviewees believed, however, that this negative situation should not continue indefinitely, and that opportunities for entrepreneurial graduates will arise in time. Interviewees also spoke of additional difficulties associated with identifying learning needs within the retail sector at this particular time:

Because the primary business need for the retail sector at the moment is the ability to manage costs, which requires reducing labour hours and increasing productivity, releasing individuals for educational purposes has become increasingly difficult. While it is not possible to predict when business fortunes will improve, it is clear that there will be a deficit of internal managerial talent in many companies in future years. It is not possible, however, to obtain a clear picture on the future learning needs of this particular area at this time (Interviewee, Retail Sector).

Interviewees also observed that a characteristic of the recent evolution of the retail sector in Ireland has been the rapid growth in franchising. These interviewees believed that the inherent strengths of franchising would be likely to ensure that it will maintain its strong position in retail markets:

There are no business courses that would help to foster retail entrepreneurialism and to develop a stream of retail business leaders capable of running their own businesses. In the past, ex-managers from the main multiples (e.g. Dunnes Stores or Tesco) were enticed to become franchisees in both the food and non-food sectors, but, while operationally strong, many lacked the business acumen required by the franchisers. Filling this development gap represents an opportunity for the future (Interviewee, Retail Sector).

Up to recently, the educational needs of the retail sector at NFQ levels 4-6 were met largely through FÁS CPD programmes or through those offered by Skillnets. These courses tend to be delivered in one- to two-day blocks. Level 7 programmes such as UCC's Diploma in Food Retailing and DIT's CPD Diploma in Retail Management are delivered in two-day blocks, held once a month, with each block comprising a single module. Most programme delivery continues to be in-class, accompanied by work-based learning and projects. Interviewees believed that the combination of in-class and work-based learning was optimal, particularly at levels 4-6. Interviewees also recognised that technology has an important role to play, but that the value of direct contact with other participants and lecturers was critical to the learning experience. All interviewees agreed that accreditation of learning is important and believed that the NFQ has participated in the accreditation.

## Future Forms of Engagement between Third-Level Institutions and the Retail Sector

The interviews for this research were conducted during 2009, a period of increasing pessimism throughout the retail sector. The views obtained on future learning needs and opportunities for partnership were conditioned by the harsh trading difficulties experienced at the moment. To date, the grocery sector appears to have invested most in meeting the learning needs of those employed in the sector. This investment, however, occurred during a period where exchequer funding was readily available to support learning. As one interviewee summarised:

Over the next few years, higher quality graduates are anticipated to become more readily available to the sector. At this stage, however, future recruitment and learning needs are still difficult to ascertain, and these will have an impact on future forms of engagement between academia and the sector (Interviewee, Retail Sector).

All interviewees were aware of graduate and postgraduate retail courses currently on offer and believed that the existing links between third-level colleges and the retail sector could be used to strengthen future forms of engagement when the current economic crisis has passed. Some examples of specific courses which interviewees highlighted were:

- Continuing Professional Development Diploma in Retail Management, offered by the School of Retail and Services Management, DIT;
- MBS (Retail Management), also offered by DIT as a two year part-time and one year fulltime degree;
- Diploma in Food Retailing NFQ Level 7, offered by the Department of Food Business and Development, UCC, and takes two years to complete;
- Retail Management Degree in association with Lidl NFQ Level 7, offered by Dublin Business School. The course is split 50/50 between college-based learning and work-based learning.
- MBA in Retailing, offered by the University of Stirling through the Institute for Retail Studies by distance learning.

The interviewees commented that, because of already existing programmes (some of which are listed above), third-level organisations already have strong links with retailers, such as Musgrave, Spar, and Lidl, and these organisations have company-specific programmes for their franchisees and staff. Regarding possible future forms of engagement between third-level institutions and the retail sector, interviewees believed that they were unable to give any commitments, due to the scale of the challenges and uncertainty facing the industry at present. Interviewees, however, were optimistic and cited some examples of strengthening partnerships between thirdlevel institutions and the retail sector. The Department of Food Business and Development, UCC, for example, has arranged with experienced buyers in Musgrave to deliver a series of lectures to students attending final year undergraduate courses and postgraduate courses, to add a new dimension to teaching and to improve employability of graduates.

# 3.8 Small and Medium Enterprises (SMEs)

## Brief Background to the Sector

According to the European Commission, an organisation, to be regarded as a small and medium enterprise (SME), must have less than 250 full-time equivalent employees, an annual turnover not exceeding €50 million or an annual balance sheet total not exceeding €43 million, and not more than 25% of the organisation can be controlled by another company which itself is not an SME.

## A Small Enterprise is defined as:

An enterprise that has fewer than 50 employees, and has either an annual turnover and/or an annual Balance Sheet total not exceeding €10 million.

## A *Medium-sized Enterprise* is defined as:

An enterprise that has between 50 employees and 249 employees, and has either an annual turnover not exceeding €50 million or an annual Balance Sheet total not exceeding €43 million.

According to Forfás (2007a), approximately half of the Irish workforce who are not employed in the public sector are employed in businesses that have a workforce of less than 50 people. This clearly demonstrates the importance of small enterprise organisations to the Irish economy and to the development of skills and training throughout the workforce. In the current economic environment, and particularly the threat to foreign direct investment (FDI), these smaller enterprises will be likely to have an even more central role to play in revitalising the Irish economy.

A three-year strategy document, *Transforming Irish Industry: 2008-2010,* published by Enterprise Ireland in October 2007, set out the following goals in terms of enterprise development in this sector:

- €4 billion in new export sales by 2010;
- Increasing to 800 the number of client companies engaging in meaningful in-company R&D (€100,000 spend annually);
- 55 companies engaging in significant in-company R&D (€2 million spend annually);
- 200 new high potential start-ups, 100 of which are to be in regions outside Dublin;
- Growing companies of scale: 225 companies achieving annual global sales of €20 million and 635 companies achieving global sales of €5 million (Enterprise Ireland, 2007).

Leadership, innovation, and growth are the fundamental themes underpinning the strategy. The strategy is driven by the philosophy that growth in global markets through the internationalisation of Irish companies is the key to wealth and employment creation in Ireland. Central to the attainment of continuous growth in exports is innovation that impacts on every facet of a business. Enterprise Ireland believes that innovation in its broadest sense is crucial to Ireland's future economic and social advancement.

## Identifying Learning Needs in the SME Sector

As the SME sector in Ireland is very diverse, a number of interviewees representing various industries in this sector were selected for inclusion in this research. Six interviews were conducted with the most senior executive available, representing the following industries:

- Catering and Hospitality
- Chemical/R&D

- Electronic Devices
- Engineering
- Information and Communication Technologies (ICT)
- Professional Services.

Interviewees representing the SME sector observed that, in general, existing education and training requirements are met in a quite haphazard fashion among the smaller SMEs, due to a lack of management skills and resources. The interviewees agreed that:

State agencies, such as Enterprise Ireland and County Enterprise Boards, are charged with developing SME businesses, resulting in specific training for entrepreneurs. Third-level education providers are also active in this area through formal enterprise development programmes such as the funded Enterprise Platform Programme (Interviewee, SME Sector).

Interviewees explained that most of the programmes offered to this sector are publicly financed. They were aware of a number of agencies who provide education and training programmes specifically tailored for the SME sector. Some examples of these include:

- Enterprise Ireland designed the OpenUp.ie website to help SME managers understand the use of information technology and e-business to improve their competitiveness and grow sales.
- The Irish Small to Medium Enterprises Association (ISME) provides its members with professional advice and information on training and development needs.
- Chambers Ireland develops and packages services that can be delivered to SMEs across the country through the Chambers Ireland network.
- County Enterprise Boards provide supports for new and established businesses, including advice, mentoring, grants and financial supports for training and growth.

Interviewees reported that there is also limited use of private education providers which would be company financed in order to provide highly specific, short-term training.

One of the interviewees representing the engineering SMEs in this research believes that these firms have been seriously undermined because of the economic downturn:

The engineering sector greatly benefited from the construction boom, when it employed a considerable number of apprentices in welding, fabrication, sheet metal construction, tool making and cutting. Local training centres would have filled courses for engineering apprentices every year over the last five years. It has come to our attention that, during the construction boom, smaller companies were too busy to send younger staff on block release and the number of apprentices did not grow in the engineering sector as much as would normally be expected. Small engineering companies received training courses from the private sector in building energy rating (BER), wind power installation and other related engineering courses. Those courses were part-funded by the FÁS continuing professional development fund and the Skillnets funding. This funding, however, is no longer available (Interviewee, SME Sector).

When asked about identifying learning needs for the sector, interviewees concentrated on generic rather than specific requirements. Interviewees, however, repeatedly emphasised the need for graduates to have handson experience when recruited to the SME sector. The interviewees explained that, as SMEs, they do not have the resources to train new recruits, but would expect them to be "able to make an immediate contribution to productivity and the bottom line".

Interviewees suggested that problem-solving skills were apparently lacking among recent graduates, including those with technical skills. All interviewees agreed that communication skills are essential for organisations in the SME sector. Interestingly, one interviewee in this sector suggested that:

Students on work placements and newly recruited graduates should be allowed to play around with concepts and machines and be allowed to make mistakes and thus learn from them. Organisations invest a lot of money for machines but some organisations are over cautious about machine usage and experimentation. That is not always a good thing because people are not being allowed to gain more valuable hands-on experience (Interviewee, SME Sector).

The owner-managers interviewed for this research identified the need for a management course which would help them guide their businesses through "these difficult times". Interviewees suggested that such courses might usefully include modules on innovation, delegation, operational management, and leadership. One of the owner-managers suggested:

Difficulty in allocating time is the biggest factor for the training of management. We would, however, encourage people involved in managing SMEs to attend night-time training if a specific course which would meet our training needs could be designed and made available. Online training would not be an option as the training should be practical and participatory (Interviewee, SME Sector).

Some of the interviewees suggested that they require graduates with more practical information technology skills:

Some graduates know only the theories and are not able to apply their knowledge as they do not have any practical hands-on experience. We need graduates that are able to design unique products so that we will not have to compete with cheaper Asian imports. We, therefore, want graduates and staff with the ability to use new technology and to design new products from scratch (Interviewee, SME Sector).

There was no consensus among interviewees in this sector regarding the optimum timing for delivering training programmes. Interviewees, however, were particularly concerned that training would not encroach on working hours. The majority of interviewees believed that most worthwhile training occurs 'on the job' and it was difficult to replicate this in an academic setting. A number of interviewees suggested:

If additional training courses were to be provided, the weekend would be the best time for employees to attend because everyone works late during the week. Organisations in our sector would not be in a position to release staff to attend training courses (Interviewee, SME Sector).

An alternative viewpoint was expressed by a number of other interviewees in this sector:

An SME demands long enough working hours from its employees so we should not expect them to take on work-related training or education at the weekend (Interviewee, SME Sector).

We would like to engage in up-skilling of our staff, however, time is the biggest difficulty rather than the cost of the training courses. We would be willing to have our staff trained during the working week if the training was in short half-day training sessions. We would also be prepared to accommodate their shifts (Interviewee, SME Sector).

It was interesting to note that a number of interviewees in this sector, were unaware of relevant programmes and services offered by third-level institutions. While they may have had a very limited interaction with their local third-level institution by availing of a particular service which they provided, interviewees in general, were unaware of some part-time courses on offer, or were unaware that occasional funding was available to facilitate joint research.

## Accreditation of Learning

Interviewees in the SME sector presented a mixed reaction to the value of having qualifications accredited:

In the main, accreditation is not a big issue for the SME sector. The sector is more inclined to favour recommendation, track record, or experience from a training provider rather than favouring accreditation. There may be some scepticism in the sector suggesting that accreditation might be just a quarantee of particular performance. This may reflect SME focus on optimum utilisation of resources and immediate results rather than long-term career development for employees (Interviewee, SME Sector).

The reaction time of higher education institutions is longer than the private sector can afford, and the roll out would take too long for a course to receive accreditation (Interviewee, SME Sector).

## One interviewee observed:

Employees like to see their credits building up and they like the idea of being able to attend courses at a pace that suits them and to store their credits for future qualifications. The accreditation of a thirdlevel qualification is an incentive for employees to undertake further study and to advance their careers (Interviewee, SME Sector).

All the interviewees representing the SME sector highlighted the requirement for graduates to have practical experience. These interviewees, however, expressed reluctance to engage in undergraduate placement programmes. They attributed this outlook on the lack of available resources, which would negatively impact on their ability to manage students and to train them correctly in the workplace. Two of these interviewees had previously been involved in student placement programmes.

Despite the mixed responses regarding the value of the accreditation of learning, all interviewees were willing to contribute to the development and review of programmes offered by third-level institutions. The interviewees were very interested in what the students were being taught, how they were being taught, and in the experience they were getting while at college. All interviewees were enthusiastic about contributing to the development of graduates who would be of practical use to them and to their sector in the future.

## Future Forms of Engagement between Third-Level Institutions and the SME Sector

The interviewees from the SME sector identified a variety of forms of engagement with third-level institutions, which they believed would be beneficial both to themselves and their organisations. All interviewees agreed that they value the expertise residing in third-level institutions. In the past, many of the interviewees had availed of information sessions provided by their local third-level institution. Some of the specific forms of future engagement suggested:

The SME sector could benefit from closer collaboration with higher education institutions. We would welcome the opportunity of networking more with staff from third-level institutions. Networking is vital for SME survival. Building up contacts with the higher education sector is very important. Having access to new technology would also be important to our sector. There is an impression among colleagues in our sector that there is no priority in the higher education institutions for industry to avail of equipment, to discuss issues, or to provide mentoring (Interviewee, SME Sector).

Technical training and relationships are considered important for the SME sector for gaining access to next generation technology and research. Access to specialised equipment would also be beneficial for us (Interviewee, SME Sector).

We would like to see future forms of engagement in the form of designing an engineering network management course. This could be designed between the two sectors and rolled out with some of the larger engineering companies in the region. A management development or leadership course should also be developed for this sector (Interviewee, SME Sector).

Some engineering companies could benefit from an operations assessment and from the application of some simple business tools that would help in the analysis and decision-making process (Interviewee, SME Sector).

Some people from our sector would like to have the opportunity to spend time in the higher education institution to understand the capabilities and abilities of the students prior to hiring them (Interviewee, SME Sector).

Training can be a two-way street. Industry, in some cases, may be more at the cutting edge of technology than the higher education institution, so industry could share this key information with academics and students (Interviewee, SME Sector).

A lot of people in our sector would benefit from training in the human resource management area. We would especially welcome short programmes delivered by staff from the third-level institutions in recruitment, effective performance appraisals, interviewing skills, and in health and safety (Interviewee, SME Sector).

All interviewees welcomed opportunities for future involvement and suggested how the current engagement could be strengthened:

We would like to avail further of expertise in the higher education institution, but, are not sure how to go about it. Some SMEs do not know who they should contact in the higher education institution to help with their particular issues and training needs. A single point of contact would work very well (Interviewee, SME Sector).

Access to students as potential employees should not be as restricted as it currently is in some higher education institutions, for example, to Master students. Sometimes higher education institutions are very protective of research and commercialisation of knowledge and are slow to give access to research findings. More access to current research would be of benefit to us (Interviewee, SME Sector).

We would benefit from further involvement with higher education institutions. At the moment, services provided by the third-level colleges, FÁS, and Enterprise Ireland are fragmented. If these and other service providers were working together we would get a better service (Interviewee, SME Sector).

For partnering projects, could the researcher from the higher education institution spend time in the company facility? (Interviewee, SME Sector).

All interviewees from the SME sector who took part in this research were satisfied with their past and current interactions with third-level institutions. Two of the interviewees had experience in dealing with more than three third-level institutions. Most of the involvement with third-level institutions, to date, has been with work placements, and one interviewee remarked:

Companies like the prestige of working with a higher education institution. When a relationship works it is of immense value to both partners (Interviewee, SME Sector).

Overall, the interviewees emphasised the importance of integrating what is included in third-level programmes with the requirements of SMEs. Interviewees repeatedly spoke of the importance, for students, of gaining practical knowledge and for the immediate application of that knowledge to the SME's productivity and profitability. Interviewees also stressed that students need to be given opportunities for relevant work-placement experience for future employment prospects, in addition to the content of their particular academic programme.



# 3.9 Tourism, Hospitality and Leisure Sector

## Brief Background to the Sector

The Tourism, Hospitality and Leisure sector is a critical generator of regional and national wealth in the Irish economy. The sector's contribution amounted to over €5 billion in 2008, or 3% of GNP. The sector is estimated to provide direct employment for almost 280,000 people, which is 8% of the workforce. Individual, small to medium-sized enterprises are the backbone of this industry, which competes in an increasingly international tourism marketplace.

Central Statistics Office figures show that there were over 7.8 million overseas visitors to the Republic of Ireland in 2008. This represents a decrease of 2.2% on 2007 figures, mainly due to worldwide economic changes during 2008. The performance must also be viewed in relation to 2007 which was a record year for overseas visitors in Ireland. There was a 33% increase in overseas visitor numbers between 2001 and 2007, with a marginal decrease in 2008.

In an increasingly competitive global market the Department of Arts, Sport and Tourism is very conscious of the need for the industry to be extra vigilant in the face of price and inflationary pressures, and because of exchange rate fluctuations. According to the Department, Ireland must also continue to provide the personal warmth of the traditional Irish welcome (www.arts-sport-tourism.gov.ie). Pressures from recent economic downturns are leading to a shift in Government policy. There is now a growing emphasis on the need to support enterprises in order to maintain their viability, to maximise employment, and to ensure that the industry is ready to respond to the economic revival as soon as it happens. Tourism, like many other economic sectors, depends strongly on climatic conditions.

The Tourism, Hospitality and Leisure sector in Ireland is developing in a complex environment of rapid economic and social change. The industry is now facing a new set of challenges in a volatile and dynamic market. Because of global economic conditions, the demand for tourism is difficult to predict in the short term and it is unlikely that the growth trends of recent years will continue.

One of the challenges for the sector is to recruit, train, and retain staff that will provide a highly skilled and flexible workforce. This is crucial in order to gain competitive advantage in what is a fiercely competitive global tourism market. Consensus is growing among policy makers that educational institutions and industry employers need to create partnerships in order to develop new ways to support the raising of skill levels in the Tourism, Hospitality and Leisure sector.

## Identifying Learning Needs in the Tourism, Hospitality and Leisure Sector

In order to identify learning needs of the sector, a number of semi-structured interviews were conducted with employers, Fáilte Ireland staff, and with other relevant sectoral representatives. All interviewees acknowledged Fáilte Ireland as the body charged by the Department of Arts, Sport and Tourism to provide training, as required, throughout the broad tourism sector. The interviewees also pointed out that tourism training and education is delivered mainly through four strands:

- The Fáilte Ireland training centres in Dublin, Cork, Limerick and Waterford (with temporary centres in Donegal, Galway, Kilkenny, and Wexford);
- Third-level college-based education programmes delivered mainly by DIT and the Institutes of Technology, with a small contribution from the Universities:

- Continuing Professional Development through the Fáilte Ireland Tourism Learning Networks and a range of other specifically designed courses. Fáilte Ireland courses for CPD include a mentoring for industry training programme, workshops for chefs on menu engineering and cost controlling, a national online tour guiding programme, trainee management development programmes, and the Optimus programme which is a business excellence programme;
- On-site work-based learning. Work-based learning is used as an element in craft skills development courses and is gaining an increasing role in the delivery of focused industry-related training.

Fáilte Ireland (2005a) recognises that the Tourism, Leisure and Hospitality sector is characterised as being 'diverse, fragmented, small and non-collectivist with each sub-sector operating an autonomous level'. As one of the interviewees summarised:

Tourism embraces a wide range of business and services in thousands of enterprises, most of them small to medium-sized enterprises. There are ongoing challenges in relation to recruitment and retention of staff and to the requirement for training of existing staff. Also, the rate of new staff is relatively high (Interviewee, Tourism, Hospitality and Leisure Sector).

Fáilte Ireland has also emphasised the importance of embedding sustainability in tourism and hospitality programmes. The interviewees from the Tourism, Hospitality and Leisure sector in this research identified the need for both generic and specific skills:

There is an ongoing requirement for continual professional development programmes to enable staff to update their skills. Delivering real skills that are appropriate to the workplace is important. Staff need to be trained to meet both the immediate needs of the industry and also to be educated to enable them to innovate and thus move the industry forward in the long term (Interviewee, Tourism, Hospitality and Leisure Sector).

There is a need for advice and training for SMEs, especially for courses on systems and procedures, for costs management, and for more effective marketing, like using the Internet and other marketing initiatives (Interviewee, Tourism, Hospitality and Leisure Sector).

There is a requirement for training courses on customer care skills to help trainees to develop good interpersonal skills and to anticipate customer needs and wants (Interviewee, Tourism, Hospitality and Leisure Sector).

There is a need for qualified hospitality managers and for management training in time management, assertiveness, conflict resolution, delegation, and for general people-management skills. International staff, who now comprise a sizable number of staff, especially in the hotel sector, also require language training (Interviewee, Tourism, Hospitality and Leisure Sector).

More training in IT skills is required. There is also an ongoing requirement for skilled and qualified chefs, restaurant and waiting staff, and accommodation assistants (Interviewee, Tourism, Hospitality and Leisure Sector).

In 2006, nearly one-third of Tourism, Hospitality and Leisure staff came from outside of Ireland, with approximately 23% from EU countries and 7% from non-EU countries. Not all these staff require additional training, but, where there is an identified training need, tourism providers identify English language and customer care training as the priority areas (Interviewee, Tourism, Hospitality and Leisure Sector).

Interviewees were aware of the Fáilte Ireland (2005b) strategy on cultural diversity and training of non-Irish employees, which includes creating awareness of the benefits of embracing cultural diversity and issues regarding human resource management and legal compliance. The cultural diversity strategy also highlights the importance of introducing improved induction programmes and the creation of effective policies regarding integrating international staff.

Following the identification of the many needs outlined above, interviewees were asked which delivery mechanisms would be most suited to their sector. There was a general consensus among interviewee replies:

Work-based learning is a methodology that is gaining increased attention in the tourism industry. Work-based learning has been a feature of craft courses in the tourism sector for some time. For the future, Fáilte Ireland has a target of a 70:30 ratio of work-based to educational institution-based training and education for craft skills training programmes (Interviewee, Tourism, Hospitality and Leisure Sector).

Recognition of prior learning is an important component in the delivery of work-based learning programmes. Recognising prior learning is particularly important in tourism and hospitality where many of the more mature employees have experience and skills but no recognised qualifications. Building in the recognition of prior learning to work-based learning courses would be important to our sector (Interviewee, Tourism, Hospitality and Leisure Sector).

Fáilte Ireland offers the recognition of prior learning to persons in the industry with skills in professional cookery and bar management. The recognition of prior learning process is part of a Fáilte Ireland strategy to enable skilled personnel in the sector to have their learning accredited. Fáilte Ireland has recommended that education providers and industry should collaborate to design feasible frameworks for the accreditation of prior learning (Interviewee, Tourism, Hospitality and Leisure Sector).

Overall, it is clear from the interviewees in this sector that work-based learning and the recognition of prior learning are the preferred methods of up-skilling staff. Interviewees underscored that it was important for learning opportunities to be convenient, timely, and relevant. All interviewees were aware of programmes on offer in which formal and accredited programmes were developed, based predominantly on the knowledge and skills gained in the workplace and supplemented by educational inputs, - as one interviewee summarised, "This is an example of effective credentialing of workplace learning".

## Accreditation of Learning

Interviewees believed that it was important to value all learning and, particularly, learning which gained in the workplace:

Fáilte Ireland recognises that valuable learning can take place in the workplace and this training and learning needs to be validated and accredited (Interviewee, Tourism, Hospitality and Leisure Sector).

It is important to focus on leveraging the potential of work-based learning and to give employees credit and accreditation for this learning (Interviewee, Tourism, Hospitality and Leisure Sector).

There should be more development in the sector for the accreditation of the prior learning. The sector should also support a range of training which could be done in industry and subsequently accredited (Interviewee, Tourism, Hospitality and Leisure Sector).

Interviewees representing this sector also believed that their continuous professional development programmes should be formally recognised and accredited as these programmes are integral to the aim of lifelong learning.

## Future Forms of Engagement between Third-Level Institutions and the Tourism, Hospitality and Leisure Sector

Interviewees identified a number of areas in which further engagement with third-level institutions could benefit both the general tourism industry and the many individuals employed in various occupations in this very wideranging sector. Specifically, in relation to training, employees suggested that:

Modern techniques of delivering training should be utilised and timing of courses should be flexible to reflect and facilitate the working hours, shift systems, and seasonality that is common throughout the sector. There is room for further engagement between educational institutions and industry in developing outreach courses and e-learning courses (Interviewee, Tourism, Hospitality and Leisure Sector).

There is room for greater involvement between the two sectors particularly if our sector could have input into course design to ensure that course content is relevant to the industry. Employers often have difficulties in releasing staff for training, so on-site training would be a big benefit to companies. Employers are experiencing difficulties for funding training for staff, so on-site training would also help to reduce costs of training (Interviewee, Tourism, Hospitality and Leisure Sector).

A number of interviewees also identified benefits which could be gained from mentoring. These interviewees believed that third-level institutions could be encouraged to provide mentors, especially for smaller enterprises:

Mentors from local third-level colleges could be used to facilitate learning in the hospitality sector. This could be useful in helping people who are promoted from the ranks of line staff to managerial positions to deal with difficult challenges. If mentors or trainers were sourced externally, for example from thirdlevel colleges, they would have more authority and more impact than internal staff mentors (Interviewee, Tourism, Hospitality and Leisure Sector).

There is always room for more training or mentoring in areas such as induction. In some best practice establishments, head chefs and sous-chefs are skilled as trainers and are also involved in the development of the organisation's training plan. In Germany and Austria, for example, chefs with responsibility for training staff receive two to three weeks of tutor training, so there is a role for third-level staff to further engage with us in ventures like this (Interviewee, Tourism, Hospitality and Leisure Sector).

Opportunities to practice skills may be limited in some establishments, especially in smaller enterprises that have a restricted level of skills and learning opportunities. Smaller establishments may not have the ability, the will, or the time to provide the necessary mentoring and structured environment, and that is where further engagement with third-level colleges would be helpful (Interviewee, Tourism, Hospitality and Leisure Sector).

Interviewees stated that best practice organisations view training as an important investment in their businesses, and suggested that proper training increases staff morale and reduces staff turnover. All interviewees repeated that they would welcome further engagement with their local education institutions for the provision of further training and development for their staff. One of the many interviewees who articulated the case for stronger partnerships between third-level institutions and the sector, for the future of Irish tourism, suggested:

A lack of engagement and linkage between industry and the education institution will create discontinuity between the effective integration of theory and practice. There will also be difficulties around employer and teacher communication and co-operation if the existing partnerships are not maintained. These partnerships are vital for further development in the sector (Interviewee, Tourism, Hospitality and Leisure Sector).

Interviewees, however, cautioned that, if the engagement between third-level education institutions and the Tourism, Hospitality and Leisure sector are to be strengthened, there are implications for lecturers involved with learners and employers in the provision of work-based learning programmes. The role of the lecturer will change from the traditional form of programme delivery, and greater emphasis will be required for the preparation and planning elements of new programme design. Interviewees also believed that, if new programmes are to be developed, the quality of the programmes will depend on the strength of the relationship between industry and the academic world. The interviewees identified that the newer models of work-based learning programmes require the academic to become a manager of the learning process, in addition to identifying the best ways to support learners. Finally, interviewees perceived that the culture of the workplace and the way learning is organised and supported in that workplace establishes what can be learned efficiently and effectively. As one interviewee succinctly observed, "A significant determinant of the future success of the tourism industry is the quality of the relationship between the third-level institution and the industry".

The research findings presented above on the nine sectors show how many examples of excellent academia-industry interactions and partnerships exist, but also that many of these are isolated successes and not institutionally embedded in the mainstream of higher education delivery. The REAP project aims to provide a template for the creation of meaningful and sustainable partnerships between employers and third-level academic institutions. The starting point for this more in-depth engagement could usefully begin with analysing the learning needs of the nine employment sectors discussed above. This, in turn, should facilitate further and deeper engagement between different industry sectors and local third-level institutions.



# Analysis of Sectoral Learning Needs

## 4.0 Introduction

Partnerships between employer and higher education institutions have existed for decades, mostly in research and development. The types of partnerships established between higher education institutions and employers vary greatly, depending on the needs of the parties involved. Additionally, motivations to develop partnerships vary according to the needs of both parties involved. The collaboration process between employers and academia usually begins with each party identifying what might be acquired from the partnership, in the context of their respective needs. Identifying learning needs of organisations is one means of developing new partnerships or of strengthening and formalising existing academic—employer partnerships. The identified learning needs analysed in this chapter represent the research conducted by members of the REAP working group with a selected employer sector in their local region. The findings of the research should help to inform decision-making by stakeholders in industry and education sectors when considering engaging with each other for mutual benefit. The findings can also be applicable to sectors in other regions of the country not addressed in this study.

The learning needs analysis of the nine sectors included in this research provide a useful checkpoint for third-level institutions when examining if:

- Current and future learning needs are being adequately met;
- Additional programmes or courses are/will be needed;
- Third-level education institutions are positioned to meet the identified learning needs;
- Current and future learning needs are not being met;
- Third-level education institutions are unable to meet the learning needs identified.

# **4.1 Community and Voluntary Sector**

The findings of the research suggest that one of the ways of overcoming the current problems facing community and voluntary organisations is through better interaction and cooperation with higher education providers. The nature and circumstances of community activity point to a significant demand for inter-sectoral engagement and collaboration, and highlight the role that third-level institution could play in meeting the education needs of community and voluntary organisations. This research reveals a number of issues which need to be addressed to strengthen the consultative and collaborative processes between third-level institutions and the wider community.

As Ireland is currently in one of its worst economic phases in decades, generating income at local level through innovation and cross-sectoral engagement is even more critical. The learning needs identified in this study provide opportunities for third-level institutions to be innovative and to move towards new ways of education delivery to address current challenges. As identified by the interviewees from the voluntary sector, there are a number of areas where learning needs are currently not being met. The academic staff involved in this research suggested that third-level institutions are well-positioned to respond to the needs and aspirations articulated by the community and voluntary sector interviewees. In particular, there is scope for third-level institutions to further engage in the following areas with the voluntary sector:

## Third-Level Academic Expertise

Building links was identified as an area where the third-level institution might lend support in terms of its expertise, particularly in the area of strategic planning, research skills, policy, and business planning.

## **Developing Networks**

Interviewees identified a need for the establishment of networks for training purposes, to address growing concerns and complexities articulated by community and voluntary organisations. The interviewees also recognised as important the support of third-level institutions for community and voluntary activities and for developing relationships between sectors for sharing information and advice.

## Management Expertise

In the areas of communication and building relations between sectors, specific categories were identified pointing to a significant deficiency for policy training within the voluntary sector. This is compounded by the sector's substantial lack of expertise in commercial and financial management. The study shows that this is an area with potential for third-level institutions to reach out to these organisations, particularly those that are struggling, and for the education providers to expand the parameters of community development through the provision of knowledge and expertise.

## Representation on Boards

The importance of academic representatives on the boards of community and voluntary organisations was viewed as significant to the success of organisations. Academic board membership acts as a means of establishing meaningful networks between the higher education institution and organisations in the wider community.

## Planning and Research

Interviewees from the voluntary sector pointed to specific categories of education needs, such as leadership development, and also the area of investment in planning and research, particularly for smaller organisations. Research was considered as a fundamental dimension of community development but that if it was to benefit communities, research must be carried out in the context of those whom the community or voluntary organisation seeks to serve

#### Revenue and Funding

Smaller and less established community-based organisations face particular problems in terms of funding and could benefit from participating in evaluative research and the generation of new ideas to help mobilise specific needs.

#### Teaching and Learning Potential

Interviewees outlined important information relating to scope for developing more diverse ways in which teaching and learning might be facilitated, which, in turn, serve to strengthen ties through participation and the sharing of knowledge. This should provide richer learning experiences through new and integrated practices that can ultimately transform communities.

#### Student Placements

The scope for education institutions to allocate their student business placements in the community was identified as an important way in which third-level institutions could facilitate and provide vital supports to community organisations.

## **Concluding Remarks**

Building closer links with the community sector will prove challenging for education providers but the research findings suggest that, if the inclusive element of community work is to be recognised, these institutions have an obligation to reach out not just to those in third-level institutions but also to those outside it. If an inclusive and sustainable environment is to be created, third-level institutions and the community and voluntary sector must work together to ensure that results can be achieved through exploring new and diverse learning possibilities. As stated in a recent NESC report:

It is also imperative to adopt new measures that protect those now experiencing loss of employment, income, savings and pensions. . . . Only integration and innovation in how Ireland's educational system, training and labour market policies, and welfare state respond will ensure that a new problem of long-term unemployment is not created. . . . The Council urges the immediate establishment of a Jobs and Skills Summit at which the labour market authorities, and all bodies with a capacity to deliver high quality, market relevant training and education programmes, would identify and implement a set of measures feasible and effective in meeting these goals. (NESC, 2009: xiii).

Finally, the research findings suggest further opportunities for third-level institutions to develop more detailed strategies in response to the NESC report and to engage in mutually beneficial relationships with the community, voluntary, and social economy sector in Ireland.



# 4.2 Energy and Sustainability Services Sector

The findings from the research, across all categories of interviewees, indicate that there is a willingness to engage at high level with third-level academic institutions. All interviewees acknowledged that their professions had already established strong links with academia and they had invested considerable time in developing these partnerships. The interviewees emphasised that they valued highly the collaboration with third-level institutions, and, accordingly, are committed to engaging further with academia. Interviewees in this sector believe that, particularly in the current economic climate, maintaining and strengthening links with academia are now more critically important. Activity in the construction sector, for example, declined each month since June 2007, therefore, re-skilling and up-skilling is considered essential for the future prospects of this cohort of workers.

As evidenced by the responses of interviewees in this sector, there are a number of specific learning needs which are currently not being met. Interviewees stated that they would welcome opportunities for future engagement with third-level institutions to address these needs. The interviewees representing the energy and sustainability services sector in this research identified a number of areas where third-level education providers could further meet these learning needs, and, in turn, develop more productive partnerships with the world of work. The interviewees suggested that the learning needs of their sector could be addressed if third-level institutions proactively engaged with them in the following areas:

## Human Resource Management Expertise

The research revealed that many organisations in this sector have less than ten staff. Employers in this category, therefore, may not possess the necessary expertise or have sufficient time for dealing with human resource management issues. The research findings suggest there is potential for third-level institutions to provide short training courses on specific areas such as recruitment, selection, managing performance, dispute resolution, and employment legislation.

## Accreditation of Learning

The research findings suggest that accreditation is now becoming increasingly important for this sector. The expertise of third-level academics would be considered valuable in having new discipline-specific courses approved at the appropriate NFQ level. Recognition of non-formal and informal learning would also be considered important for accreditation purposes.

## **Continuing Professional Development**

The research conducted for this report reveal that continuing professional development is an important element for professionals in this sector. Third-level academics could usefully provide various aspects of continuing professional development activities relevant to this sector.

## **Guest Lecturers**

A number of interviewees believed that their professional bodies would benefit from the expertise of academics addressing workshops and annual conferences.

## **Concluding Remarks**

All interviewees in the six categories representing this sector stated that many of their organisations are currently experiencing redundancies. Interviewees, however, recognised that the environmental and energy areas have potential to offer new opportunities for professionals, particularly those formerly engaged in the construction

sector, to re-skill and change career focus. As a result, all interviewees identified opportunities for further provision of courses incorporating energy assessment of buildings, strategic environmental assessment, and waste management. As government and European Union regulations and legislation are increasing, organisations now require qualified people with environmental training. Environmental control and assessment are relatively new disciplines and require the amalgamation of a variety of existing and new technical skills. With growing concerns over pollution, global warming, and corporate responsibility, and with European Union and Irish government regulations becoming more stringent, environmental management looks set to continue as a growth area.

## 4.3 Financial Services Sector

The interviewees from the financial sector indicated that they would welcome new courses broadly designed to encapsulate the full financial services sector. The interviewees expressed interest in providing advice for the content of such courses, and would be willing to work with academics in the area of new course development. One obstacle, however, which was identified in relation to new course development, was the length of time it takes to develop and launch courses. Interviewees perceived that currently it takes too long to implement a new course. The interviewees also believed that the learning needs which they identified are currently not being met. They identified a number of areas which they believed their sector would benefit from further interaction and strengthening of partnerships between third-level institutions. These include:

## **Dedicated Qualifications for the Financial Services Sector**

The research revealed that most staff employed in this sector have third-level qualifications. Interviewees, however, observed that there is currently a dearth of provision of dedicated third-level qualifications for the sector. This gap in programme provision could usefully provide an opportunity for third-level institutions and the financial services sector to jointly design a dedicated programme for employees in the sector.

#### **Provision of Short Courses**

In addition to the identified demand for full-length graduate and postgraduate programmes, the research findings revealed the need for focused short courses. The design and delivery of short courses could also be jointly developed by academics and industry specialists from the financial services sector.

## Recognition of Prior Learning

As identified in the research findings, the majority of employees in this sector are highly qualified. As there is no specific third-level financial services qualification currently available, the recognition of prior learning should prove an attractive option for employees in the sector who wish to up-skill. Recognising prior learning also affords academics and financial services staff an opportunity to work together and, in turn, to strengthen the existing partnerships between the sectors.

#### Work-Based Learning

The interviewees observed that their organisations provide conducive opportunities for academics to acknowledge new types of learning practices associated with the concept of work-based learning. Financial services interviewees perceive work-based learning as an attractive option for employees to gain qualifications by drawing on recent or current everyday work practices. Work-based learning, therefore, provides an attractive option for third-level institutions to further engage with this sector.

## **Developing Local Networks**

The research findings also indicated a demand for the establishment of local learning networks. These networks have been identified as opportunities for a two-way sharing of knowledge between academics and financial services staff. Such networks may be of more importance to staff in the financial sector than in other sectors, given that many organisations in this sector have their headquarters outside of Ireland and thus making networking more difficult.

## **Concluding Remarks**

The current economic climate presents considerable challenges but also presents opportunities to those working in financial services. The National Competitiveness Council (2009) identified mathematics as one of the key skills for future development. Mathematics is particularly important, not only for the financial services sector, but also because it underpins many other disciplines such as science, technology, engineering and business. The Expert Group on Future Skills Needs (2008), among others, however, has raised concerns that failure rates in mathematics over recent years have remained stubbornly high, thereby, limiting the educational and employment prospects of a significant number of young people. The Expert Group also recommended that consideration should be given to developing a professional degree at Master's level in mathematics, a part-time higher diploma in mathematical education, and a four-year honours degree in mathematics education. The Expert Group concluded that implementation of these high-level degrees should contribute to improving national mathematical performance. It is clear, therefore, that the development of such courses presents third-level institutions with the opportunity to develop these courses in tandem with industry partners.

# 4.4 High Potential Start-up (HPSU) Enterprises

Enterprise Ireland reported that the regional spread for High Potential Start-up enterprises shows that almost 60% of these new companies are located outside of Dublin. The results of the research conducted for this report, therefore, should be applicable to High Potential Start-up enterprises across the country.

Hugh Cooney, Chairman of Enterprise Ireland, recently remarked: "Given the impact of the current market conditions on Ireland, 'growing our own' enterprises has never been more important. These new companies play a really significant part in stimulating local economies and employment, fostering the climate of innovation in Ireland and translating Irish entrepreneurial ambition and potential into commercial reality" (www.enterprise-ireland.com).

Interviewees representing the High Potential Start-up enterprises in the current research believed there is further scope for addressing their current and future learning needs through partnerships with their local third-level institution. Some examples of future cooperation between academia and High Potential Start-up enterprises include:

#### **Short Course Provision**

All interviewees would welcome input from academics on delivering short courses specifically tailored to their identified learning needs. Interviewees are willing to work with academics in developing these courses, which would ideally be delivered in their own premises or through online distance learning.

## Mentoring

Interviewees argued that they need mentors for their respective businesses, and suggested that if academics were prepared to act as mentors it should be very beneficial. The interviewees identified a number of topics across various disciplines which they believed could be addressed by mentors immediately.

## Third-Level Research

The findings further illustrate that this sector would benefit from research conducted in third-level institutions. As many of these enterprises are operating in knowledge-intensive sectors, the interviewees suggested that having access to new cutting-edge research would be very valuable to them.

## Access to Technology

Enterprises in this sector are at an early stage of development, and generally employ small numbers but, because of funding constraints, they may not always have access to the most up-to-date technology. The interviewees believed that if a system could be created whereby they could have access to technology in third-level institutions at off-peak periods it would greatly benefit themselves and their businesses.

## **Concluding Remarks**

The current economic downturn underscores the importance of stimulating entrepreneurship through High Potential Start-up enterprises which, according to the Tánaiste, are "the life blood of a thriving indigenous business sector". Enterprise Ireland recognises that the international trading environment for all companies is very challenging, but it believes that even in these difficult times there are significant opportunities for new export-oriented businesses. Commenting on the performance of this sector during 2008, Tom Hayes, Head of High Potential Start-ups at Enterprise Ireland, said: Ireland's High Potential Start-ups are operating in a broad spectrum of knowledge-intensive sectors and are indicative of the areas of opportunity – life sciences, bio-tech and medical technology, food, telecommunications, and niche areas including compliance and risk management and areas that contribute to productivity improvement. These are sectors in which Irish firms can create a sustainable competitive advantage with significant market knowledge and by continually anticipating and satisfying complex customer needs" (www.enterprise-ireland.com).



# 4.5 Legal Sector

The research findings revealed that, because of the current economic climate, there is a shift in focus from some of the more traditional aspects of law to non-economy-based areas. This recent shift in emphasis to different areas of law means that new learning needs have been identified and these needs are currently not being fully met. The various stakeholders representing the legal sector in this research believed that these new learning needs could be met through further involvement with academia. The interviewees specifically highlighted areas where the legal sector would benefit from strong partnerships with their local third-level institution. These include:

#### Work Placements

All interviewees in this sector strongly advocated that work placements should be included as a mainstream feature of all undergraduate law degrees. The interviewees suggested that work placements could provide opportunities for academic law faculty staff and the legal profession to work together in developing a uniform approach in order to enriching the student experience.

## **Continuing Professional Development**

Interviewees suggested that there is considerable scope for third-level academic law staff to engage more fully with the legal practice for providing seminars, workshops, or more problem-based continuing professional development events. There is now a demand for training in the use of online databases, and industry-specific customer relationship management tools. The concept of client confidentiality is one of the top issues facing any legal employee; therefore, the area of information technology security has major implications for this sector. The legal profession interviewees in this research identified information technology proficiency as a priority among practitioners.

#### LLM (Practitioner Master's)

The research findings strongly suggest the need for a practitioner Mater's degree to be developed and delivered. The interviewees believed the LLM would be highly valued by those in practice. Preliminary research on the demand for LLM degrees indicates that it is strongly anticipated by practitioners as a means of advancing their personal knowledge and education, and in facilitating changes in career focus necessitated by current economic circumstances.

#### Networking

All interviewees affirmed the importance of networking for legal professionals. Academic institutions could act as venues for members of the legal profession in general, members of the law society, local and national judiciary, and law faculty academic staff to avail of such networking opportunities. These networking opportunities could also be used to host continuing professional development activities.

# **Concluding Comments**

The research findings have identified that, because of the current economic downturn, professionals in the legal sector are required to move to new areas of specialisation and to engage with up-skilling. As identified in the research findings, the legal profession is in transition, and legal enterprises are moving from a very traditional environment in order to keep pace with the technology of the twenty-first century. This modernisation will present numerous opportunities for the profession. Finally, the legal practitioners interviewed for this research were unanimous in their support for furthering their existing partnership with third-level institutions and pledged to work closely with law faculty staff to ensure the introduction of the LLM postgraduate degree.

## 4.6 Pharmaceutical Sector

The research conducted for this report reviewed both the general pharmaceutical sector and the biopharmaceutical sector. Identifying learning needs of the general pharmaceutical sector was considered important in the southern region because of a high concentration of major companies engaged in pharmaceutical production in that location. Identifying specific learning needs of the biopharmaceutical sector was considered important in the east region because 29% of national biopharmaceutical employment is in this area. It has been argued that innovation performance, productivity, and profitability can be higher among geographically proximate firms in contrast to the case with geographically dispersed firms. The Industrial Development Authority (IDA) is seeking to develop a self-reinforcing pharmaceutical/biopharmaceutical sector by stimulating foreign direct investment, mainly through tax relief and substantial research and development funding. To realise these benefits the IDA recognises the necessity for a critical mass of talent, support infrastructure, and sophisticated business services in cities and regions. In line with IDA thinking, interviewees in the current research identified the need for building critical mass and further up-skilling employees in the sector. A number of learning needs which are currently not being met were also identified by interviewees, and they added that the sector would welcome further interaction with academia to help meet these requirements. Some of the immediate areas identified for further development of many existing partnerships between academia and the sector include:

## Soft Skills Course Provision

Interviewees specifically identified benefits for this sector from courses on soft skills. As identified in the research, employees in the pharmaceutical sector are highly skilled in technical and specialist areas, but many new graduates do not appear to have the desired soft skills or business acumen for operating in this environment. The pharmaceutical sector would facilitate the delivery of such courses, in their organisations, by local third-level academics.

## Accreditation of Work-Based Learning

The findings illustrate, again because of the current economic downturn, that it is now timely to address the accreditation of work-based learning so that operators in the sector might up-skill and move up a level of the NFQ. All interviewees believed that their local third-level institutions are well placed to address this learning need.

## Recognition of Prior Learning

Closely related to work-based learning is the recognition of all learning (formal, informal and non-formal). Interviewees in this sector were enthusiastic about the prospect of having uncertified prior learning formally recognised, particularly, for operating staff in the sector. Interviewees affirmed that staff from local third-level organisations could play a strong role in achieving this aim.

## Student Placements

The findings suggest that the provision of student placement opportunities benefits both their own sector and the academic world. Interviewees from the pharmaceutical sector would be willing to work closer with academics to ensure that maximum benefit is achieved for the student, the industry, and the academic institution.

## Research and Development

The findings from this study confirm that research and development is an integral part of this sector. All interviewees would like to have stronger links between academia and the pharmaceutical and biopharmaceutical sector for new research and development opportunities. Many employees in this sector and academic staff in local third-level institutions are engaged in collaborative research, but interviewees believed that both sectors would benefit if this collaboration were established on a more formal basis.

# **Concluding Remarks**

The IDA confirms that the reliance on local and national training and development resources strongly contribute to the pool of talent necessary for innovation and regional development in the pharmaceutical sector. Local third-level institutions are well-placed to provide additional training and development at all levels to this sector. The biopharmaceutical sector, in particular, has been identified as an area of strong potential growth and also one which is already contributing to the culture of innovation and is helping to build Ireland's smart economy. The Government has also identified the development of the biopharmaceutical sector as one of the country's best options for future industrial development. Finally, according to PharmaCareers, "biopharmaceuticals impact on the 21st Century will be as significant as the Microchip effect on society and industry in the second half of the 20th century (www.pharmacareersireland.com).

## 4.7 Retail Sector

Interviewees representing the retail sector in this research acknowledged that it does not treat learning, training and development as current priorities. The research findings suggest that the biggest issue facing the retail sector at present is the collapse in consumer spending. Total consumer spending (of which retail spending is a sub-set) is expected to have fallen by 6% in 2009 (when motor sales are included, the annual deterioration was 17.9%). In 2008, retail sales fell by the largest annual drop ever recorded.

Figures released by the Central Statistics Office in September 2009 showed that 29,000 people who previously worked in retailing joined the Live Register from the middle of 2008 to the middle of 2009. Employment prospects, therefore, for the sector were considered a very serious concern for the future. Given these difficulties, interviewees in the retail sector believed they are currently not in a position to commit to any form of learning, training, or development activities. The interviewees observed that while the current economic difficulties are affecting all sectors of the economy, this is particularly the case within the retail sector, which is very much reliant on consumer confidence and on their levels of disposable income. Interviewees also suggested that currently consumer spending is remaining very weak and is expected to fall further in 2010.

# 4.8 Small and Medium Enterprises (SMEs)

Interviewees in this sector believed that closer cooperation and collaboration with their local third-level institutions is critically important to their sector, particularly in the current economic downturn. These sentiments resonate with the findings of the most recent survey of trends conducted by the Irish Small and Medium Enterprise Association (ISME), which showed that almost two-thirds of SMEs are under threat and suffering in a fraught trading environment with an 83% decline in sales. The ISME report also noted that construction companies and retail companies in this sector are particularly vulnerable due to lack of business confidence and falling employment. The interviewees outlined a number of areas which they believed third-level institutions could usefully assist them to make their businesses more profitable. These include:

## Work-Based Learning

Interviewees in this sector outlined many reasons for closer involvement with their local third-level institutions, but highlighted the gaining of formal credit for work-based learning as a key priority. Interviewees would welcome the opportunity for academic staff to give credit for work-based learning, and therefore help employees in this sector to move up the NFQ levels.

## Recognition of Prior Learning

Interviewees believed that gaining recognition for all types of learning is of paramount importance for this sector, particularly as many enterprises are started by one or two individuals who have the practical experience and business knowledge but might not have certification for their learning. Additionally, because of the small scale of many of these enterprises, it is not feasible to release employees to attend third-level institutions.

## **Networking Opportunities**

As stated in the research findings, "networking is key for SME survival". Interviewees outlined that many organisations in this sector very often depend on contacts and word-of-mouth recommendations, thereby highlighting the need for networking opportunities. Interviewees believed that local third-level institutions could host networking events which could give organisations in the sector opportunities to showcase their products. Interviewees would also welcome quest lectures from academia at these networking events.

#### **Short Course Provision**

The research findings identified the need for short courses specifically targeted at this sector, for example, courses for managers on management and business development, and for employees on soft skills, including teamwork, sales, and interpersonal communication. The Interviewees suggested that flexible delivery methods are most suited to this sector. Interviewees would welcome online provision and face-to-face delivery of short courses in their own premises by third-level academic staff.

## Access to Research

The findings indicate that, due to time and financial constraints in this sector, owners and employees may not always have access to the most up-to-date research available. Interviewees indicated that they would welcome further collaboration with their local third-level institutions to gain access to recent research and also to promote further research.

## **Concluding Comments**

There are currently 160,000 SMEs in Ireland. Interviewees in this research believed that these will play a leading role in Ireland's future economy. The Tánaiste and Minister for Enterprise, Trade and Employment recently stated that "SMEs are central to our economic development". Interviewees in the current research also emphasised the importance of SMEs to regional and local development and the need to move away from an over-reliance on foreign direct investment and, instead, to increase the development of indigenous enterprises. As many SMEs are currently experiencing the impact of the recession, the interviewees argued for greater support from partnerships with local third-level institutions.

# 4.9 Tourism, Hospitality and Leisure Sector

All interviewees acknowledged the existing links between the Tourism, Hospitality and Leisure sector with local third-level institutions. The research findings suggest that these links are now more important than in previous years, because of the difficult period of readjustment the sector is going through. The interviewees optimistically believed that the Tourism, Hospitality and Leisure sector is resilient and that it will prosper and grow in the future. The interviewees also suggested that the future success of the sector will depend on the recovery of competitiveness, which has not been apparent in recent years, and on a capability to respond with flexibility to changes in the market place.

The interviewees indicated that utilising the collective knowledge of academia and sector-specific specialists should help to bring Ireland through the current recession. The main areas identified for strengthening partnerships between this sector and local third-level education providers include:

#### Work-Based Learning

The research findings indicate that work-based learning is considered an important element of programmes for expanding this sector. Interviewees, however, would welcome further development and accreditation of work-based learning in all third-level programmes offered to this sector. The interviewees representing this sector believed that third-level institutions could develop more diverse assessment methods, incorporating work-based learning, which would identify the necessary learning outcomes but still maintain high academic quality standards.

#### Work Placements

Undergraduate work placements form an important part of the learning experience in many programmes for this sector, however, the quality of the experience varies widely and a variety of approaches are adopted for awarding credits and assessing learning outcomes. Interviewees identified opportunities to work with their local third-level institutions in order to develop clearer guidelines for work placements, including agreed statements of expectations, learning outcomes, and assessment methodologies appropriate to the various NFQ levels.

## Recognition of Prior Learning

All interviewees believed that recognition and accreditation of prior learning are important and necessary for all programmes offered to this sector. Interviewees in this sector would be interested in working with their local third-level institutions to develop short courses which would lead to minor awards focusing on specific work-based learning skills and competencies. Fáilte Ireland has also recognised that further collaboration between the tourism sector and local third-level institutions in relation to the recognition of prior learning is urgently required.

## Continuing Professional Development

Interviewees in this sector would welcome more interaction with third-level institutions in relation to continuing professional development. Interviewees believed that continuing professional development is a key component of lifelong learning, for organisations and individuals. Continuing professional development also encourages networking and partnership among professionals and among the groups they are associated with, particularly as many enterprises in this sector have relatively few employees. Interviewees in this sector believed that third-level academic staff are well-placed to provide continuing professional development activities.

## Mentoring

Interviewees outlined the importance of mentoring and learning 'on the job' for this sector. Interviewees believed that employers could engage further with their local third-level institution and avail of a mentoring module which would enable them to perform their mentoring role more efficiently and effectively. Interviewees also believed that mentoring plays a very important role for work placements in this sector.

## **Concluding Comments**

All interviewees in this research, while acknowledging that the sector is operating under challenging economic conditions, are committed to improving their business capability during this difficult period. Interviewees, however, acknowledged that the recession has provided new opportunities for the sector to be more innovative, cost-focused, and more competitive. Interviewees also observed the changing trends in this sector in relation to online bookings, but believed that online marketing can provide them with further opportunities to boost their businesses in light of changing tourism patterns.

The research findings strongly indicate that the sector would benefit from closer collaboration between thirdlevel institutions, Fáilte Ireland, and individual tourism enterprises. This view is supported by Dr Stewart Stephens, Managing Director of Gulliver Ireland, who called for a partnership approach for providing an integrated Irish tourism product. He suggested that "Individual tourism businesses and regions need to practically address the cost and value perceptions that prevail so that better value, innovative online marketing and effective tourist products awaken tourists, both domestic and visitors alike, to thinking of Ireland as a must-book destination" (www.4hoteliers.com).



# **4.10 New Course Development**

Based on the Learning Needs Analysis conducted for the REAP project, a number of partner institutions have designed new courses which are currently on offer, or will be offered in the next academic year. A sample of these developments to date includes:

- Athlone Institute of Technology has identified a number of modules in the Hospitality, Tourism and Leisure
  Department that can be offered to industry as single subject certification. The Hospitality, Tourism and Leisure
  Department developed partnerships with a major hotel and a leisure centre in the region. A substantial
  report has been prepared and there are ongoing communications between academic and industry staff in
  relation to the provision of modules to these enterprises;
- Cork Institute of Technology is currently developing a dedicated course to meet the learning needs of the financial services sector. CIT's move to fully modularised and semesterised programmes has enhanced accessibility and flexibility for all learners. CIT will continue to actively collaborate with employers and employer organisations in the financial services, pharmaceutical, biopharmaceutical, and other employment sectors. This should ensure the ongoing development of a rich range of relevant modules leading to full awards at all levels.
- Dublin Institute of Technology has developed a two-day preparatory programme for prospective students who wish to qualify as a building assessor. A Building Energy Rating (BER) Assessors programme for commercial buildings has also been developed. There are also plans for the provision of collaborative continuous professional development workshops with the BER Assessors Association.
- Institute of Technology Tallaght has developed an e-portfolio system that will enable work-based learning in the pharmaceutical industry to be recorded against identified competencies (technical and personal). This portfolio will be used as a tool for use by those in the workplace to claim recognition of prior learning. In relation to the SME sector, two series of seminars have been organised on identified topics of benefit to this sector. *Breakfast Juice* is a monthly breakfast series of thought-provoking presentations on niche topics of relevance to small businesses with high growth aspirations. *Brown Bag Lunch* is a series of lunchtime sessions targeting SMEs, which allows an SME to outline the services that they can provide to small business owners.
- National University of Ireland, Galway has designed three new modules for the SME and High Potential Start-up enterprise sectors. The modules are accredited and are available to on-campus researchers and external entrepreneurs. The specific modules are: Technology Commercialisation, 10 ECTS (available September 2009); Technology Marketing, 10 ECTS (available September 2009); and Entrepreneurial Awareness, 5 ECTS (available January 2010). NUIG is also offering a number of non-accredited specialist training courses to industry in areas such as laser technology and biomaterials.
- University College Cork's law faculty is proposing to offer a practitioner master's degree (LLM) commencing
  in 2010. The LLM would be offered to solicitors and barristers and would be endorsed by the Incorporated
  Law Society of Ireland.
- Waterford Institute of Technology has designed specific minor awards to match workplace needs, for example, Certificate in Office Administration; Certificate in Leadership; and Certificate in Renewable Energy.
   WIT also intends to promote existing single modules to SMEs, employees, and the unemployed, and to change the Higher Certificate in Business Studies, Engineering, and Information Technology to match the needs of the workplace, for students in work and for unemployed students.

## 4.11 Conclusions

Over the past few decades an unprecedented and rapid change in society and working life has taken place, causing the importance of continuing learning to increase for individuals operating in the learning society and for organisations to become learning organisations. Stoney (2002: 58) asserts that "partnerships and learning organisations have emerged as two of the most powerful metaphors of the last decade". Stoney suggests that partnership and learning organisations symbolise the shift from conflictual to consensual workplace relationships. Both groups underscore stakeholder co-operation as the core of enlightened management and commercial success in the modern economy. Similarly research conducted by Keithley and Redman (1997) in relation to academic-industry partnerships found that learning experienced at the workplace has much greater impact and relevance. More recently, a Forfás report (2007b) recognises that closer interaction between public knowledge institutions and enterprise is increasingly important. The report suggests that by working closely with knowledge institutions companies gain access to new knowledge, specialist skills, and the latest technologies.

The learning needs analysis of the nine sectors included in this report also endorses the strengthening of partnerships between academia and employers. From the research conducted for this report, it can be seen that the existing partnerships are at different developmental levels. To date, the experiences of staff members from the academic institutions and from the organisations involved in these partnerships are very positive, with reports of a win-win situation from all participants. Arising from this research, a number of common learning needs emerged across many of the employment sectors included in this study. The identified learning needs provide opportunities and challenges for third-level education providers and for employers in their attempts to satisfy these needs. Opportunities to satisfy commonly identified learning needs, which could also be applicable to other industry sectors, may be summarised as follows:

## Up-skilling and Re-skilling of Employees

As work environments increasingly move to knowledge-based environments, with their increasing dynamic and changing contexts, ongoing up-skilling of employees is required. Up-skilling and lifelong learning have become the new catchphrases associated with the move away from the 'job for life' towards the need for individuals to develop new skills and to update existing skills throughout their working lives. This is particularly true for those at the lower skills level who find it difficult to access employment, education, and training opportunities. Further strengthening of employer-academic partnerships should provide for up-skilling of workers and, in particular, for removing barriers which discourage people from partaking in third-level education and from continuing professional development. Some common areas emerging across many sectors included the need for flexibility, multi- and inter-disciplinarity for workforce learning, the need to up-skill in soft skills, such as team working and communication, and the requirement for additional business and marketing skills.

## Networking

The importance of networking was identified as a critical factor for individual career progression and for organisational learning. Networking provides a number of significant advantages to the individual and, consequently, their organisation. These advantages include greater exchange of information, improved collaboration, new alliances, the acquisition of tacit knowledge, higher visibility, and easier access to support. Networking also provides informal access and connections to people who have influence. Informal networking opportunities between employers and academia typically develop new contacts with a variety of colleagues for the purpose of mutual work benefits.

## Flexibility in Delivery

Many interviewees outlined the need for flexible learning in terms of time, place, and mode of learning. To further develop flexible learning, a strengthening of academic–industry partnership is required to transform the role of higher education into one of facilitating and supporting learning, rather than delivering pre-specified programmes of study. In order to effectively provide this support, when and where it is needed, third-level institutions need to ensure that they are adequately equipped to deliver e-learning programmes and distance learning with negotiated learning outcomes.

## Work-based Learning

Work-based learning is playing an increasingly important part in the development of lifelong learning and affording individuals the opportunity to begin, update, or improve their higher education qualification by obtaining credits for negotiated learning outcomes which can be completed flexibility in the workplace. As work contexts are now considered important for curriculum developments, this emphasis highlights the need for a sharing of the responsibility for creating new learning opportunities. Partnership is increasingly regarded as the key to the development of lifelong learning. This emphasises the importance of developing partnerships between higher education institutions and employers and other organisations, and recognising the growing number of partners who may be involved in negotiating the structure and content of higher education programmes. The REAP project is committed to further developing concepts and models of partnerships.

## Recognition of Prior Learning

There is a widespread and increasing emphasis on lifelong formal and informal education and training, which are seen as critical components to ensure a highly skilled workforce. In this context, recognising *prior* learning can make a significant contribution to providing responsive, relevant, and integrated learning, which are all necessary for the present and ongoing maintenance of a quality workforce in Ireland. The recognition of prior learning has a potential role to play in meeting individual, societal, and national needs; as an instrument for providing people with access to education, training, and formal qualifications; and to help meet the ongoing and fast-changing requirements of the workplace. In the current economic climate, the recognition of prior learning is becoming increasingly important for jobseekers and for those in employment who wish to up-skill and reskill. There are further opportunities for the REAP project to build on the existing work of the SIF *Education in Employment* project to promote the recognition for all types of formal and informal prior learning. Additionally, both the *Education in Employment* project and the REAP consortia have collaborated with a further SIF Cycle 2 flexible learning project, led by the Institutes of Technology Ireland (IOTI). It is expected that the flexible learning project and the learning BlueBrick.ie portal, developed to make flexible learning opportunities more accessible, will become a significant driver of RPL activity.

#### Work Placements

Work placements have been designed to provide work experience to students and to help them to develop their professional skills and allow them to apply some of their course knowledge in the workplace. They are identified as an important component of third-level programmes and they provide experiences on which students can base their career aspirations. Work placements provide a cost-effective solution for businesses needing specialist input and also give students access to a work environment where they can develop their employability skills. Close collaboration between employers and academia should ensure that the placement experience is as rewarding as possible for the student, for the third-level institution, and for the organisation.

There are also challenges for higher education institutions in attempting to fulfil the identified learning needs. All nine sectors had specific requests for their local third-level institution, while a number of these demands were common to most sectors and may be summarised as follows:

## Developing Industry-Specific Courses at Low Cost

Many interviewees across all sectors outlined their need for specific courses tailored to meet the learning needs of their individual sectors. Interviewees believed that, due to financial constraints and particularly due to reduced training budgets in recent years, these courses would be likely to be financed by individuals rather than employers and, therefore, the courses should be offered at low cost. This proposal provides a challenge for third-level institutions who would invest considerable time and resources developing industry-specific courses without any guarantee of student numbers.

## **Timelines for New Course Development**

Some interviewees observed that the time it took for a new course to be developed and delivered was too long. For individuals whose job functions are under threat or for those who are unemployed, interviewees suggested that new courses are needed to enable these individuals to up-skill or re-skill so that they will be better placed to avail of new job opportunities when they become available, including in new sectors such as energy efficiency areas. This proposal also provides a financial challenge to third-level institutions due to tight academic constraints and timelines.

## Accreditation of Learning

Some interviewees argued that all forms and modes of learning should have equal value to traditional academic learning, and should receive recognition in the form of equal credit. Many interviewees believed that learning should be accredited in a short timeframe and with little or no costs to the learner and employer. However, academic staff require time to develop particular approaches to the curriculum in which learning is defined in terms of sets of learning outcomes, and where learning is grouped in modules and delivered at an identified level and volume.

Finally, developments associated with the concept of the learning society, lifelong learning, and the learning organisation are promoting change in higher education in a number of ways. There is increasing pressure on higher education institutions to work more closely with employers and thus to contribute to the processes of economic change and development. Education and industry partnerships are increasingly regarded as essential to the development of lifelong learning, thus resulting in the blurring of boundaries between these sectors. This reflects a growing emphasis on the importance for higher education institutions to develop partnerships with employers and other organisations. Economists recognise that enhancing people skills gives future competitive advantage to a workforce. The current economic downturn makes a strong case for reforming aspects of thirdlevel education in an effort to strengthen economic growth. As Applebaum and Reichart (1998: 52) note, however, "there is no roadmap available to follow that will take a traditional organisation down the path to being a learning organisation. There is no single right way or only one way". They observe that, in many ways, it is the journey that creates the learning organisation. They conclude that the journey is not a simple one, as it requires the challenging of many fundamental beliefs and operating principles.

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